

Narratives in Teacher Professional Development and Metaphors Facilitators Live By

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Dedication

For my beloved sons—Matthew, Justin, and Nathan—who inspire me to collaborate with school and university colleagues to improve educational experiences for *everyone*.

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Abstract

Narrative Inquiry immerses participants and researchers in relational examination of shared lived experiences. Using narrative as both the phenomena and method of study (Connelly & Clandinin, 2000), I sought to uncover metaphors as embodied and enacted in the storied experiences of four professional developers facilitating teacher learning in the Cultural Relevance in Science Pedagogy (CRISP) action research network. The overarching question for the inquiry was: What metaphors are lived (embodied and enacted) in the practice of professional developers when working toward cultural relevance in science pedagogy? Additional questions were: How do metaphors lived in predominant academic discourses, shape facilitators' thoughts and actions? What other kinds of metaphors influence educational researchers' academic discourses and facilitators' conceptions of teacher professional development? How does collaborative work with facilitators to identify metaphor in their practice contribute to a) facilitator professional learning and b) teacher professional development research?

Field texts negotiated with each facilitator entailed: participant observation at local meetings, audio recording of facilitator-led meetings, observation notes, facilitator interviews, transcribed facilitator teleconferences, pre/post surveys, and teacher exit interviews. Using a holistic analytic approach provided by Connelly and Clandinin's (2006) commonplaces of temporality, sociality, and place, I analyzed the storied experiences of four facilitators; negotiated lived metaphors to highlight elements of each participant's practice, and re-storied the field texts for presentation in the form of narrative. Participants were engaged relationally throughout the narrative inquiry to assure the metaphors identified represented their lived experiences in CRISP.

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Chapter 1: Introduction

In 2006 I left the job I loved. I sought a deeper understanding of teacher professional learning, professional development designs, and cultural competency by enrolling in a doctoral program. Next to my new desk, I kept a large storage box full of National Board for Professional Teaching Standards (NBPTS) booklets, facilitation materials, and teacher portfolio narratives from the job I left. The lessons and support materials, I imagined, would serve me well as a “toolkit” for my doctoral work in teacher development.

Between 1996 and 2006 I served as facilitator and graduate instructor at a state university for practicing teachers earning their Masters degree in action research based learning communities. I learned much during that time about the National Board teaching standards, adult learners, learning communities, multicultural education, constructivism, and university processes. The toolkit by my desk reminded me of how fortunate and empowered I felt as a teacher practitioner while engaged in the redesign of the state university’s graduate program. I wanted to be involved in more initiatives like the one that I had experienced.

The university where I had worked for that decade was interested in developing collaborative, co-teaching teams of schoolteachers and university faculty to break down conceptions about who “held” the knowledge about practice. The design team imagined teacher practitioners and university faculty as equals and developed the common title “facilitator” for use instead of professor and instructor. The dean of the college changed university faculty load to incentivize faculty to teach graduate courses in school

districts, and paid school faculty to work side-by-side as co-facilitators of teacher learning communities. All facilitators met often to co-plan, review feedback, take action, and reflect on practice. Development for *all* facilitators, university and school-based, was an essential element of the redesign. In retrospect, these monthly meetings served as a venue for collaboratively setting goals for the learning community cohorts, advocating for systemic changes at the university, reflecting on our experiences, exchanging ideas for improvement, and holding each other accountable (Stein, Silver, & Smith, 1999).

I looked forward to our dinner meetings each month when all six learning community facilitators met to talk across our experiences in the districts where we worked. As we talked candidly, we worked out new strategies and discussed alternatives when problems arose. During these facilitator development meetings and at our yearly retreats, we discussed our individual action research projects, analyzed student work, provided feedback after peer-observations, studied selected research texts, and developed plans for the future. We worked for the first six years on refining the core curriculum to fit the needs of teachers in each district, being mindful of the mission of the Masters' program to support reflective practice in action research. From the stories my colleagues told and from the deep discussions we had about issues often confronted in our practice, I learned strategies for facilitating adult learning, engaged teachers in multi-cultural education, enacted constructivist learning theory, and advocated for graduate students within the university system.

Yes, we had our disagreements and frustrations with each other. Yet, we also recognized the value in our diversity of opinions and persevered. Our focus remained on

program improvement and making action research experiences highly engaging for the teachers enrolled. I could not imagine working on this initiative in isolation, and I felt sorry for the professional developers who were hired to facilitate other programs at nearby institutions without this kind of support.

As the years went by, the financial support for our monthly facilitator team meetings diminished and we met less frequently. By the ninth year, we were still working in university and school-based facilitation teams but we were no longer focused on developing ourselves as developers. The dean moved on to a promotion and the department chair retired. As I've found is often the case with old favorite sweaters, the strings that had held the vision together began to unravel at the ends. Noting the program's eventual undoing, I chose to take what I had learned with me to graduate school.

While in my doctoral program I was sometimes hired to facilitate teacher development. I returned to the "toolkit" by my desk for an article or activity from the past. I often found, however, that the materials I kept rarely were a perfect fit beyond their original context. These "tools" I had hoped to use again never seemed to be exactly the right ones for the job. Digging through the materials for the right facilitative tool reminded me of the times I had fruitlessly scrounged in our family garage for the correct size screwdriver only to end up using a table knife from the kitchen drawer. Why had I kept these items? Did I think I had some "best practices" to share? I admit; I did have a few favorite lessons. It occurred to me that facilitators rarely have materials from past practice that work well in their next role. To assume so, I surmised, would not take into account the participating teachers' setting, experience, and context. Eventually

I stopped opening the box to dig for facilitator materials that I might reuse. The “kit” sat undisturbed in my office for some time.

After completing my coursework for my doctoral program, I returned to the box with the intent of looking through it one last time before throwing everything away. At the bottom, I found my former graduate students’ narratives. Reading a few, I was soon as engrossed with their stories, as I had been during my time in each learning community. I realized that these written reflections— unlike the other materials in my toolkit—stood the test of time and crossed contextual boundaries. The stories of my former students’ experiences as practicing teachers engaging with action research were compelling and revealing. I began to consider the possibilities that stories have in highlighting different perspectives on a shared experience; as in this case, with NBPTS-based learning community Masters program.

Along the way in my practice as facilitator, I had collected these narratives of lived experiences from those who participated with me in that time, place, and relationship. Each individual’s story, recorded narratively by the teacher in a final exam or portfolio entry shed light on some element of practice through the experience, collaboration, and reflection on their work in schools with children. The data collected, although representing only a part of the whole story, illuminated elements of experience (Mishler, 1986) as interpreted by the teacher and re-encountered by the reader.

The artifacts collected also contributed to the larger narrative. Each teacher’s journey remained a part of my own life experience, as Clandinin and Connelly (2000) posit, “embedded within a larger narrative of social science inquiry, the people, schools, and educational landscapes we study undergoing day-by-day experiences that are

contextualized within a longer-term historical narrative” (p. 19). These narratives were relevant and communicated a more complete picture of the teachers’ experiences in the redesigned Masters program than my story alone.

I threw away everything but the narratives from the program participants because I didn’t want to forget the individual stories told by teachers reflecting on their action research journeys. I didn’t want to forget my experience as a teacher-practitioner in their midst. The collection represented my desire to remember the extraordinary and ordinary moments shared in a program that had transformed my conception of how teachers and college professors could partner to improve P-12 schools.

The stories told also highlighted the experiences of teachers and facilitators living a new metaphor for professional development—teacher learning as “communities of practice” (Lave & Wenger, 1991). As far as I knew, no other records existed—other than these stories in my box—of what we had learned at this state university in partnership with schools about facilitating teacher learning communities. I was determined to do research and capture these kinds of stories to inform the field of professional development; *particularly* those engaged in facilitation of long term initiatives with practicing teachers.

This dissertation was originally imagined as a way to engage with teacher development facilitators in relational inquiry, capturing and analyzing our experience “shaped by social, cultural, institutional, and linguistic narratives” (Clandinin & Murphy, 2009, p. 601). Using metaphor as the overarching framework for analysis with teacher development facilitators, I hoped to better understand our shared experiences and provide narratives from practice for reflection. I anticipated the focus on metaphor

as lived by facilitators in practice (Chapter 2) as interpreted through narrative inquiry (Chapter 3) would contribute a unique perspective to the field of teacher development, with a particular focus on the Cultural Relevance in Science Pedagogy (CRISP) initiative (Chapter 4).

Dissertation Form and Function

The title of this dissertation, *Narratives in Teacher Professional Development and Metaphors Facilitators Live By*, reveals my adherence to Lakoff and Johnson's (1980) theoretical framework of metaphors lived in thought and action and Clandinin and Connelly's (1987, 1988, 1990, 1992, 1995, 1998, 2000, 2006) methodology—narrative inquiry. The focus on metaphors as an analytical tool with facilitators was not just used to identify metaphors in their language, but also to identify metaphors as “powerful forces in the construction and maintenance of the world views by which we live (and die)” (Cochran-Smith, 2002, p. 283). Through narrative inquiry methodology, I was able to both view the “experience as phenomenon” (Connelly & Clandinin, 2006, p. 375) and study the experience as storied with metaphors lived by facilitators in practice.

In this introductory chapter—after describing the form and function of the dissertation and defining terms—I review what is known about developing facilitators of professional development. Findings indicate very few qualitative studies are available to provide researchers and facilitators with narratives of practice to further develop the developers.

In chapter two, “Lived Metaphors,” I discuss Lakoff and Johnson’s (1980) theory that metaphors structure our understandings and perceptions of the world, shaping our images of practice. I will define and discuss examples of three kinds of conventional metaphors (orientational, ontological, and structural) used in everyday language. In order to make explicit the metaphors in education research and reform literature, I briefly analyze three academic discourses in teacher development highlighting language signaling underlying conceptions. Finally, I draw on the metaphors discovered in the analysis to discuss the implications for practice if lived by facilitators leading professional development initiatives.

In chapter three, “Finding Narrative,” I provide an overview of the research methodology situating myself within the literature to make transparent my epistemological stance. The chapter serves several purposes providing: a retelling of the story of narrative research, a description of Clandinin and Connelly’s research, and an overview of the methodology as imagined in the CRISP project.

In chapter four, “Narrative Inquiry Setting and Parameters,” I provide details about the study including participant vignettes, research questions, field texts and data collection, analytic approaches, format, limitations, and the role of the researcher. With the study parameters defined, I next present each facilitator’s narrative analysis in chapters five through eight. The four analysis chapters are presented purposefully to move the reader through widening perspectives; drawing attention to significant elements of each facilitator’s experiences and metaphors lived by in CRISP.

Chapter five, “Matthew’s Story,” closely examines his early ontological metaphor of practice and the shift that he makes during the program to become an anti-

racist activist. I zoom in on Matthew's experience, focusing closely on his reflections about practice and his effort to adopt a new metaphor to live by. I consciously did not include details from the teacher participants' experiences with whom he worked in the framing of Matthew's story.

In chapter six, "Rachel's Story," I widen my lens to frame an analysis that includes me at her side. I am with her in the frame so that I am explicit about my struggle and diligence as a White woman re-storying a Black woman's experience while facilitating White teachers about cultural relevance. In order to better understand the implications of my analysis and re-storying of her experience, I turned to Tim Lensmire (2009, 2008, 2000) on White privilege who introduced me to the work of Black feminist authors: Patricia Hill Collins (1990/2000), Alice Walker (2003), and Kimberly Springer (2005). Each has helped me grapple openly with my responsibility as a White researcher and provided new conceptual frameworks for metaphors lived by Rachel. Rachel's lived experience as re-storied in this chapter also serves as a rich resource for closely examining Lakoff and Johnson's (2008) orientational metaphors as embodied and enacted in practice.

In chapter seven, "Molly's Story," the narrative includes within its frame the group of teachers that Molly facilitated during CRISP as they worked together in a community of practice. Molly's metaphor of practice is re-storied to highlight how a lived structural metaphor and the systematicity found within that metaphor supported the development of shared inquiry and the eventual creation of a group report.

Chapter eight, my final analysis chapter, is when I take a wide-angle view to re-story Susan's experience. Susan is a part of the story but is immersed in a larger

landscape creating a work culture in which she has difficulty facilitating. Examining her experience using the structural metaphor of production pervading the district's work culture provides the reader with a facilitator's struggle while living a counter-narrative in professional development.

Finally, in chapter nine I summarize each facilitator's metaphors and narratives for teacher development in CRISP, review the kinds of metaphors analyzed and not analyzed, and discuss the implications and limitations of metaphor and narrative in developing professional developers.

Definition of Terms

In order to be explicit about how I define terms commonly used in my writing, I include this lexicon for my readers:

- **Facilitator:** A person hired, selected, or appointed for work with practicing teachers collaborating in a school-based, research-based, or university-based professional development program. A facilitator or developer (I use the terms interchangeably throughout) supports a group of teachers through an experience that is intentionally designed for professional development and learning. The professional developer may work to perform the functions needed by the group in a variety of roles, as: facilitator, program co-designer, instructor, guide, trainer, content expert, researcher, organizer, and leader of group-structured teacher learning.
- **Image:** (See "metaphor"). I use image and metaphor interchangeably in this dissertation to improve readability. They should be interpreted as one in the same.
- **Metaphor:** There are two senses of *metaphor*¹:
 1. A metaphor is the expression of an understanding of one concept in terms of another concept, where there is some similarity or correlation between the two.
 2. A metaphor is the understanding itself of one concept in terms of another.
- **Re-Story:** When individuals and researchers tell stories, they are actively re-telling it from a new point in time (temporal) and in a different context

¹ <http://www.sil.org/linguistics/GlossaryOfLinguisticTerms/contents.htm>

(sociality and place). Each time a story is told, it is re-storied or performed for a different audience in a different voice.

- **Relational Inquiry:** A narrative inquiry requires the representation of the experience to be co-constructed between the researcher and the participant. The researcher and participant collaborate in the shared space where field texts are collected, co-constructed, validated, and the final research text is negotiated. In this type of inquiry, researchers work alongside their participants with a commitment to the relationship.
- **Systematicity:** A coherent set of metaphors evident in the language individuals use to talk or write about a concept.

Now that the form and function of the dissertation have been described and definitions provided, I turn my attention in the next section to a brief review of what we currently know about the development of professional developers.

How to Develop the Developers

Three veteran professional developers sat in the workspace outside my office where I worked as a graduate student in 2009, three years after leaving my role as facilitator of learning communities. The developers were meeting to determine their approach and agenda for the next session with a group of practicing teachers. The question of how to organize the agenda hung in the air as they became mired down in understanding the different perspectives each brought to his or her work. Silence permeated the space and, after some uncomfortable moments, a tentative explanation emerged in the form of a metaphor. “What if,” one developer said, “we thought about connecting goals to practice in a less linear way? What if we helped teachers to imagine the space between the goals and practice as something less linear?”

“Like relativity theory? As in bending space and time?” another professional developer replied. An animated discussion followed as the three began to think

metaphorically about how different science theoretical structures could help (or not) teachers re-imagine connections between their professional goals and current practice. In a matter of minutes, the structural and ontological implications of several metaphors were examined. The moment of silence was replaced with laughter and playfulness as each presented metaphors that clarified perspectives. Recognizing that they were engaged in a conversation that would interest me, one of the developers called out: “Hey Stacy! Are you listening? We’re using metaphors!” I sat transfixed in my office thinking about how powerful such conversations could be in making transparent professional developers’ images of practice.

Looking forward. The above vignette, based on recollections of an overheard conversation, demonstrates the power of metaphors to support facilitator learning and action (A. Hokanson, personal correspondence, May 9, 2009). As demonstrated, attending to metaphors while working with co-developers in professional development programs may deepen understanding of practice, pedagogy, and philosophy for work with teachers and colleagues. A decade ago Stein, Smith, and Silver (1999) called for more study of the development of the developers. Although their work is often cited, I have found few studies that have addressed the call. I wonder, with the relatively recent national focus on the effectiveness of teacher professional learning (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009), if scholars will more closely examine the development of developers. It seems that if student learning is affected by teacher quality (Darling-Hammond, 1999; NCTAF, 1996), then certainly teacher learning in professional development is also affected by the quality of the developer. What do we know about the practice and development of those serving teachers in professional

development roles?

Looking Back. During my ten years as a facilitator, I treasured the monthly dinner meetings with my colleagues working as co-facilitators of learning communities. What I believe was important was that we worked in the same collaborative team format that we asked of our teachers in the learning community. We embodied and enacted our image of professional learning; very little disjuncture existed between how we worked together and what we asked of the practicing teachers in our graduate program.

Based on my experience, I understand the power of this type of collaboration between professional development colleagues. Ever since, I have wondered what other scholars are doing to examine the professional development of the developers. Therefore, the following questions frame my review of the empirical literature: What do we know about the development of professional developers? Do professional learning programs incorporate specific development plans for individuals working in such roles as facilitators, leaders, guides, experts, and trainers? If so, what is the structure and content of the development for developers? What findings have been identified from empirical research specific to developers? Where are the voices of those working in development roles? What do we know about their images of practice and their experiences in various teacher professional development program sites?

As I reviewed the literature, I noted consistency in language that exposed underlying metaphors the researchers used to build their arguments from the data analyzed. I assume professional developers working with teachers are equally susceptible to metaphors that different discourses live (and die) by. In much the same

way, I think professional development researchers are often constrained by the metaphors promoted from within their academic discourse. To make the metaphorical coherence in the researchers' written language explicit, I highlight words in italics from each selected text.

What Do We Know about Developing Professional Developers?

Methodology. For this empirical literature review, I first established that no review of the literature on the development of teacher professional developers had been published in major educational research journals. The journals I searched at this stage were *Review of Educational Research*, *Review of Research in Education*, *Teaching and Teacher Education*, and *Journal of Teacher Education*. I then searched the on-line ERIC database, which indexed peer-reviewed American and international education journals written in English. I set the time parameters of 1990 to 2009 and used the following key phrases: “professional development,” “development of facilitator/professional developer/trainer,” “staff development,” “learning community facilitator/coach,” “professional development learning community,” “professional development facilitator,” “training for facilitator,” “personnel development,” “science pedagogy,” “cultural relevance,” “teacher professional development,” “professional development research,” and “professional development research trainers/developers.” Because of my interest in professional development based in teacher group structures, I did not use search terms that tend to frame research with one-on-one teacher professional development (e.g., mentor or coach).

Finding very few promising or related abstracts to the development of professional developers in the initial general search of ERIC, I followed leads from common works cited in research reports of empirical studies that included an examination of the professional development personnel, program, or design. I identified abstracts of 188 peer-reviewed articles included in the ERIC search under the general term “teacher professional development” and 278 in *Journal of Research in Science Teaching* similarly selected for relevance. I noted very few articles related to the search terms were written before 1998 and narrowed my time parameters accordingly.

With over 400 articles to consider from the multiple searches, I examined the articles that directly or indirectly addressed the professional development for developers and eliminated those that did not include investigation and analysis of the design with developers in mind. After reviewing the remaining articles from the search, I chose only empirical studies (qualitative, quantitative, and mixed methods). The selections were summarized for analysis on a spreadsheet. Since this line of research appears relatively recent, I also retained 10 additional references that included brief professional development literature reviews, opinion pieces, project reports, evaluative studies, and books written by leaders in the field of teacher professional development. Additionally, I reviewed the new National Staff Development Council (NSDC) publication, “Professional Learning in the Learning Profession” (2009) not yet included in ERIC.

Using the selection parameters for identifying studies that were empirical, I identified for 15 texts for review from scholars explicitly focused on professional development designs including 11 empirical studies, 2 large-scale evaluative studies, a summative report, a research brief, and a book. However, of the fifteen only three

specifically included recommendations for facilitation/developer approaches or characteristics, the remaining twelve research-based texts included some focus on professional developers, but only as part of a comprehensive program review or evaluative study. Most selections in the review seek to identify elements of effective teacher development programs yet one scholar stands alone, asserting that professional developers work must include uncovering underlying assumptions and positionality in teacher learning.

Review of Professional Development Literature. As already noted, Stein, Silver and Smith's (1999) research article is consistently cited in the research literature mentioning or examining the development of professional developers of teachers in communities or site-based groups. Therefore, I begin with a quick review of their case analysis methods to identify the approaches of two professional developers working with teachers over an extended time period. The authors explored the challenges and tensions faced when working to support teacher *transformation* in collaborative group settings using repertoires beyond the traditional workshop direct instruction format. The voices of two practicing professional developers are included in the analysis. Stein, Silver and Smith's (1999) assert, based on their case analysis and interviews of the two participants, that a necessary new paradigm of practice will require professional developers to:

- Adopt more encompassing goals and take greater responsibility for the outcomes of their efforts.
- Build repertoires beyond workshops and courses and learn how to manage the repertoires related to the goals and contexts in which they are working.

- Learn how to develop teachers as individuals as well as how to develop whole communities of practice.
- Expect to be held accountable for adding new techniques or skills to teachers' repertoires and for teachers' enactments of valid practices that raise student achievement. (p. 265)

While reviewing their study, I found that the authors used the metaphor of cartography to frame their recommendations as *maps* for practicing professional developers, or "*pioneers*" *travelling in the new territory* (p. 265).

In a mixed methods study, Ertmer et al. (2003) focused their study for the Office of Educational Research and Improvement on professional development coaches' critical characteristics. The authors gathered quantitative and qualitative data primarily in one-to-one interviews and surveys² specific to perspectives and experiences of 31 peer coaches of learning communities. The research question was "What does it take to be a successful professional development coach?" (Ertmer et al., 2003, p. 9). The authors use school reform lexicon when thinking metaphorically of "successful" as "*effectiveness*," "*skills*," and "*strategies*" (2003, p. 9). Many of the development coaches' voices were included in the analysis section of the report. Findings suggested that strong interpersonal skills were key to building relationships with teachers in order to facilitate changes in practice. Content skills were identified as important, but they were perceived as something that could be taught, unlike interpersonal skills. Their recommendation was for school districts to select peer coaches with a reasonable mix of interpersonal skills and content expertise.

² Participants completed the 'Change Facilitator Stages of Concern Questionnaire' (CFSocQ; Hall et al., 1991)" see <http://www.sedl.org/pubs/catalog/items/cbam21.html>

In the third empirical study selected, Little (2003b) examines three bodies of data from a 14-year period to show how teacher leadership roles have shifted over a time period where they were influenced by school reform rhetoric. She analyzed teachers' interview transcripts to identify ways in which characterizations of teacher leadership changed—"how people speak normatively, metaphorically and substantively about the professional obligations of teaching, what they do and do not consider leadership by teachers, and the attributions they make regarding important influences on the goals and practices of teaching" (2003b, p. 402). Findings indicated conceptions of teacher leadership shifted from specific teaching contexts where department heads lead content specific initiatives, to formal teacher (non-subject specific) leadership positions heading whole school reforms, to teachers' 'expanded role' to adopt an external leadership position in local and state reform agendas. Little (2003a, 2003b) conceives of teacher leadership as internal to school organizations and clearly delineates formal professional development from the "natural" development that occurs within daily work. Her work (2003b) specifically includes the voices of those in roles as teacher leaders. Although she does not offer recommendations specific to the development of teacher leaders as facilitators of professional learning, her work is focused on those working in this role.

I was unable to locate any other empirical research specifically examining professional developers' approaches when working with teachers in group structured professional development models. I also noted that though other research texts including developers' voices do exist (e.g., mentoring NBPTS candidates Shulman & Sato, 2006), the first group did not include much in the voices of facilitators of teachers' professional groups.

The second group of research texts—including an empirical study, book, research brief, and report by respected scholars—provide some recommendations for developing professional developers. The following four selections for review span at least a decade of work in professional development supported by the National Science Foundation (NSF).

The first selection in this related group of research-based texts is Mundry, Spector, Stiles, and Loucks-Horsley (1999) qualitative study. The authors report on what has been learned about development as *reform interventions, structures, and relationships* specific to science and mathematics preservice and inservice teachers engaged with the National Institute for Science Education's (NISE) Professional Development Team projects. The authors examined 61 initiatives. They identify a lack of quality, coherence, and alignment within and across programs. Lack of shared vision between providers and teachers, traditional roles in teacher development, cultural differences between *providers* (developers) and *receivers* (teachers), incoherent design and content for teacher learning, and lack of *quality control* among *mechanisms* for teaching contribute to these issues across programs. The authors' recommendations specific to professional developers and teacher educators include making “efforts to build common vision, develop leadership, and create collaborative designs for professional learning” (p. vii). The language used by the researchers, as identified in italics above, evokes images of systems of production (*structures, providers, receivers, designs, mechanisms, quality control, interventions, reform*).

In a related research brief, Mundry and Loucks-Horsely (1999) argue that professional development is not a “simple task of ‘plan and implement’” (p. 1). Instead,

professional developers must remain alert to teacher contexts, development stages, and dynamics. Examples from cases provide an overview of professional development designers and facilitator teams' decisions on the following issues: program focus (philosophical or pragmatic), teacher participation (voluntary or schoolwide), curriculum (develop or adopt), and frameworks (constant or context specific). The authors suggest that developers "become more conscious of all the decisions they make and the impact those decisions have on the implementation of professional development" by actively identifying and reflecting on issues while remaining open to "changing their approach when initial assumptions are proven wrong" (1999, p. 7).

Loucks-Horsely, Love, Stiles, Mundry, and Hewson's (2003) book includes an updated design framework connecting standards for student learning and analysis of student learning with professional development goals. Designers of professional development are directed to consider the following implications: a) Context (e.g., students' needs, teachers' needs, practices, organizational culture, organizational structure and leadership, policies, resources, history of professional development, and the public (p. 54)); b) critical issues (e.g., finding time, ensuring equity, building professional culture, developing leadership, sustainability, scaling up, and public support), and c) strategies (p.113, see figure in Appendix A).

Mundry's (2005) report for the Eisenhower National Clearinghouse in a more recent review on what researchers in the field have learned from experience designing and implementing professional development. Mundry asserts the most significant positive change witnessed by researchers in the field is the shift, likely due to the requirements of the No Child Left Behind (NCLB) Act toward believing that the goal of

professional development is to enhance learning of challenging content for all students. In her summary, Mundry calls for more research on what comprises *effective* programs in specific contexts, focus on how teacher learning can be *enhanced by innovations in technology*, and attention to whether the No Child Left Behind (NCLB) Act strengthens or deteriorates effective professional development's impact in the educational *system*. Overall, these research-based texts have produced valuable resources for professional development designers and remain fairly consistent within the metaphorical language of the school reform discourse (see Chapter 2).

The third grouping of selected literature focuses on important elements in professional development but does not speak directly to the development of facilitators. As with the second grouping, the research selected for review is primarily grounded in school reform metaphors that draw on images of efficiency in schools as organizations. Authors in the second and third groupings of literature in my review appear to work from the assumption that they will identify a formula or set of best practices for effective delivery of professional development to teachers that will directly transfer to teachers' practice. These authors seek to identify design parameters (e.g., number of hours, delivery methodologies, contextual elements) necessary to scale up the program to mass-produce similar results. Finally, I also noted nine of the ten selections in this third grouping use either the word "*effective*," "*change*," or "*reform*" in their report titles. The consistent language in the titles of these texts indicates to me that those analyzing and reporting on large-scale professional development programs are speaking quite directly to an audience who understands and participates in a reform discourse focused primarily on efficiency.

It is beyond the scope of this review to complete a comprehensive overview of these ten empirical and evaluative studies including methodologies, participants, questions, and related findings. However, I will briefly summarize recommendations specific to development of developers; if recommendations for professional development practitioners are not included, I will state the research focus instead.

Banilower, Boyd, Pasley, and Weiss (2006) and Banilower and Shimkus (2004) report on a decade of research in NSF's Local Systemic Change large-scale program funding 88 projects nationwide. Banilower, Boyd, Pasley, and Weiss (2006) provide both longitudinal and cross-site data focused on development providers, effective interventions, target audiences, and policy stakeholder strategies. Overall, the authors find that the National Science Foundation's LSC program provided high quality professional development, positively impacted teachers and teaching, increased teachers' use of high quality mathematics and science instructional materials, and built capacity and infrastructure to sustain the reform.

When summarizing major challenges and implications, Banilower, Boyd, Pasley, and Weiss' (2006) evaluation team first identifies weaknesses in the preparation and support of professional development providers. They cite developers weaknesses as: lack of rigor in content delivery, failure to provide explicit strategies in pedagogy, limited skills as facilitators of teachers, unpreparedness for their role in implementation, and lack of time and effort devoted to their preparation as providers. The authors recommend specific, sustained preparation of professional developers "in areas that pose particular difficulties for teachers (e.g., content, questioning, closure)," in mathematic and science concepts, demonstration strategies, questions for leading discussions, and other student-

centered instructional techniques that help make conceptual connections for students (p. 87). Other challenges and implications identified include deepening teachers' content knowledge in mathematics and science, supporting teachers in ongoing small groups, and—not specifically related to the initiatives' developers—engaging school principals to support teachers' participation and attracting the teachers resistant to reform.

In an earlier related evaluative study, Banilower and Shimkus (2004) used hierarchical linear modeling based on 2,400 observations of professional development sessions submitted by project evaluators. Banilower and Shimkus's (2004) findings specifically related to professional developers, indicated the type of provider (e.g., scientist/mathematician, teacher leader, university education faculty) facilitating a session “tended not to be an important predictor of session quality, with the exception of sessions focused on creating a vision of effective instruction, promoting reflective practice, and understanding student thinking” (p. 24).

Other mixed methods research identified characteristics of professional development experiences that help teachers incorporate inquiry skills into teaching science (e.g., Jeanpierre, Oberhauser, & Freeman, 2005), identify what makes professional development effective for secondary educators (e.g., Lester, 2003), and measure the effectiveness of program-specific professional development activities (e.g., Garet, Birman, Porter, Desimone, Herman, & Yoon, 1999). Though Jeanpierre, Oberhauser, & Freeman (2005) do find that professional developers and providers are effective when they have high expectations for teacher learning and can facilitate multifaceted experiences, “allowing teachers to demonstrate their learning,” (p. 682) the authors do not offer recommendations for the development of such developers.

Generally, the findings for these studies will assist designers of professional development programs by providing some recommendations regarding the length of time dedicated to a professional learning experience, teacher motivation, and group size. Notably, these reports do not examine the lived experiences of practitioner professional developers.

Quantitative research in this third grouping seeks to identify the kinds of professional development activities that increase the effectiveness of implementation (e.g., Penuel, Fishman, Yamguchi, & Gallagher, 2007); the kinds of professional development associated with more inquiry-oriented teaching practices (e.g., Supovitz & Turner, 2000); the relationship between features of professional development and teachers' self-reported change in knowledge, skills and practice (e.g., Garet, Porter, Desimone, Birman, & Yoon, 2001); the influence of assessment, curriculum, and professional development on teacher practice and student achievement (e.g., Cohen & Hill, 2000); and, the relationship between teacher program participation with attitudes, perceptions, pedagogical preparedness, and practices (e.g., Banilower, Heck, & Weiss, 2007). Specific recommendations from the findings were not identified in these studies to inform developers working directly with teachers in professional development programs. Instead, these reports were informative on a design level for future *large-scale* science and math based program *reform initiatives* with teachers.

The last empirical study in my review was selected to draw a distinction from the multitude of efficiency-based reform studies found in the literature. Moore's (2008) focus on underlying assumptions and *positional identity* in professional development designs in science challenges the assumptions about what developers should be focused

on with teachers in professional development. The author reports on research specific to teacher positional identity in her narrative study of three African American secondary science teachers. She finds that positional identity is a necessary (and missing) component in teaching to and learning from *multiple perspectives*. Her findings indicate developers must *extend beyond goals* of affecting teacher learning and student achievement to include a conscious effort to *uncover issues of identity, gender, power, and privilege* into more meaningful “opportunities that connect to identity to *personal and professional goals*” (p. 705). Moore positions identity as an essential element in teacher professional development, one that designers (and facilitators) must take up in their work with teachers.

Findings. Notably, NSF-supported projects for the professional development of teachers in science, math, engineering, and technology (e.g., Banilower, Boyd, Pasley, & Weiss, 2006; Banilower, Heck, & Weiss, 2007; Little, 2003a, 2003b; Mundry, 2005; Mundry, & Loucks-Horsley, 1999; Mundry, Spector, Stiles, & Loucks-Horsley 1999; Garet, Porter Desimone, Birman, & Yoon, 2001) are sites with long term, well-funded programs where researchers are able to conduct comprehensive examinations of professional development designs, implementation, and impact. The consistent relationship between NSF and university and/or private research centers creates a nexus for in-depth studies and reports. However, very few of the empirical studies, research-based literature, reports, or evaluative studies reviewed make facilitators’ practice explicit. Only three studies in this review focused specifically on developers’ experiences (Ertmer, et al., 2003; Little, 2003a/2003b; and Stein, Silver, & Smith, 1999) while others made broad recommendations for the professional development of

developers in program designs.

Small-scale professional development studies were, perhaps, not as well resourced nor enjoyed the same length of engagement with participants. Examination of the developers' professional learning appears to not be prevalent in the study designs for small-scale projects indicating that the designers of teacher development efforts may be focused on other aspects of their work. Again, when the practitioner working with teachers is not included it suggests that the researcher assumes consistency in the approaches and practices of the professional developers. It appears, then, that very few large scale or single site studies attend to the practice of the individual professional developers as a major contributing factor in teacher learning.

The review of research specific to these large-scale program designs also revealed that efficiency and production remain the primary metaphorical concepts of most empirical work on teacher professional development. A related assumption is that successful professional development programs can be transferred, reproduced, or scaled up from one site to another (e.g., Borko, 2004). Transferability is based in the metaphor of production. Researchers thinking within this metaphor may expect hired facilitators to deliver a program in similar ways at different local sites. Such thinking leaves unexamined the site-specific work and unique images of practice professional developers embody and enact with teachers. Furthermore, I share Rosaen & Florio-Ruane's (2008) concern that "conceptual networks of terms used in common parlance make their way into professional conversations, teacher educators and beginning teachers alike are in danger of falling prey to them instead of learning from them" (p. 707).

This preliminary survey of empirical research literature, evaluative studies, reports, and research-based books, also indicates that no research has been completed specifically on the images or metaphors as embodied and enacted in the practice of professional developers and/or facilitators. Nor has work been completed specifically to identify conceptions of facilitators working with teachers in learning communities. In the next chapter, I will examine metaphor in language, thought, and action as linguist George Lakoff and philosopher Mark Johnson (1980) propose in their theoretical framework co-authored in *Metaphors We Live By*.

Chapter 2: Living Metaphors

There is nothing so practical as a good theory. -Lewin (1945)

I am fascinated by metaphors. I attend to them when conversing with others, reading education research, analyzing facilitators' practice, and listening to the news. To illustrate, while reviewing a 2009 speech at Georgetown University by President Barak Obama, I noted his use of metaphor to describe his economic plan envisioned through two approaches: fighting a war and rebuilding a house. President Obama used language such as "action," "strategy," "pre-emptive," "overarching plan," to describe his staff's plans to address the "threats," "obstacles," and "challenges" in the "fight" to improve the economy (Obama, 2009). Later in his speech, he referred to a biblical story about a wise man who built his house upon a rock. By metaphorically referencing the construction of a home the president enlisted citizens' experiences with buildings to encourage people to imagine our country working together to "lay that new foundation," and "do the hard work of rebuilding" so that this "house will stand...unwavering in the greatest storms" (Obama, 2009). Metaphors used in this manner by politicians have always intrigued me, especially when the language is repeated in community narratives; they provide images that move political, professional, and personal agendas. Metaphors, on an everyday basis, help me to understand how other people imagine our world and my relationship to them within it.

Metaphors offer an approach to understanding an idea or problem as it may relate to another object or property with which we have had experience (Lakoff & Johnson, 1980). Researchers posit that metaphors permeate the personal and

professional practice of teachers (Bullough, 1991; Clandinin, 1985, 1986; Munby, 1986; Munby & Russell, 1990; Palmer, 2007) researchers, and professional developers.

Clandinin and Connelly (2000) report that their interest with experiential knowledge and “embodied metaphors” (p. 1) was informed by Lakoff and Johnson (1980) theoretical framework. In order to better understand the impact of metaphors as a lens in Clandinin and Connelly’s narrative inquiry methodology (see Chapter 4) and how metaphors might shape conceptions of facilitation, I turned to Lakoff and Johnson (1980).

To Live By Metaphors

Though *Metaphors We Live By* also influenced the work of other scholars across multiple disciplines (e.g., in sociology Nerlich, Clarke, & Dingwall, 1999; in education Bullough, 1991 and Rosaen & Florio-Ruane, 2008; in cognitive linguistics Kövecses, 2005), a full review of their theory and its impact on the work of other scholars is beyond the scope of this dissertation. However, part of my endeavor in this chapter is to highlight the metaphors living within a few academic discourses in education that shape the structural and ontological frameworks for teacher professional development.

I begin by examining Lakoff and Johnson’s (1980) assertion that metaphor is not just a characteristic of language or “a matter of words” (p. 3). Instead, they posit:

Metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature. The concepts that govern our thought are not just matters of the intellect. They also govern our everyday functioning, down to the most mundane details. Our concepts structure what we perceive, how we get around in the world, and how we relate to other people. Our conceptual system thus plays a central role in defining our everyday realities. If we are right in suggesting that our conceptual system is largely metaphorical,

then the way we think, what we experience, and what we do every day is very much a matter of metaphor. (p. 3)

I am captivated with Lakoff and Johnson's (1980) assessment of metaphor as lived in our everyday life. I admit also, as a former language arts and communications teacher, a strong pull toward analysis of language to understand conceptions of the world. We are often unaware of the metaphors we live by, even though it is by metaphors that we think, act, structure, perceive, and experience the world.

As Bruner (1996) reveals in his analogy of humans' ability to understand the "sea of stories" (p. 147) as well as fish understand their relationship within water, Lakoff and Johnson contend that "our conceptual system is not something we are normally aware of [and] in most of the little things we do every day, we simply think and act more or less automatically along certain lines" (p. 3). Echoing Whorf's (1956)³ focus on the structure of language and its impact on our thinking, Lakoff and Johnson recommended that researchers pay particular attention to language as it is based on "the same conceptual system that we use in thinking and acting" (1980, p. 3) as structured by human experiences. It is through analysis of metaphor that Lakoff and Johnson argued for a new "experientialist approach" (1980, p. 193) to better represent "the way we *understand* the world through our *interactions* with it [and how] human conceptual systems are metaphorical in nature and involve an imaginative understanding of one kind of thing in terms of another" (p. 193-4). The authors categorized our experiences in the following ways: 1) how our bodies perceive the world through thought, emotion,

³ Whorf explains linguistic relativity principle –"the structure of a human being's language influences the manner in which he understands reality and behaviors with respect to it" (p. 23).

and action; 2) how we interact (move, eat, sleep, manipulate things) with our physical environment; and 3) how we interact (socially, politically, economically, and religiously) within our culture with other people and institutions.

Although Lakoff and Johnson (1980) and others⁴ have offered multiple lenses to examine and utilize metaphors, for the purpose of this chapter I will introduce their work with a brief overview of the three types of conventional metaphors—orientational, structural, and ontological. After providing definitions and details, I will examine academic literature in teacher professional development to highlight metaphors. By demonstrating how metaphors can be identified and examined in a person's language or in an academic discourse, I build my case that metaphor and narrative are an ideal pairing as analytical lens and methodology for examining facilitators' experiences in professional development.

Examining metaphor for orientational conceptions. An orientational metaphor, as Lakoff and Johnson (1980) define it, is a metaphor that “organizes a whole system of concepts with respect to one another...[usually] spatial[ly]: up-down, in-out, front-back, on-off, deep-shallow, central peripheral” (p. 14). The authors explain that these metaphors are grounded in our bodily experiences and how we function within the environment in which we live. For example, this type of metaphor usually describes a physical basis—as Lakoff and Johnson's (1980, p. 15) examples illustrate (italics in the original):

⁴ For example, see Schön's (1979) *Generative metaphor: A perspective on problem-setting in social policy* in A. Ortony's (Ed.) *Metaphor and Thought* (Cambridge, Cambridge University Press). Palmer (1998) also cites metaphor as a way to understand one's practice as teachers in classrooms.

Happy is Up; Sad is Down

I'm feeling *up*.

That *boosted* my spirits.

My spirits *rose*.

You're in *high* spirits.

Thinking about her always gives me a *lift*.

I'm feeling *down*.

I'm *depressed*.

He's really *low* these days.

I *fell* into a depression.

My spirits *sank*.

When we experience sadness or depression, our physical body droops as we walk heavily along. When happy, our body tends to be upright and light. Similarly, other orientational metaphors are based on physical states. As humans, Lakoff and Johnson (1980) assert, we lay down to sleep and stand up when awake. Therefore, we think of consciousness as up and unconsciousness as down when we say, “wake *up*” or “he *sank* into a coma” to express states of being. Related, health is up (e.g., he’s in *top* shape), sickness is down (e.g., he came *down* with the flu), good is up, bad is down, more is up, and less is down. The authors suggest that this experiential grounding of physical experiences in orientational metaphors creates a coherent system (“systematicity”) of metaphorical concepts. For example, Lakoff and Johnson (1980) assert that as a cultural group if we view humans as:

in control over animals, plants, and [our] physical environment [due to our] unique ability to reason [as placing] human beings over animals... [then] CONTROL IS UP thus provid[ing] a basis for MAN IS UP and therefore for RATIONAL IS UP. (p.17)

If rational is up, the author’s assert, then EMOTIONAL IS DOWN. This particularly interesting juxtaposition orients behavior along a continuum and is noted in vernacular

in the United States in statements like “we put our *feelings aside* and had a *high-level intellectual* discussion of the matter” or “he couldn’t *rise above* his *emotions*” (p. 17).

Lakoff and Johnson (1980) also provide the following examples of concepts oriented as UP: consciousness, life, foreseeable future events, being a force, high status, virtue and as conversely as DOWN: unconsciousness, death, being subject to force, low status, and depravity.

What does this have to do with lived metaphors in education? First, I reflect now on the word “grown up” and how Americans talk about children as *not* grown up when individual acts out or cannot rise above their emotions. Placing individuals or groups of people on a continuum, based on criteria differentiating between high and low, up and down, left or right is another example of how orientational metaphors are embodied and enacted. Teachers, as another example, may be perceived as employees who must be trained to build children’s confidence up, bring curriculum up to standards, raise student test scores up to district expectations, and heighten students’ intellectual abilities. Administrators in the district, then, may be imagined as a leadership chain in which one moves up or down within the organizational structure. In these ways, the culture in which facilitators and teachers in professional development may be understood through orientational metaphors—images grounded in our physical senses and culturally accepted conceptions of UP as generally GOOD and DOWN as BAD.

Examining metaphor for structural conceptions. Lakoff and Johnson’s (1980) work makes explicit the pervasiveness of metaphors, particularly the type that structures conceptions of “one kind of thing [that] is understood and experienced in terms of another” (p. 5). Structural metaphors are the most commonly used in Western

vernacular, and are identifiable as concepts expressed “in terms of another structured, sharply defined concept.”⁵ Scholars in education proposing new ways to conceptualize school reform (e.g., Schlechty, 1990) or taking the time to explicitly name metaphors in academic discourses (e.g., Bullough, 1988), research trends (Cochran-Smith, 2002), and dominant notions about students (Cook-Sather, 2003) often identify structural metaphors. The following examples of language from Lakoff and Johnson’s (1980) text highlight how embedded metaphors about time within western culture is structured by an industrial civilization’s experience with money. Metaphors connect our experiences with one object (e.g., money) to help us structure another concept (e.g., time). Selected examples from the English language as identified in Lakoff and Johnson’s (1980, pp. 7-8) examples are re-introduced here to demonstrate how our experiences with money are embedded in our language and structure how we conceive time (italics in the original text):

Time is Money

You’re *wasting* my time.
 This gadget will *save* you hours.
 I don’t *have* the time to *give* to you.
 How do you *spend* your time these days?
 I’ve *invested* a lot of time in here.
 I don’t *have enough* time to *spare* for that.
 You’re *running out* of time.
 You need to *budget* your time.
 Do you *have* much time *left*?
 You don’t *use* your time *profitably*.

By drawing particular attention to the ways we structure our talk about time as money

⁵<http://www.sil.org/linguistics/GlossaryOfLinguisticTerms/WhatIsAStructuralMetaphor.htm>

in Western culture, the authors draw out how the language (e.g., *wasting, save, spend, have, give, invested, spare, budget, use, profitably*) we use helps us to imagine the metaphor lived by many in western culture of time as money. In the same way that I attended to patterns in language in professional development discourses (see Chapter 1), narrative researchers may attend to the systematic use of language to uncover conceptual metaphors in stories as lived and told.

Furthermore, Lakoff and Johnson (1980) argue that structural metaphors such as *time is money* and *argument is war*, pervade all aspects of western culture and conceptual thinking. Since people's everyday experiences with financial decisions inform conceptions of time as money, this kind of conceptual metaphor of time as money creates cultures that "*act* as if time is a valuable commodity—a limited resource, even money—we *conceive* of time that way" (emphasis in the original, p. 8).

Why do I point to these examples from Lakoff and Johnson (2008) as important in education? The structural metaphors *time is money* and *argument is war* are often embodied and enacted in teacher professional development. First, for school professionals in conversation about the amount of time to be made available for teacher professional development, structural conceptions of time may focus decision-making on the *cost-benefit analysis* of proposed programs. In this scenario, school administrators may reduce budgets for teacher development when stakeholders argue such activity is *costing valuable* student contact time. Second, decisions may be made as to the type of professional development (e.g., workshop, community of practice, conference, training) based on the *amount* of time a teacher or principal believes is available *to budget* during the school day. Similarly, if *argument as war* is a prevalent structural metaphor within a

school culture engaged in reform then debates between school professionals may *rage on* as individuals unconsciously focus on making *defensible* claims, *attacking weak points*, *demolishing arguments*, and *declaring victory* instead of working across disciplines to discuss shared concerns and ideologies.

Although comparisons of concepts to physical structures can help us to think in new ways about our ideas, this particular type of metaphor also has the potential to limit our ability to think beyond or outside a structure as experienced. Lakoff and Johnson (1980) examine metaphors to highlight their structural as well as the ontological implications. In the next section, I identify ontologically based metaphors that shape how we view the world and have implications for teacher professional development.

Examining ontological metaphors. Lakoff and Johnson (1980) assert, “our experiences with physical objects (especially our own bodies) provide the basis for an extraordinarily wide variety of ontological metaphors” (p. 25). Our ways of viewing the world are directly impacted by the fact that “we are physical beings, bounded and set off from the rest of the world by the surface of our skins, and we experience the rest of the world as outside us” (p. 29). Therefore, in an effort to quantify our world, we impose boundaries on boundary-less things (e.g., the mind, time, love, learning).

Ontological metaphors serve to provide people with ways of viewing events, activities, emotions, ideas, and other concepts as entities or substances understood from other experiences. As shown in President Obama’s 2009 speech, when one uses metaphors to identify a human experience as a substance or entity (e.g., the economy as an entity) then individuals are able to imagine the concept for analysis, quantification, and categorization. Lakoff and Johnson (1980) illustrate, with the ontological metaphor

inflation is an entity, that the concept of inflation in the 1980s was similarly imagined as some kind of monster to “*combat*” because it was imagined as “*backing us* into a corner” (p. 26). Lakoff and Johnson demonstrate two distinctly different metaphors for ontologically conceiving “the mind” in the following two examples (1980, p. 27-28):

The Mind is a Machine

Boy, the *wheels are turning* now!
We’re still trying to *grind out* the solution to this equation.
I’m a little *rusty* today.

The Mind is a Brittle Object

Her ego is very *fragile*.
You have to *handle him with care* since his wife’s death.
He *broke* under cross-examination.
The experience *shattered* him.

At least two aspects of metaphors are at play in these examples. Since ontological metaphors are generally unexamined as we go about our day communicating with others “they are usually taken as self-evident, direct descriptions of mental phenomena.... statements like ‘he cracked under pressure’ [are understood] as being directly true or false” (p. 28).

Secondly, the above examples illustrate two metaphorical concepts with very different ontological approaches to and conceptions of the mind. Consider for a moment how someone living by and generalizing by the metaphor *mind as a machine* might approach his or her role in teacher professional development design. How would that same professional development be re-conceptualized for teachers if another ontological metaphor *mind as a brittle object* was lived by the designer(s) instead? Professional developers⁶ might view the mind of a teacher from two significantly different

⁶ Again, I use the term professional developer interchangeably with facilitator. I am thinking here of a person who is hired, selected, or appointed for work with practicing

perspectives; thinking about the mind as mechanical might mean that teachers are thought of something that can be fixed, replaced, or re-engineered. However, thinking about teachers' minds as brittle objects might elicit an approach focused on nurturing and supporting the affective needs of each teacher. In these ways, conversations about teacher professional development likely include metaphors from distinctly different ontological premises.

Finally, Lakoff and Johnson (1980) assert that ontological metaphors, just as structural metaphors, “provide coherent structure, hiding some things and highlighting others” (p 139). If metaphorical concepts conceal some aspects and emphasize others, then it is imperative to make explicit the metaphors used in current conceptions of teacher professional development to tease out their underlying assumptions. Therefore, in my review of theoretical, sourcebook, and policy literature about teacher professional development, I attended to the wide range of conventional metaphors (orientational, ontological, and structural) authors evoke in their writing to help readers imagine how teachers and professional developers experience and improve their practice. In the next section, several approaches to teacher learning are examined to identify metaphors that inform and structure images for enactment.

teachers collaborating in a school-based, research-based, or university-based professional development program. The professional developer may work to perform the functions needed by the group in a variety of roles, as: facilitator, program co-designer, instructor, content expert, researcher, coach, mentor, organizer, and leader of group structured teacher learning.

Metaphor in Academic Discourses of Teacher Professional Development

For the purposes of this inquiry I have grouped scholarship on teacher professional development into three academic discourses: school reform, socio-cultural, and transformative learning. These three academic discourses have been particularly influential in my life as a teacher, graduate student, parent of school-aged children, and facilitator of teachers. By examining each using the lens of metaphor, I hope to uncover aspects of each that I have embodied and enacted in practice. Each discourse evokes different images for teacher professional development. Thirty-six selections from theoretical books, empirical studies (see Appendix B), professional developer resource books (see Appendix C), and peer-reviewed policy articles were chosen for analysis based on prominence within each of the three academic discourses and on the general “metaphorical coherence” (Lakoff & Johnson, 1980, p. 41) evident in the text providing enough detail to identify systematicity in concepts. I limited my review of professional development literature to scholars who included teacher collaborative structures, groups, or communities (See Appendix D) as an essential element of teacher learning designs. However, I omitted research specific to online learning communities, K-12 classroom communities, pre-service preparation programs, informal learning communities, professional development schools, whole school reform efforts, and workplace communities outside of schools. By examining theoretical, sourcebook, and policy literature used to describe teachers and professional developers in collaborative structures, I endeavor to show coherency in metaphors as demonstrated in the language within each discourse.

In the next three sections, I examine metaphorical language used to describe professional development's purpose in teacher learning. I will group and examine metaphors from each discourse identified, both structurally and ontologically, to show thinking about the roles of teachers and developers in collaborative group structures. Implications of identified metaphors within each discourse will be discussed relative to the individuals who serve as facilitators/professional developers within programs designed for teacher learning. As in Bruner's (1996) oft-cited analogy:

We live in a sea of stories, and like the fish who (according to the proverb) will be the last to discover water; we have our own difficulties grasping what it is like to swim in stories. It is not that we lack competence in creating our narrative accounts of reality -- far from it. We are, if anything, too expert. Our problem, rather, is achieving consciousness of what we so easily do automatically. I invite the reader to swim in metaphors to become aware of the "water," (p. 147)

I begin with a headlong dive into the academic discourse of school reform. Metaphors are identified in italics.

School Reform. Metaphors in the language written about *professional development as school reform* elicits images similar to those found in organizational development and manufacturing discourses. Scholars grounded in the school reform discourse use language to speak to purposes of changing organizations, increasing productivity, streamlining processes, managing systems, identifying inefficiencies, adapting to external environments, and developing productive norms in schools or school districts (e.g., Garmston & Wellman, 1999; Louis, Marks, & Kruse, 1995; Sparks, 1995; Sparks & Loucks-Horsley, 1990; Williams, 1997). School change is imagined as *produced* through "skilled" leadership, *management*, and collaboration

with staff to reform the group's approach to meeting the needs of today's learners.

Lavié (2006) differentiates between perspectives on teacher collaboration from five discourses: cultural, effectiveness and improvement, community, restructuring, and critical. He reports that teacher collaboration as enacted in the effectiveness and improvement discourse is conceived *as a product of cultural management* under the leadership of the principal. The author asserts that school administrators following this discourse facilitate overseeing teachers' collaborative groups *as reform managers* creating tensions with teachers about power, time, and decision-making. As related from the experience of one of the facilitator participants in my study when discussing teacher professional learning communities (PLCs) in her district, she stated that PLCs are seen as a part of the school's committee work to be completed under topics chosen by the district's professional development office, not the teachers (Rachel⁷, personal communication, October 27, 2008). The ontologically based metaphor of *administrators as reform managers* highlights sustainability and effectiveness *as management goals* for teacher collaborative groups.

School leaders as change agents, facilitators as change agents (Garmston & Wellman, 1997), and *principals as skilled leaders in the change process* (Williams, 1997) are also examples of coherent ontological metaphors in school reform scholarship. However, some school reform and educational leadership scholars envision professional communities as *whole school initiatives* where principals no longer act as "*architects of school effectiveness*" (Louis, Marks, & Kruse, 1995, p. 393). Instead, the

⁷ All four names for facilitators and teacher participating in my narrative inquiry are pseudonyms.

authors' image is of *leadership as shared vision* and the creation of *cultural space* for collaboration.

Sparks and Loucks-Horsely (1990) identified five distinct models for staff development including the most prevalent conception, the training model, often equated with workshop-based school reform initiatives where outside content experts determine what is presented. Sparks and Loucks-Horsely (1990) explain that research supports this model but, like the *organizational development* paradigm, "it relies on outside experts as trainers, presumes that universal answers can be conceptualized external to the organization, emphasizes replication of practice, and treats teachers as recipients of knowledge transmitted by others" (p. 135). Resonating with my experience, the embedded structural metaphor of *professional development as training* displaces teachers from their role as knowledgeable professionals and places professional developers in the role of experts. Related ontological metaphors from training paradigms based on industrial training models appropriate language that describes teachers *as consumers of knowledge, followers, or technicians*.

Teachers and professional developers (Stein, Smith, & Silver, 1999) coming from paradigms with a focus on *developer as knowledge disseminator* may be troubled by collaborative work they find inconsistent with conservative conceptions of teaching (Hargreaves, 1994; Lavié, 2006; Rosenholtz, 1989). Likewise, when teachers are hired within buildings as leads for professional development, they may approach their role of *facilitator as teaching expert*. This ontological metaphor may explain how some collaborative teacher groups offer little more than structured time for individuals to tell stories, share ideas and resources, exchange materials, and receive assistance

(Hargreaves, 1994). This form of collegiality does not pose a serious threat to teacher independence (Hargreaves, 1994) since each teacher's conceptions and control over practice remains intact. It makes sense, then, that teachers who become facilitators may facilitate as they were taught—in isolation, through tradition, seeking 'best practices' to share and distribute for implementation. Without time and depth in professional learning for developers, those in the roles of facilitators, mentors, coaches, and experts have few chances to improve or re-imagine practice with teachers in collaborative groups.

In sum, the coherent metaphorical conceptions prevalent in the school reform discourse of *principal as change agent, teacher as consumer, professional development as training, and developer as knowledge disseminator* are fairly consistent across the research selected for this dissertation. These metaphors, however, may be incongruent with other discourses informing the field. For example, teachers in professional development group structures as imagined from the socio-cultural academic discourse (where knowledge is considered co-constructed, situational, and shared) may resist "training" mandated from an external source, such as the district office or university. To elaborate on the differences in metaphors between approaches by swimming in a different sea, I turn our attention to the next stance selected for analysis—socio-cultural discourses.

Socio-Cultural. Professional development designs with teacher learning communities (e.g., Grossman, Wineburg, & Woolworth, 2001) often draw from socio-cultural theories and "communities of practice" (Lave & Wenger, 1991). Lave and Wenger (1991) assert that workers socially construct knowledge and engage in situated

learning throughout their professional endeavors together. The term “situative” evolved from a set of theoretical perspectives and research with roots including the disciplines of psychology, anthropology, and sociology (Borko, 2004). Her description of the term “situative” draws from Wenger’s conceptualization of “*knowledge*” as *situated* within a community of practice. In other words, knowledge is structurally conceived as residing not only in the individual minds of the community members but also within the *shared knowledge* of the community. Knowledge is recognized as already *existing intrinsically in systems* (e.g., cultural, socio-historical, personal, physical) and is available as working knowledge through the community’s specific *events* and *activities* (Yinger & Hendricks-Lee, 1993). Borko (2004) adds that conceptualizations of situative learning include changes in community *members* through participation in *socially organized* activities and uses of individual’s knowledge through participation in the community’s social practice (e.g., Lave & Wenger, 1991).

The language used in the socio-cultural academic discourse is different than that found in school reform literature. Such words as apprenticeship, culture, situated knowledge, shared experience, constructivist learning, social mediation, shared norms, negotiation, ritual, and custom were identified as consistent across sources during my review (e.g., Ball & Cohen, 1999; Borko, 2004; Lave & Wenger, 1991; Little, 2001, 2003a, 2003b; Wenger, 1998; Yinger & Hendricks-Lee, 1993). These words are less often grounded in organizational development or industrial metaphors, as was true of the language identified in school reform discourses. Instead, this language supports the ontological metaphor of *professional development as community membership*, developed from its anthropological and sociological roots to create images of cultural work, community

building, and shared practices. When teachers are imagined as *members of learning communities* with developers in situative contexts, a different development model than the school reform conception of teachers as consumers or receivers can be imagined. Again, I italicized words in these paragraphs to highlight the language used in the socio-cultural academic discourse that depicts the structure of the professional development experience and the ontological assumptions on which communities of practice are based.

Sykes' (1999) categorization of *teachers as professionals* depicted individuals as part of a collective group that "orient[s] their work according to communal and collegial norms" (p. 154) and is coherent with the metaphors highlighted in the socio-cultural academic discourse. Ontologically, the image of teachers as professionals—social beings within particular school sites—simultaneously simplifies and complicates aspects of implementation of new programs by outside experts. As Sykes (1999) elucidates, the socio-cultural discourse illuminates how:

As a function of their cultural and structural properties, schools may be more or less collegial; more or less open to innovation and outside influence; more or less inclined to scrutinize practice and results, to involve participants in decision making, and to hold members of the school community to shared ideals, standards, norms, and values." (p. 157)

This suggests that if teachers' relationship to the school *cultures* in which they practice are imagined as interconnected, then professional developers need to find ways to approach their practice of facilitating teacher groups from perspectives informed by anthropology, sociology, and psychology.

Little's (2003a) socio-cultural focus on teacher community in the natural work context is to examine "constructions of practice...afforded by and through the *ordinary*

workplace exchanges that constitute teachers' communities of practice" (p. 940). She firmly embedded her research at that time in the daily interactions of teachers and teacher leaders within communities of practice working on local and state-based school reform initiatives. With careful scrutiny of teacher interaction within community, both in formal and informal professional development designs, Little (2003a) posited that researchers might be able to identify when and how communities of practice are contributing, or not, to the transformation of teaching practices.

Socio-culturally based professional developers may conceive of *knowledge as constructed from experience*, a coherent ontological metaphor grounded in constructivist learning theory (e.g., Brooks & Brooks, 2000; Vygotsky, 1987). For example, professional developers' viewing *teacher learning as apprenticeships* within a community of practice (Wenger, 1998) may design learning experiences with *critical friends, feedback loops*, and *peer-coaching* expectations for members. Developers may work collaboratively with teachers to uncover covert or hidden norms, develop *shared values*, and engage individuals as equals in professional development for the purpose of "countersocialization" (Ball & Cohen, 1999, p. 6). Professional developers thinking metaphorically about *professional development as a situated, cultural enterprise* may imagine their role as *cultural worker, master craftsman, teacher leader, scholar, mentor*, or *community caretaker*.

Professional developers not aligned with socio-cultural academic discourses but hired to facilitate a "learning community" may negatively affect community-held assumptions about teachers' autonomy, knowledge, and pedagogy. Even professional developers working from within a socio-cultural orientation must be cognizant of the

community's development stages and work to create an environment where community might be constructed and maintained (Taylor, 1998). Wenger (1998) posits that careful work on "*community maintenance*" is necessary to transform coherent mutual engagement into a community of practice. Examples of community maintenance practices are *site team decision-making*, gifts of food to share, and emotional support for other members. This type of maintenance work is intrinsic and less visible, undervalued and unrecognized when considered with other aspects of community building (Wenger, 1998). Professional developers grounded in other academic discourses may not be willing to accept the image of *facilitator as caretaker* nor value Wenger's (1998) image of community maintenance.

In the next section I review the final selected academic discourse informing teacher professional development—transformational learning/critical reflection. I begin with an examination of the structural and ontological properties of the word transformation to revisit the connection between experience and metaphor.

Transformational Learning. Based in Mezirow's (1978) seminal work, transformational learning theory is often recognized for positioning *disorienting dilemmas* (e.g., family crisis, death, loss of job) as experiences that can transform the adult learner's assumptions and future choices (Impel, 1998). Transformative learning occurs when individuals critically reflect to change their frames of reference through examination of their assumptions and beliefs (Mezirow, 1997). The transformed individual implements new definitions for their world and takes action to live within these newly explored roles and perspectives. For some professional developers, the underlying theoretical framework for the adults engaged in groups may be based on the

ontological and structural metaphor of *learning as transformation* through critical reflection and rational discourse.

Selected perspectives shape transformative learning theory (Brockbank & McGill, 1998; Friere, 2006; Mezirow, 1978, 1991, 2000; Schön, 1983; and Thompson & Zeuli, 1999) and use language coherent within a metaphorical framework of transformation and reflection. I note the following common words in my review of the literature across several schools of thought on transformative learning: *reflection, reflective practice, reflective dialogue, action learning, action research, mentoring, critical transformation, critically reflective learners, conscientization, cognitive dissonance, deeply held beliefs, habits of practice, and revolutionary*. This common lexicon provides a coherent image for teacher learning that is different from that used in the socio-cultural and school reform discourses.

Metaphors found in professional development discourses grounded in transformative learning and reflection include a focus on the individual as in *teacher learning as reflection-on-action, reflection-in-action* (Schön, 1983) and learning as a form of social reform as in *conscientization* (Freire, 2006). In professional development settings grounded in transformational pedagogies, facilitative roles take on a variety of forms. For example, Taylor (1998) sees the role of the *facilitator as creating an environment* of trust to build the relationships among learners, yet the author contends the facilitator is not to be overemphasized at the expense of the other participants who share responsibility for creating the conditions for transformative learning. Cranston (1994) stresses that, to *set the stage* for transformative learning, the *facilitator* is to serve as a role model by exhibiting openness to learning and changing perspectives in

both subject matter and pedagogy. Brockbank and McGill (1998) see *facilitation as enabling reflective practice* through intentional dialogue, transparency, and *awareness of self*.

The language and metaphors in the transformative learning discourse in teacher professional development also appear often in literature from cognitive science and counseling. Interestingly, the discourse of transformational learning has an individualized nature when compared to the social nature of the socio-cultural discourse. Though facilitators are encouraged in the transformative learning discourse to set the stage for transformation and support adult learners through rational dialogue after a disorienting dilemma, the focus remains on each individual's reflective practice and awareness of self.

Finally, I noticed that even the names of academic discourses convey the underlying metaphors around which they are imagined. Consider, the semantics of transformational learning (Mezirow, 1978, 1997, 2000) as an ontological metaphor by reorganizing it to the phrase *learning as transformative*. Using the word “transformative” in professional development might elicit teachers' and professional developers' experiences from observation of an object or life form (e.g., child, seed, caterpillar) that has changed dramatically into something entirely new—changing from the inside out. If transformation is something we have experienced as uplifting in the physical world, then we may metaphorically structure it as a process and orient it as up.

Or, if transformation is imagined as something we cannot see happening in another person, but may understand through religious beliefs (e.g., the biblical story of the transfiguration of Jesus Christ) or spiritual experiences, then it may be something

we perceive as magical that happens inside us or in others. We might apply this image to our understanding of transformational learning defined as “a deep, structural shift in the basic premises of thought, feelings, and actions ... a shift of consciousness that dramatically and irreversibly alters our way of being in the world” (O'Sullivan, 2003, p. 327). These are only two ways the words *transformative learning* evoke structurally, orientationally, and ontologically based metaphors from experiences.

Metaphors in Professional Developers' Images of practice

My initial examination of metaphors in school reform, socio-cultural, and transformative/critical reflection professional development discourses illustrates the metaphorical coherency found in language within discourses. The examination of language specific to each discourse provides conceptually focused ways to think about teachers', school leaders', and professional developers' assumptions specific to their roles and purposes in teacher development. Since metaphors highlight and hide structural, orientational, and ontological conceptions of professional development design and developer practice, it is important to uncover the assumed images within academic discourses. In this section, I argue for attention to the professional learning of developers using metaphor as one avenue for uncovering assumptions, imagining new paradigms, and improving practice with teachers.

First, professional developers working with teachers in collaborative structures need to attend to re-imagining their practice and think beyond the structural and ontological premises of the metaphors deeply ingrained in western culture. Explicating and examining metaphor within systems provides professional developers, teachers, and

administrators the opportunity to work collaboratively toward a professional development approach that is fine-tuned for each unique school site. When developers are transparent, confusion over the structure and purpose of the professional development design may lessen, providing teachers, developers, and school administrators with new opportunities for growth beyond assumed paradigms. For example, school reform literature is riddled with the words “effective” and “efficient.” Both words elicit structural metaphors about machines or factories that are well designed to run at full capacity and produce a desired product. The words, embedded in a strong cultural narrative for production, set up a dichotomy between efficient and inefficient professional development models. “Ineffective” and “inefficient” may be assumed, then, of professional development designs that are not structured or ontologically based on the industry metaphor. So, the metaphorical choices available to professional developers who do not want to connote an industrialized civilization’s manufacturing image for teachers appear limited. Therefore, since hidden ontological metaphors are powerful enough to hide some viewpoints and highlight others for professional developers and teachers working in collaborative school groups, the metaphors must be exposed and examined.

Second, understanding the water in which we swim helps us to dive into other oceans and appreciate what new experiences they have to offer. Exposing metaphors’ structural and ontological influence on our thoughts and actions is essential to understanding underlying assumptions (Lakoff & Johnson, 1980; Rosaen & Florio-Ruane, 2008; Schön, 1979) and to address teacher socialization through

countersocialization (Ball & Cohen, 1999; Lortie, 1975) in an effort to make conscious the issues of power, privilege, and poverty (Freire, 2006).

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As noted earlier in this chapter, Lakoff and Johnson's (1980) work provided the impetus for the experientially based, collaborative narrative research methodology as defined over time by Clandinin and Connelly (1988, 1990, 1992, 1995, 2000, 2006, 2007). With narrative inquiry as methodology, I sought to understand and appreciate the significance of Clandinin's (1985) choice of metaphor as a lens for understanding teacher knowledge, experience, and identity. Clandinin's (1985) narrative inquiry study alongside "Stephanie" identifying the teacher's metaphors of practice revealed—as I hoped to uncover with facilitators—how these images are a kind of knowledge “embodied in a person and connected with the individual's past, present and future” (p. 379). In the next chapter, I will overview how narrative inquiry's story and possibilities for relational research captivated my imagination.

Chapter 3: Finding Narrative

[Practice] involves the calling forth of images [metaphors] from a history, from a narrative of experience, so that the “image” is then available to guide us in making sense of future situations. Images are within experience and are not only in the logically defined words which specify their conceptual status. Their embodiment entails emotionality, morality, and aesthetics and it is these affective, personally felt and believed meanings which engender enactments.

– D. Jean Clandinin (1985, p. 363)

Finding D. Jean Clandinin

Near the end of my doctoral coursework, I became increasingly anxious that none of the many methodologies analyzed (quantitative or qualitative) in the core methodology courses would be appropriate for the questions and approach I had in mind for further study in teacher professional development. During the last week of my final methods course we considered relatively new interpretative options including narrative inquiry and arts-based inquiry. I read D. Jean Clandinin’s (1985) early work to identify images (i.e., metaphors) informing teachers’ personal practical knowledge. Her study of classroom teachers’ personal practical knowledge through participant observation and interview had elements that resonated strongly as an excellent fit for my future as a researcher of facilitators. I admired several aspects of this study’s research approach.

First, Clandinin demonstrated within her method a desire to serve her participants by working side-by-side—assisting with anything needed—in the classroom. Resonating with my epistemological stance as an action research facilitator with teachers, I envisioned this type of onsite involvement with and service to

participants in my future research studies. Narrative inquiry was reminiscent of the partnerships shared with teachers involved in action research because of the participatory relationship privileging teacher insider knowledge (Elbaz-Luwisch, 1997) when writing in collaboration with researchers. Similarly, action research (Stringer, 2007) presumes

that the mere recording of events and formulation of explanations by an uninvolved researcher is inadequate in and of itself...[and] that those who have previously been designated as 'subjects' should participate directly in research processes and that those processes should be applied in ways that benefit all participants directly. (p. 7)

Like action research, narrative inquiry as enacted by Clandinin demonstrated a way to engage directly with teachers in the classroom to examine lived experiences while also “shift[ing] the experiences of those with whom we engage” (Huber & Clandinin, 2002, p. 789).

Another reason I was fascinated with Clandinin’s approach was the length and quality of engagement for researcher and participant. Clandinin reported a two-year long relationship in her 1985 study and, according to her current work, continues similar extended engagements often of a year or more (Osadetz, 2004). The extended time together discussing past and present stories from both shared and unshared experiences creates space for partnership in the exploration of experience and image. This relational inquiry dimension between researcher and participant in narrative inquiry includes shared space where field texts are collected, negotiated research texts, and collaborative work with participants (Clandinin, 2006). Although Clandinin’s initial study did not specify narrative inquiry as her methodology, her enactment of inquiry

within the lived and told stories of her participants helped to create meaning for both teachers and researcher.

Additionally, Connelly and Clandinin's (1988) assertion that an "image" held by a teacher is embodied and enacted in practice captivated my own imagination as an emerging scholar. If facilitators had significantly different images of their practice with teachers, wouldn't they each act upon those images in their work in unique ways? Would identifying and reflecting on those images help with their own professional development and would not the conversation with others about these images of practice be beneficial? When analyzing Clandinin's use of the word "image," I found that she meant the work in much the same way as "metaphor," and was grounded in Lakoff and Johnson's (1980) *Metaphors We Live By*. As noted in chapter 1, I use image and metaphor interchangeably throughout this dissertation to represent the way in which people use one concept to describe, construct, or direct the understanding of another concept.

Clandinin's (1985) research identified classroom images that informed personal practical knowledge in teaching. Clandinin engaged with two teachers through her study to identify the images teachers carried into their profession. Stephanie, the elementary teacher participating in Clandinin's study, imagined her classroom as "home" and felt responsibility within that image to create a family-like atmosphere with treasured things, baked foods, and people who work together. Clandinin's findings support her theory that images of teaching are a kind of knowledge "embodied in a person and connected with the individual's past, present and future" (1985, p. 379) that blend personal characteristics and background to shape practice in the classroom and in life.

In these initial ways, Clandinin's 1985 study was a particularly good fit for my image of self as a researcher. Through narrative inquiry as methodology, I could imagine working, side by side, with teachers and facilitators examining and developing narratives of their lived experiences. I envisioned my work as a researcher both as a service to teachers and facilitators, but also to practitioners in teacher development and professional development. Not only did Clandinin's study aligned with my image of practice as a researcher, but also the idea that people have conceptual metaphors and images that they live out in practice fascinated me. In order to learn more about narrative inquiry from the authors who most resonated with me and other researchers engaged in similar study, I completed an extensive review of the literature in narrative with specific attention to the work of Clandinin. In the next section, I will review the history of narrative research as reported by seminal educational scholars. In a playful review, I elected to retell the story of narrative by writing about key elements of story—setting, characters, points of view, themes, and conflicts.

Story Elements of the “Narrative Turn”

Several scholars offer historical reviews (Chase, 2005; Clandinin & Rosiek, 2007; Langellier, 2001; Riessman, 2008) to explain the shift from traditional treatment of the literary narrative as an object of study to the narratives of humans in the social sciences. An additional historical review of the theoretical and empirical literature would be redundant in the field and is beyond the scope of this dissertation. However, I draw from several prominent authors in narrative research to examine the elements of narrative research's story. Since the history of narrative research can be retold using

story elements (e.g., setting, character, point of view, themes, and conflict), I have elected to reconstruct the review of narrative literature accordingly to creatively organize narrative scholars' epistemological viewpoints, ontological premises, methodological approaches, and responses to issues of validity, reliability, and generalizability.

Set·ting [sétting] 1.place, time, conditions **Char·ac·ter [kár·ræktər]** 1.people. The setting for the turn to the narrative was influenced, as Chase (2005) and Riessman (2008) posit, by a variety of scholars in many disciplinary fields turning to narrative at “different times, places, theoretical shifts, and political movements” (p. 14) as an extension of the interpretative turn (Geertz, 1973). Both sociology and anthropology's beginnings in narrative occurred in the early twentieth century with the Chicago School's collected life histories and anthropology's simultaneous adoption of methods in life history to examine cultural change. Langellier (2001) and Riessman (2008) locate the origin of the “narrative turn” in the 1960s due to the shift away from positivist modes of inquiry with realist epistemologies, emancipation efforts of marginalized groups, acceptance of a therapeutic culture, moves toward cross-disciplinary studies, and developments in recording technologies. Riessman (2008) adds that, in the United States, a turn away from Marxism's class analysis toward postmodernism's “social theories that privilege human agency and consciousness” (p. 16) further supported the shift toward narrative research in the social sciences. She also identifies Labov and Waletzky's (1967/1997) article “Narrative analysis: Oral version of personal experience” as seminal to structural analysis in narrative research.

Scholars (Chase, 2005; Clandinin & Rosiek, 2007; Langellier, 2001; and Riessman, 2008) identify significant texts as concurrently creating fluidity and conversation between disciplines and informing emerging narrative researchers in art, humanities, and social sciences. Seminal works in narrative research seem to emerge simultaneously from multiple fields in the 1980s. Riessman (2008) specifically points to *Actual Minds, Possible Worlds* (Bruner, 1986), *Interpreting Women's Lives* (Personal Narratives Group, 1989), *Narrative Knowing and the Human Sciences* (Polkinghorne, 1988), and *Research Interviewing: Context and Narrative* (Mishler, 1986) and Clandinin (2007) would add *Metaphors We Live By* (Lakoff & Johnson, 1980). Chase (2005), Clandinin and Connelly (2000), Cortazzi (1993), and Riessman's (2008) separate reviews also identify other important contributions from influential researchers in the 1990s who have informed multidisciplinary research lines drawing from anthropology, feminism, psychiatry, philosophy, and qualitative methodology (see Appendix E).

Narrative research remains “a field in the making” (Chase, 2005, p. 651) during a time when the social sciences are engaged in developing new methods to “preserve agency and subjectivity” (Riessman, 2008, p. 16). Riessman (2008) emphasizes that narrative research is currently under study worldwide in “virtually every field and social science discipline” (p. 17) increasingly from researchers who are crossing disciplinary boundaries and creating conceptual diversity of assumptions, approaches, and definitions. In spite of the variety of scholars engaging in creating narrative methodologies, researchers choosing narrative inquiry as a methodology do so from similar points of view.

Point of View [poynt uv vyoo]. 1. Angle from which a story is told. Narrative research is epistemologically grounded in examining and generating with participants new relations between the individual and his or her environment, community, and world (Clandinin & Rosiek, 2007). However, it is a complex research method because of the variety of methodologies and diversity of fields informing the process of analysis. This section will take up the point of view from the perspective of the participant and the point of view from the perspective of the narrative researcher and his or her related field.

Participants' viewpoints. The participants' point of view is essential to consider while analyzing and reporting in narrative research. As researchers examining experiences narratively, we make possible for participants and readers "a new way of dealing with [their environment, community, and world], and thus eventually create a new kind of experienced objects, not more real than those which preceded but more significant, and less overwhelming and oppressive" (Dewey as cited in Clandinin & Rosiek, 2007, p. 39). Narrative inquiry has potential when enacted in relation with participants to support reflective practice in the participants and researcher's professional and personal development.

Narrative research also uses the point of view of the participants and researcher to illuminate the complexity within the social context and culture of teaching and learning "just as story unfolds the complexities of characters, relationships, and settings" (Webster & Mertova, 2007, p. 13). Riessman (1993) explains that in narrative research, researchers believe:

nature and the world do not tell stories, individuals do. Human agency and imagination determine what gets included and excluded in narrativization, how events are plotted, and what they are supposed to mean. Individuals construct past events and actions in personal narratives to claim identities and construct lives. (p. 2)

It is narrative inquiry's focus on the individual's point of view, grounded in examining life as experienced and narrated, that aligns with my epistemological stance as an educational researcher. Recognizing that I construct, story and re-story my own life experiences, I find it imperative to consider deeply how to ethically and collaboratively construct and re-story the lives of others in research.

Researchers' viewpoints. Other points of view emerging from the literature on narrative are reflected in the diversity of researchers' recommended methodological approaches for analysis of participants' stories. The diversity in analysis techniques and performances of narrative reflect the wide variety of fields underlying researchers' perceptions about what is and is not appropriate technique (Chase, 2005). She describes five contemporary lenses for narrative as:

- 1) A discourse form for "retrospective meaning making, the shaping or ordering of past experiences";
- 2) "verbal action- as doing or accomplishing something" (e.g., inform, entertain, persuade, disrupt);
- 3) stories "both enabled and constrained by a range of social resources and circumstances";
- 4) "socially situated interactive performances- as produced in a particular setting for a particular audience"; and,
- 5) as self-study where "they develop interpretations and find ways to present or publish their ideas about the narratives they studied" (p. 656-7).

Chase (2005) each viewpoint on how to *do* narrative reflects specific disciplinary approaches to narrative inquiry from psychologists (quality of life and psychosocial

development), sociologists (organizational contexts and identity work), anthropologists (ethnography and autoethnography).

When describing methodological approaches to analyzing interview transcripts in her early work, narrative researcher Riessman (1993) drew from sociolinguistic, anthropological, and literary traditions for analysis. She explained that narratives are collected and examined for persistence of literary conventions (genre, protagonist, events), structure (form, dramatism, inflection), plots (tragedy, comedy, romance) and narration (evaluative clauses).

Her early analysis techniques were primarily focused on the language participants used in transcribed interviews. More recently, she expanded her conception of approaches to include a broader representation from the field of narrative research. Riessman (2008) presented four current types of narrative research analysis approaches as: thematic, structural, dialogic/performance, and visual analysis. Three of her categories for narrative inquiry methodologies include a broad selection of empirical studies using thematic, structural, and dialogic language analysis techniques to examine the written and spoken words of participants. However, her addition of visual analysis as a fourth approach for the examination of art, photography, and other visual genres studied in narrative research expands the field of narrative research to include other performance and communication mediums.

Cortazzi (1993) developed approaches specifically for collecting and analyzing stories from teachers. His kinds of narrative research included: 1) Autobiography where participants identify past educational experiences, discuss future intellectual interests, analyze their biographical present, and synthesize the three together; 2) Collaborative

Biographies aimed “to make sense of teachers’ thoughts, actions, experience, and attitudes by studying the formation of their professional consciousness through their experience” (p. 14) through joint investigation in extensive interviews, relevant texts, and contexts; 3) Narrative Inquiry aimed to illuminate how practical situations bring forth images (metaphors from stories of experience) that act as guides in future action and “influence the personal curriculum of the teacher” (p. 17); and 4) Teacher Curriculum Stories examining experienced teachers’ practices with meaning creation through use of story within the curriculum.

Cortazzi (2002) recommended a variety of techniques often employed in his field of linguistics for use by participants and researchers in the above approaches. From his viewpoint, he recommended analyzing interview transcripts, field notes, observation data, journals and other relevant artifacts for critical incidents. The critical incidents are considered key events to be organized into a sequence and re-storied in the narrative. The re-storying draws attention to the participants’ meanings and voices as actors in the experience (Cortazzi, 2002).

Clandinin and Connelly (2000) asserted that narrative research is more than collecting, analyzing, and interpreting stories. The wide variety of data that they collected as field texts through participant observation, self-study, and interview coupled with the co-construction with participants while re-storying those texts reflected their focus on more than participant interviews as sources of stories. Clandinin and Connelly’s point of view came through in their work written to reflect a multi-faceted study of experience that remains “a matter of people in relation contextually and

temporally” (p. 189) where participants and researchers live and tell the experience collaboratively. Clandinin and Connelly reported:

As we tell our stories as inquirers, it is experience, not narrative, that is the driving impulse. We came to narrative inquiry as a way to study experience. For us, narrative is the closest we can come to experience. Because experience is our concern, we find ourselves trying to avoid strategies, tactics, rules, and techniques that flow out of theoretical considerations of narrative. Our guiding principle in an inquiry is to focus on experience and follow where it leads. (p. 188)

A sense of messiness exists within their work that I believe best reflects life as lived and storied. I imagine from their writing that researchers and participants are working together to capture moments of experiences viewed as through kaleidoscopes to re-represent and re-live later with readers, never in the same way twice. I locate Clandinin and Connelly’s approach, as well as my own, within Riessman’s (2008)

dialogic/performance analysis realm where:

the research relationship is an unfolding dialogue that includes the voice of the investigator who speculates openly about the meaning of a participant’s utterance. Readers see her subjectivity and awareness of social positioning at work...intersubjectivity and reflexivity come to the fore as there is a dialogue between researcher and researched, text and reader, knower and known. The research report becomes ‘a story’ with readers the audience, shaping meaning by their interpretations. (p. 137)

Connelly and Clandinin (2006) more recently noted that the field of narrative inquiry remains quite fluid. Instead of categorizing narrative work into approaches, they offer seven considerations when designing narrative inquiry: 1) imaging a lifespan, 2) living and telling as starting points for collecting field texts, 3) defining and balancing the commonplaces of temporality, sociality, and place, 4) investment of self in the inquiry, 5) researcher-participant relationship, 6) duration of study, and 7) relationship

ethics and narrative inquiry. Their engagement in narrative inquiry seems a way of living and thinking, not just a way of doing research.

As demonstrated, multiple viewpoints exist in the literature detailing how narratives are collected, enacted, analyzed, embodied, and reported. With the flood of narrative research studies and methodologies across multiple disciplines, researchers in formalist research paradigms test the emerging currents shaping analysis techniques. Leading scholars (Barone, 2007; Connelly and Clandinin, 2006; Lyons, 2007) advocate on behalf of exemplary texts to make explicit to the larger research community well-designed and enacted analytical approaches in narrative. In spite of the fact that researchers (Clandinin & Rosiek, 2007; Riessman, 2008; and Webster & Mertova, 2007) share varied points of view framing their approach to narrative analysis, there is general consensus in narrative inquiry's ontological foundations. Thus, narratives are typically grounded in the following elements: 1) temporality of research, 2) continuity of experiences growing out of other experiences, 3) rejection of transcendent reality (god, truth, etc.); and 4) social dimensions or influences on person's inner life, environment, and unique personal history.

Themes [them] 1. Unifying dominant ideas; a discourse subject; topic. Chase (2005) delineates five specific themes embedded within researchers' disciplines when she asserts that: psychologists approach narrative with a "focus on the relationship between individual life stories and the quality of their lives" (p. 658); sociologists focus on identity work with individuals "constructing selves within specific institutional, organizational, discursive, and local cultural contexts" (p. 658); other sociologists base inquiry on "specific aspects of people's lives rather than on conversations in specific

organizational contexts” (p. 659); anthropologists are involved in long-term ethnographic approaches that present both the participants and the researchers in texts (p. 659); and autoethnographers “interpret, and/or perform their own narratives about culturally significant experiences” (p. 660). Chase, like Riessman, does not include studies from educational research specific to teachers, which makes it difficult for me to place Clandinin and Connelly’s work within presented themes and approaches. Seeking authors who do include educational research perspectives, I draw again from Cortazzi.

Cortazzi (1993) identifies three research themes that highlight the importance of teachers’ narratives: 1) conceptions of reflection (e.g., Dewey’s *reflective action*, 1938; Schon’s *reflection on action*, 1987; and Zeichner & Liston’s *reflective teaching*, 1987), 2) the nature of teacher’s knowledge (e.g., Connelly and Clandinin’s *personal practical knowledge*, 1988; Doyle’s *event structured knowledge*, 1990; and Elbaz’s *high context knowledge*, 1990), and 3) the *absence of teachers’ voices* in teacher research (e.g., Goodson, 1991; Lytle & Cochran-Smith, 1990). I posit that these themes continue today in the field of professional development for teachers engaged in professional learning communities and action research groups. My sense is that research focus continues to be on teachers’ knowledge, professional development design, reflective practice, and voice. However, it is beyond the scope of this dissertation to review current themes in the related empirical and theoretical teacher professional development literature.

Con·flict [kón flíkt] 1. Opposition, in interests or principles. Conflicts over how to reframe validity, reliability, and generalizability within the field of narrative inquiry have been part of the larger ongoing scholarly debates between researchers grounded in formalist/realists traditions and reformists/interpretative researchers (Clandinin &

Connelly, 2000; Riessman, 1993). Polkinghorne's (1988) work to deconstruct Bruner (1986) encouraged a reconceptualization of reliability and validity for narrative inquiry by delineating paradigmatic-type narrative inquiry (gathering data to categorize) from narrative-type narrative inquiry (gathering data to produce explanatory stories). Riessman (1993) asserts that no canon exists in narrative research to address validation but recommends an approach to validation through focus on persuasiveness, correspondence, coherence, and pragmatic use. Pinnegar and Daynes' (2007) assert that questions of meaning, value, and integrity make more sense in assessment of narrative research than does the traditional positivistic focus on validity, reliability, and generalizability.

Polkinghorne (2007) posits "different kinds of knowledge claims require different kinds of evidence to convince readers that the claim is valid" (p. 474). He argues that narrative inquiry will validate "claims about understandings of human experience [with] evidence in the form of personally reflective descriptions in ordinary language and analyses using inductive processes that capture commonalities across individual experiences" (p. 475). He also identifies validity threats in narrative research as the following: 1) participants' descriptions of their experiences do not reflect the full meaning as participants leave out aspects of meaning from experiences in the retelling; 2) the assembled texts may not express well the meaning of the participants' experience. Validity is threatened, Polkinghorne (2007) asserts, when participants, texts, and the researcher are impacted by four sources of disjunction:

- (a) the limits of language to capture the complexity and depth of experienced meaning, (b) the limits of reflection to bring notice to the layers of meaning that are present outside of awareness, (c) the resistance of people because of social

desirability to reveal fully the entire complexities of the felt meanings of which they are aware, and (d) the complexity caused by the fact that texts are often a co-creation of the interviewer and participant. (p. 480)

To attend to these threats to validity in narrative inquiry, Polkinghorne (2007) recommends that the researcher work diligently to “lessen the distance between what is said by participants about their experienced meaning and the experienced meaning itself” (p. 482) through communication. It is the responsibility of the narrative researcher to present arguments “to reviewers and readers to convince them that the ensemble of storied portrayals, although only partial, does not overly distort participants’ meaning” (p. 482). Polkinghorne recommends that the four sources of disjunction be addressed in the text through transparency regarding the iterative process of member-checking narratives with participants “to gain clarification and further exploration of questions that arise during the interpretative portion of the research” (p. 482).

Narrative inquiry counters the “reliance on the assumptions of positivistic and post-positivistic science allow[ing] researchers to assert that their findings are valid” (Pinnegar & Daynes, 2007, p. 23). Instead, the narrative inquirer’s acceptance of “multiple ways of knowing the world establishes findings through authenticity, resonance, or trustworthiness” (Clandinin & Connelly, 2000; Denzin & Lincoln, 1994 as cited in Pinnegar & Daynes, 2007, p. 23). Pinnegar and Daynes (2007) explain:

The acceptance of the relational and interactive nature of human science research, the use of the story, and a focus on a careful accounting of the particular are hallmarks of knowing in narrative inquiry... Narrative inquirers recognize the tentative and variable nature of knowledge. They accept and value the way in which narrative inquiry allows wondering, tentativeness, and alternative views to exist as part of the research account. (p. 25)

Validity concerns can also be addressed in narrative inquiry through a multi-dimensional approach. Connelly and Clandinin's (2006) three-dimensional narrative inquiry space "prompts researchers to both question explanations and meanings constructed and provide the audience with accounts that uncover and reveal such questions of meaning, value, and integrity" (Pinnegar & Daynes, 2007, p. 21).

Polkinghorne (2007) is adamant that "it is the readers who make the judgment about the plausibility of a knowledge claim based on the evidence and argument for the claim reported by the researcher" (p. 484) and it is the responsibility of the narrative researcher to present arguments with evidence-based clarity and accuracy. The focus on the researcher as instrument speaks to issues of reliability. Narrative researchers, in collaboration with their participants, are the research instruments. Reliability in post-positivist research is measured by the consistency of the research instrument used in the experiment (e.g., survey, test) through statistical analysis. Reliability is closely tied to validity in narrative inquiry. If the reader deems the data valid due to the researcher's transparency and persuasiveness in analysis as well as her careful attention to authenticate meaning constructed from participants' experiences, then the researcher-as-instrument will convince the reader of reliability.

Finally, similar conflicts between formalist and reformist traditions influence narrative researchers' responses to the conception of generalizability in social science research. Riessman (1993) asserts that generalizability in narrative inquiry is approached differently in that the researchers' goals "are to learn about substance, make theoretical claims through method, and learn about the general from the particular. Individual action and biography must be the starting point of analysis, not the end" (p.

70). Perceived limitations, such as small sample sizes drawn from under-represented populations, may inhibit readers' perceptions of theoretical abstractions to be made from the research. However, Riessman (1993) points to examples including "Breuer's Anna O, Garfinkel's Agnus, and Piaget's Children" as part of science's long tradition "of building inferences from cases" (p. 70).

Clandinin and Connelly (2000) report similar conflicts with positivist and post-positivist traditions framing conceptions of generalizability. They tell the story of doctoral students engaged in narrative inquiry and struggling with reductionist ideas that promote textual formats with minibiographies of participants followed by a cross-case analysis. When narrative researchers' create themes or categories for the purpose of generalization, Clandinin and Connelly (2000) assert they are reducing downward and "yield[ing] a different kind of text with a different role for participants" (p. 143). These are examples that demonstrate conflict within and around narrative researchers when working within a reformist paradigm for interpretive research.

Having explored the elements of the narrative turn as storied in the literature, I focus in the second part of this paper on Clandinin and Connelly's storied research line and narrative inquiry as lived in their work with teachers. Clandinin and Connelly's (1987, 1988, 1990, 1992, 1995, 1998, 2000, 2006) collaborative research has remained consistent in its focus and respect for teachers' knowledge as embodied and enacted from personal and professional experiences. In the next section, I consider the evolution of Clandinin and Connelly's research together and locate myself as an emerging scholar within their conceptualizations of the elements in narrative inquiry.

Clandinin and Connelly's Storied Lives

In the introduction to this chapter I shared the story of my discovery and appreciation for Clandinin's (1985) study of Stephanie's image of practice as a classroom teacher. Through Clandinin's research, I also appreciated her mentor and friend, F. Michael Connelly, for his collaboration on an evolving conception of narrative inquiry as embodied and enacted in practice.

Embodying narrative inquiry. Early collaborative work by Clandinin & Connelly (1988, 1992) focused on the teacher and how each expressed personal practical knowledge in her classroom (Clandinin, 2006). In 1995, they expanded their work to the professional knowledge landscape "in order to attend to the social, cultural, and institutional contexts of schools" (p. 49) where they worked from the teacher's vantage point to take on a Deweyan view of curriculum. She explains "Dewey's (1938) notion of 'situation' and 'experience' enabled us to imagine the teacher not so much a maker of curriculum but as part of it and to imagine a place for contexts, culture (Dewey's notion of interaction), and temporality (both past and future contained in Dewey's notion 'continuity')" (Clandinin & Connelly, 1992, as cited in Clandinin, 2006, p. 49).

Another shift in focus occurred recently for Clandinin and Connelly when they began to attend to the interaction between teachers' and particular children's lives within certain contexts. Clandinin (2006) explains:

By entering into relationships with particular children and teachers, we wanted to understand curriculum as a course of life as lives were being lived. From within these relationships, we began to understand how curriculum could be seen as a curriculum of lives, teachers' lives and children's lives. Thinking in

this way, of course, made the composition of life identities, what we understand narratively as stories to live by, central in the process of curriculum making. (p. 49)

Clandinin and Connelly worked first with teachers to identify personal practical knowledge and later with studying narrative, or lived stories, as enacted in curriculum by students and teachers alike. This incorporates many of the ideas I also have in focusing my work initially on facilitators' images as embodied and enacted in practice. I envision the format of my research report designed in a way that honors each of the participants' unique life identities with attention to their lives within the commonplaces.

Embodying image in practice. Clandinin's initial work (1985, 1986) helped clarify "image" and how it may be conceived in relation to practice. She theorized that images embody personal and professional experience and, in turn, are enacted in professional and personal practices. She explains:

[Practice] involves the calling forth of images from a history, from a narrative of experience, so that the "image" is then available to guide us in making sense of future situations. Images [metaphors] are within experience and are not only in the logically defined words that specify their conceptual status. Their embodiment entails emotionality, morality, and aesthetics and it is these affective, personally felt and believed, meanings that engender enactments. (1985, p. 363)

People live storied lives using metaphors embodied and enacted. These metaphors or images shape their personal and professional identities. As Zeichner and Liston (1996) explain, "Connelly and Clandinin view this practical knowledge as a rich interweaving of images, experiences, understandings, and personal stories that guide and inform teachers' actions" (p. 36). For my research purposes, *images are metaphors* (see Lakoff & Johnson, 1980) seminal to and embodied in an individual's practice. As I reviewed my notes kept during the time I served as instructor and facilitator of teachers in action

research based learning communities, I had an epiphany about my own metaphor of practice.

I believe I have long held the image of “spiritual worker” as facilitator for practicing teachers. I am not thinking of spiritual in a religious sense, but one that resonates more with Parker Palmer’s (1998) images in *The Courage to Teach*. I saw myself as healer for what Palmer described as “the pain of dismemberment” (p. 20) when teachers painfully discovered that the professional community and student groups they worked with were often distant, uncaring, and competitive. Palmer explains that “deeper down, this pain is more spiritual than sociological: it comes from being disconnected from our own truth, from the passions that took us into teaching, from the heart that is the source of all good work” (p. 20).

I didn’t read Palmer’s work while I was a facilitator; he was a welcome find during my doctoral studies. However, my journal notes from 1997 indicated I was thinking and acting out my image as spiritual guide while facilitating. For example, I often spoke to the teachers about remembering their passion for the profession. I noted that I felt like a “preacher” sometimes when I spoke to the group. I encouraged them to reflect on their original reasons for becoming a teacher to help them remember who they are and why they teach. I recall that I thought of myself as serving students by working with teachers. I nurtured, supported, and trusted teachers in their practice. I loved my work and thought of it as a calling. On my best days, I believed I was re-igniting the flame within people who originally came to our program feeling burnt out. I enacted the image of spiritual guide that I held subconsciously for many years and now I wonder what other images facilitators are enacting while working with teachers.

Enacting narrative: data forms and purpose. Connelly and Clandinin (2006)

envision narrative inquiry as “shar[ing] features in common with other forms of qualitative inquiry such as the emphasis on the social in ethnography, and the use of story in phenomenology” (p. 479). Data, collected primarily through interview, journals, artifacts, stories, and photographs, are intended to capture the storied lives that people lead, socially and individually. In order to explore with other images as embodied and enacted, I envisioned collecting similar data to develop, collaboratively, the stories of facilitators. As Connelly and Clandinin (2006) further explain:

People shape their daily lives by stories of who they and others are and as they interpret their past in terms of these stories. Story, in the current idiom, is a portal through which a person enters the world and by which his or her experience of the world is interpreted and made personally meaningful. (p. 477)

According to Connelly and Clandinin (2006) access to these “portals” with the living might be drafted into narratives after research that both purposively and simultaneously explores the commonplaces of place, temporality and sociality. In Chapter 4, I explain in greater detail Connelly and Clandinin (2006) commonplaces as an analytic approach.

Narrative Inquiry as Methodology in CRISP

The Cultural Relevance in Science Pedagogy (CRISP) project was created as an action research network for K-8 teachers. Narrative inquiry, like action research, values participatory relationships and privileges practitioner insider knowledge (Elbaz-Luwisch, 1997) when writing in collaboration with researchers. Similarly, action research (Stringer, 2007) presumes “that those who have previously been designated as ‘subjects’ should participate directly in research processes and that those processes should be applied in ways that benefit all participants directly” (p. 7). Like action

research, narrative inquiry as enacted by Clandinin (1985, 1986) demonstrates a way to engage directly with practitioners in the examination of lived experiences with a hope to begin “shift[ing] the experiences of those with whom we engage” (Huber & Clandinin, 2002, p. 789). Narrative inquiry, like action research, immerses participants and researchers in a relational examination of their shared lived experiences in practice.

With the principal investigator’s support, I approached this project strongly aligned with Clandinin and Connelly’s (2000) assertion that narrative inquiry is: 1) a way of understanding experience, 2) collaborative between researcher and participants, 3) a context where the inquirer enters in the midst and progresses—living, telling/reliving, retelling the stories that make up people’s lives, and 4) stories lived and told. My purpose was to understand images of facilitation by working closely with facilitators for the CRISP project using narrative inquiry as an appropriate epistemological, methodological, and ethical approach.

Our collaboration with the Science Museum of Minnesota for the CRISP project was based on the principles of action research and focused on providing assistance to facilitators working with teachers to examine how cultural relevance could play a part in science pedagogy (M. Sato, personal correspondence, April 16, 2008). I was employed to participate fully in the project as a graduate assistant—experiencing it as it evolved—in the following roles: facilitator of facilitators, co-planner with the principal investigator and Science Museum professional development team, data collector, organizational contact, and narrative researcher. A complete description of the CRISP project is provided in the next chapter.

Chapter 4: Storying CRISP

We live immersed in narrative, recounting and reassessing the meaning of our past actions, anticipating the outcome of our future projects, situating ourselves at the intersection of several stories not yet completed. – Peter Brooks (1984, p. 3).

Project Description

The Cultural Relevance in Science Pedagogy (CRISP) action research network was a 12-month project (see Appendix F). The Science Museum hired four facilitators at \$4000 each to lead an action research teacher group of K-8 elementary teachers near their respective communities. I worked collaboratively with the principal investigator and the professional development team at the Science Museum to plan and carry out the project's five objectives as outlined in the original proposal:

1. Engage science teachers in a critical analysis of their own science teaching practices as they relate to cultural relevance for their students as learners.
2. Facilitate the questioning, reflection, and research processes that would allow the teachers to begin improving their classroom practice toward more culturally relevant pedagogies.
3. Provide professional learning communities in which teachers can collaborate and learn about and from practice.
4. Generate knowledge from practice that can be cycled back into schools as levers of change and catalysts for conversations about culture and pedagogy.
5. Generate new knowledge from practice for dissemination through research and practitioner articles and conference presentations.

The project started with planning meetings between the university researchers and museum professional development staff. After the objectives were finalized, facilitators hired, and the full group meeting dates established, we planned for a facilitator meeting in September of 2008. During the first meeting, the facilitators met the Science Museum's staff, completed the pre-questionnaires, discussed approaches to facilitation,

planned for the first full group meeting to be held at the Museum, and discussed recruitment of teachers in their region. Participating teachers and facilitators then met at the Science Museum in November and January for the first two of three full group sessions. Twenty-seven teachers attended on our first full group meeting held at the Science Museum. Each teacher volunteering for the project was to earn a \$400 stipend upon completion of an action research project in May, 2009 and was a member of one of the four regional group led by CRISP's newly hired facilitators.

Facilitators led conversations on culture with their local groups in November. In January, all participants engaged with a stream table model that incorporated the voices of the people affected by the proposed removal of a river dam. Participants also critically examined published elementary school science reading materials to identify underlying assumptions about culture and civilization. During the academic year, the facilitators met with their local groups about once a month to support action research projects that critically examine some aspect of the teachers' science teaching related to cultural relevance. In late May, twenty-three teachers presented action research projects grounded in cultural relevance in science pedagogy to their peers across the state at our final full group meeting.

For the project's facilitators, we provided the following supports: pre-purchased materials, data collection tools, planning meetings for state-wide events with teacher participants, a tour of the Science Museum's resources, a facilitator website on Moodle (a course management system) for reflections on practice, monthly meetings (face-to-face or teleconference), prompt email correspondence, a detailed list of expectations, ongoing reports of data collected and analyzed, site visits to local group meetings,

opportunities to observe each other in practice, and invitations to co-present at national conferences.

Though project related meetings ceased in June 2009, examination of the data continued to evolve through iterative analysis, member checking, and participant review. We analyzed eleven twenty minute randomly selected interviews (representing at least two people from each local group of teachers), collected post-questionnaires, completed statistical analysis of the data, performed qualitative analysis on the projects submitted. Findings about the conceptual structures of cultural relevance in science and the impact of the action research experience on the participating teachers have been summarized and reported in a technical report for the Science Museum and presented at three national conferences (Sato & Ernst, 2010a; 2010b; 2010c; Sato, Ernst & Gabler, 2010). In this dissertation I report the results of the narrative inquiry developed from the field texts generated with the CRISP facilitators.

Research Questions

Stein, Silver, and Smith (1999) assert that in a school reform environment, “just as teachers will need to relearn their practice, so will experienced professional developers need to relearn their craft...” (p. 238). Assuming developers wish to re-imagine their practice, collaborate with peers interested in professional learning, and develop awareness of underlying assumptions, research is needed to inform the field. The overarching question for this study is: How are conventional metaphors lived (embodied and enacted) in the practice of facilitators when working with teachers toward cultural relevance in science pedagogy?

On a policy level, this research may inform stakeholders, policy makers, philanthropic foundations, and scholars assuming a uniform set of metaphors of practice are lived by all involved with professional development initiatives. I worry too, that some professional developers may come to their roles with experiences and images of practice that are in conflict with the metaphors lived by (Lakoff & Johnson, 1980) development designers, stake-holders, teachers, school district leadership, and policymakers. Such tensions existing between professional development scholars and facilitators are reminiscent of the challenges Stein, Silver, and Smith (1999) assert exist between developers and teachers.

By examining developers' metaphors as embodied and enacted in practice, I hope to uncover and examine unique approaches to facilitating teacher professional development. Additionally, after examining the metaphors in three academic discourses I believe are hiding and highlighting aspects of professional development (See Chapter 2), I hoped to uncover other metaphors in the academic discourses of professional developers not yet considered. The overarching question for the inquiry was: What metaphors are lived (embodied and enacted) in the practice of professional developers when working toward cultural relevance in science pedagogy? My three additional subquestions were: How do metaphors lived in predominant academic discourses, shape facilitators' thoughts and actions? What other kinds of metaphors influence educational researchers' academic discourses and facilitators' conceptions of teacher professional development? How does collaborative work with facilitators to identify metaphor in their practice contribute to a) facilitator professional learning and b) teacher professional development research? Research examining the metaphors through

narrative inquiry in the professional development field would illuminate hidden assumptions and unexamined images for practitioners and scholars alike, opening doors for new understanding and growth in the field.

Facilitator Vignettes

The following narrative vignettes, created using field texts collected early in the project, reflect my initial impressions of each participating facilitator in the CRISP project:

Matthew, a White middle-aged man with a quick to smile, enjoyed interacting with others in the group. As a single parent with a young son at home, he sometimes had to balance work and home by bringing his son along to CRISP meetings. He loved gardening, playing guitar, and engaging in philosophical discussions. Matthew equated his experience as facilitator to one of his former jobs as an instructor of undergraduate students at a local university. He had taught science for over ten years in a large metropolitan district, after which he relocated to his current setting where he teaches seventh and eighth graders in a small private school. He had not officially served in the role as a facilitator for a teacher learning community though he had had some experience with assessing teacher action research projects. He told or electronically posted stories highlighting critical moments, wishing to engage with his co-facilitator “friends” in reflection. He expressed concerns regarding not knowing the content of cultural relevance well enough to speak about it but had signed up to facilitate in CRISP to continue to deepen his appreciation of diversity.

Rachel was a confident woman who walked with purpose and spoke from her heart. Her identity as expressed to the group was as a Black, bi-racial woman from a large metropolitan city and school district. She had recently published a book for teenage girls sharing reflections on her experiences growing up as a biracial child with White mother and Black father. She was middle-aged, had full-grown children, and often needed to schedule around the needs of her dogs. We often met at a popular coffee shop where people who knew her constantly interrupted our conversation to say hello and catch up. She had been working in schools for many years, and had recently accepted an offer to change schools in district where she now worked as a cultural competency specialist. Even though she worked with teachers as an advocate for students of color as part of her work in schools, she had limited experience as a facilitator of learning communities and action research, and in particular— with science teachers. However, she appeared confident in her approach to her role in CRISP. Rachel identified her work with teachers in the past as difficult, tense, and uncomfortable—yet necessary to help people understand themselves and “move.” She was engaged in specific professional development training for her role in the district and looked forward to engaging with teachers of science toward culturally relevant pedagogy.

Molly enjoyed talking with the other facilitators, reflecting openly on her approach to the work. With her fine gray hair tucked behind her ears, she leaned into conversations with the group, often the first to respond. Grounded in her practice as professor with expertise working with teachers and English Language learners, Molly sought what each individual member brought to the group (e.g., biases, prior knowledge, learning styles, communication, self-reflection, and openness to modifying

their beliefs). For many years, she had worked with teachers in professional development and other adult learners enrolled in post-secondary English Language learner education. She had also served the university where she worked as a coordinator of school partnerships, making many connections with districts within an hour of her home. Molly was a White woman who focused on bringing to the forefront and valuing each individual's cultural background. She worked to ensure that contributions from each participating teacher were added to the shared knowledge in the learning community. She exuded confidence with all aspects of the facilitative role she was hired to enact.

Susan was a tall, active, White woman with short-cropped hair. She was enjoying engaging in several small side jobs since her recent retirement from a large school district. She enjoyed teaching lab sections for biology courses part-time at a local community college and looked forward to facilitating for CRISP. She lived in a rural area with very slow dial-up internet access, and initially was more prone to call rather than send an email. During meetings, she listened carefully to others and responded to questions when asked directly. She responded, hesitantly, during group conversations but was very open and thoughtful when interacting one-to-one. She had extensive prior work, having served in twenty or more groups as a facilitator, centered on implementing new district curriculum or designing district standards with groups of science teachers from local schools. However, the groups with which she worked were not called learning communities. Instead, she described her prior work as facilitator at workshops or coordinator for district-appointed teacher committees and task forces.

I am a White woman, in my mid-forties, from a rural town in Minnesota. I also identify as Greek, given my mother's parents' immigration to the United States and the strong cultural traditions I learned as a child and maintain today. Due to my past experiences and graduate studies, I felt prepared to participate fully in the project as a facilitator of facilitators, collaborate in session planning, experience the project relationally as it evolved, and observe facilitators in action. I was not confident that I would be able to contribute to the discussions on science but action research, learning communities, networks, culturally relevant pedagogy, and facilitation were areas in which I felt proficient. In my own quiet way, I worked to collect data in close relationship with my participants to serve as my narrative inquiry field text for analysis as part of this dissertation and my doctoral studies.

By routinely addressing Connelly and Clandinin's (2006) commonplaces—temporality, sociality, and place—while collecting word data, I addressed meaning, value, and integrity as well as validity and trustworthiness (Pinnegar & Daynes, 2007) in my work. I include a description here of Connelly and Clandinin's (2006) commonplaces as an introduction to the way I thought about locating this inquiry in a three-dimensional space. Descriptions of each participant's setting, as part of their commonplaces, are included in the analysis (Chapters 5-8).

Addressing the commonplaces: temporality, sociality, and place. By participating fully as co-facilitator, co-researcher, research assistant, and reflective practitioner, I lived the experience with the participants in the space between the past, present and future—honoring the commonplaces of temporality, sociality, and place (Connelly & Clandinin, 2006). For *sociality*, I was concerned with balancing my

research with the personal conditions of the facilitator (e.g., “feelings, hopes, desires, aesthetic reactions, and moral dispositions of the person” p. 480). My effort to inquire into social conditions (e.g., environment, factors surrounding the individual, forces that form contexts) opened the dialogue between each facilitator and myself within the social context of the project and beyond. By working to develop collaborative relationships, we came to understand one another’s history as it informs present behaviors and impacts future actions.

Connelly and Clandinin (2006) assert that in order for a narrative researcher to know the *temporal history*, she must be able to speak to the participants’ past, present and future choices for the setting of interest. Narrative inquiry requires knowing “what happened the day before, the day before that, the month before that, and so forth” (2006, p. 480). In order to understand both the temporal and social aspects of this study, I needed to understand each facilitator’s connection with his or her participating teachers and the local setting. To connect each individual to the project through time and relationships, I asked the teachers how they came to the project, what links, if any, did they have to others involved, and what assumptions they had about their local school sites. For this relational inquiry, it was imperative that I remained attentive to aspects of temporality and sociality at all of the sites at which we are engaged in work together for the CRISP project.

Finally, it was also essential that I identified *place* “...the specific, concrete, physical, and topological boundaries of place where the inquiry and events take place” (Connelly & Clandinin, 2006, p. 481), crucial to narrative inquiry. Relevance in narrative inquiry was addressed by acknowledging the qualities and impact of the

study's place. Place, however, can be influenced by temporality and sociality. Narrative inquiry may conceive of place as existing not always in a physical space, but also perhaps within the individual's historical memory. I thought here about place within the "dialogic relationship among voices" (Bakhtin, 1984, p. 90) as would exist between and within inquirer and participant. Expanding my thinking about place as beyond the bounded system as in case study (Clandinin, 1985) or physical location as in ethnographic study was also important in this study.

Field Texts and Data Collection.

My interest in the project was in participant observation of and relational narrative inquiry with the 4 facilitators. Connelly and Clandinin (2006) envision narrative inquiry as "shar[ing] features in common with other forms of qualitative inquiry such as the emphasis on the social in ethnography, and the use of story in phenomenology" (p. 479) therefore using data commonly collected in qualitative research. However, what is normally called "data," Clandinin and Connelly (2000) instead call "field texts... because they are created, neither found or discovered, by participants and researchers in order to represent aspects of field experience" (p. 92). Because I foregrounded my interest in metaphors lived by facilitators, I deliberately collected field texts for this study that made metaphors visible (e.g., interviews, observations, questionnaire responses, online reflections, site visits, and transcribed meetings). I recognize, as my readers should, that selectivity in composing my field text for this narrative inquiry made some aspects of my participants' stories visible and other aspects invisible (Clandinin & Connelly, 2000). I intended to capture the storied lives

that the participants and I led during CRISP, but I could not collect, observe, and analyze every aspect of our shared experience. I intended as Clandinin and Connelly, (2000) recommend, to write field texts that expressed my relationship with participants, that addressed the three-dimensional inquiry space—now known as the commonplaces of temporality, sociality, and place (Connelly & Clandinin, 2006)—and demonstrated my work in each phase of the study to better understand not only my participants' experiences, but also my own.

Inquiry phases and related field texts. In the first phase of my inquiry, I completed two literature reviews examining the narratives and metaphors encountered in my past practice as facilitator of a learning community-based graduate program and in professional development literature (Chapters 1 & 2). During the second phase I delved deeply into examination of metaphor and narrative with the intent to live as an educational researcher by a new metaphor—research as story (Chapter 3). In the third phase of my inquiry, I engaged with four facilitators in the CRISP project to co-construct narrative accounts that linked their past, present, and future lived metaphors for practice in facilitation (Chapter 4). During this third phase I collected and negotiated interpretations of the field texts for use in the fourth and final phase—when I re-storied their experiences to highlight aspects of interest (Chapters 5-9).

The data I collected in phase three from participants (see Table 1) included interviews of facilitators, written reflections from facilitators after local group sessions, my field notes during all facilitated sessions, facilitators' online reflections, and facilitators' survey responses during the timeframe of the CRISP project. The facilitators engaged with me in face-to-face conversations, through email, on an

interactive website, and via phone. All facilitators responded to the pre- and post-questionnaire, recorded digitally many of their local session conversations for transcription, provided reflections of work in the field, and welcomed me as participant observer to several of their facilitated local group meetings in the communities of interest and at the Science Museum. During the data collection phase with facilitators, I adhered to my timeline, process, and commitments (see Table 1).

Table 1. Data Collection for Phase 3 in Narrative Inquiry

Timeline	Field Texts Action	Commitments
September-October, 2008	<ul style="list-style-type: none"> Recorded and transcribed facilitator-only meetings (three hours). Collected facilitators' responses to pre-questionnaire (See Appendix G) Supported facilitators with development as part of preparation for the first meeting (See Appendix H) Requested each facilitator use a digital recorder (provided by the SMM) to capture local group meeting conversations. Collected and logged transcripts (approximately one meeting per month per facilitator, two-three hours per meeting for a total of nine meetings per facilitator) 	<ul style="list-style-type: none"> Engaged in self-study through narrative inquiry to examined my own assumptions, metaphors/images of facilitation in action research teacher communities. Engaged facilitators as colleagues in planning for large group meetings.
November, 2008	<ul style="list-style-type: none"> Recorded and transcribed facilitators' first full meeting with each local group at SMM. (1 hour meeting per facilitator) 	<ul style="list-style-type: none"> Engaged facilitators as co-researchers in collecting data at large group meetings.
December, 2008	<ul style="list-style-type: none"> Observed at least two local site meetings per facilitators at the following locations: (Duluth, St. James, Rochester, St. Paul). (Eight site visits at two-three hours each). Kept communication lines open through the use of email, phone, and a Moodle website. Collected field text data. Reviewed initial analysis and interpretation with facilitators. Organized Dec. facilitator meeting (one hour). 	<ul style="list-style-type: none"> Allocated time to converse with facilitators before and/or after local site visits. Asked questions to encourage reflection on images in practice. Revisited my research goals with participants. Be as transparent as possible about my interests and how I was thinking about restorying their narratives in my field texts.
January, 2009	<ul style="list-style-type: none"> Audio recorded large and small group sessions during all-participant meeting at SMM. Five recorders in the hands of four facilitators and PI. Logged and transcribed sections of particular interest. Observed facilitators engaged with teachers at the Science Museum. 	<ul style="list-style-type: none"> Engaged facilitators as co-researchers in collecting data at large group meetings. Engaged facilitators as colleagues in planning for large group meetings.
February-April, 2009	<ul style="list-style-type: none"> Organized April and May facilitator meetings (face-to-face when possible, teleconference if able). Recorded teleconference meetings, 1 hour each. Transcribed for analysis. 	<ul style="list-style-type: none"> Revisited my research goals with participants. Be as transparent as possible about my interests and how I was thinking about restorying their narratives in my field texts.
May, 2009	<ul style="list-style-type: none"> Complete post-questionnaire with teachers including non-evaluative questions about image of facilitators' in learning community. (See Appendix I). 	<ul style="list-style-type: none"> Revisited our research goals with the full group at SMM at our last meeting on May 30, 2009.
June, 2009	<ul style="list-style-type: none"> Organized June facilitator meetings (face-to-face when possible, teleconference if able). Recorded teleconference meeting, one hour. Transcribed for analysis. 	<ul style="list-style-type: none"> Shared preliminary thoughts and written analysis with participants for member check regarding storyline and theme.
July-August, 2009	<ul style="list-style-type: none"> Transcribed data for analysis. Completed Teacher interviews (Appendix J) Reviewed full data set. Began analytic and interpretative process to identify stories of interest and metaphors 	<ul style="list-style-type: none"> If able, brought preliminary analysis to share for member checking. If not ready, promised to return with analysis.
September 2009-September 2011	<ul style="list-style-type: none"> Conducted member-checking sessions and extensive exit interviews in summer 2010. (See Appendix K). Continued member-checking process as I finalized the narrative. 	<ul style="list-style-type: none"> Stayed in touch with facilitators' lives through email and at local events.

Analyzing and Interpreting Facilitators' Stories

I was particularly interested in collecting the participants' stories as lived and told (Clandinin & Connelly, 2000). It is through the researcher's engagement in analytic and interpretative processes that meaning is constructed and re-storied (Clandinin & Connelly, 2000; Lieblich, Tuval-Mashiach, & Zilber, 1998; Polkinghorne, 1988). Although narrative researchers have different ideas about how to approach narrative analytically (e.g., Riessman, 2008), it is agreed that the analytic process of re-storying data is what elevates narrative inquiry from merely descriptive in nature to explanatory. Within narrative research, there are distinct structures serving different purposes, each with its own analytic process. Since the variety of narrative analytical processes proposed causes confusion in the field, many researchers have worked to clarify the differences (Lieblich, Tuval-Mashiach, & Zilber, 1998; Ollerenshaw & Creswell, 2002; Riessman, 2008).

As shown in Chapter 3, I found Clandinin and Connelly's (2000) holistic, three-dimensional, experience-based approach—re-conceptualized by Connelly and Clandinin in 2006 as the “commonplaces”—the best fit for my practice as researcher. Within Connelly and Clandinin's (2006) commonplaces of sociality, temporality, and place—I was able to explore non-linear sequencing for each story, highlight the experiences and interactions, and re-story in negotiation with my participants to assure a trustworthy re-presentation and explanation of each facilitator's experience. The approach, as described by Clandinin and Connelly (2000; Connelly & Clandinin, 2006),

involves composing negotiated field texts while attending to the commonplaces to analyze and re-analyze transcripts, artifacts, documents, observation notes, and other raw data toward the end goal of re-storying the lived experience of the participant.

In order to highlight the differences between analytical styles, Ollerenshaw and Creswell (2002) delineated the similarities and differences between a linear (e.g., “problem-solution approach,” Yussen & Ozcan, 1997) and a holistic narrative analysis approach (e.g., “three-dimensional space,” Clandinin & Connelly, 2000). As Ollerenshaw and Creswell (2002) describe, I—like most linear and holistic narrative researchers—reanalyzed raw field texts many times during analysis as part of my work to re-story the participants’ experiences. I reorganized the timeline of events that occurred, if necessary, to highlight metaphors lived by each participant. I used tables, taxonomies, story maps, time lines, and analytic memos to organize the data. I worked to develop and write stories of my participants’ for readers, or as in this case, to serve as analysis chapters in my dissertation. I selected each narrative to tell the participant’s story in a particular way. In my inquiry, as most other narrative researchers do, I selected elements in each participant’s story to retell—highlighting different elements (e.g., metaphors) as well as offering different perspectives (e.g., close up, medium shot, full frame, and wide-angle).

However, I was closely aligned with Clandinin and Connelly’s (2000; Connelly & Clandinin, 2006) complex and unique analysis process. Using their analytical methods, I extended beyond reading and re-reading the field texts to also attend to: documenting my own experiences; considering the temporality, sociality, and place through my experiences and each participant’s experiences; focusing inward on each

participant, noting language—in my case, specific to metaphor—and other elements of participants’ personal experiences; widening the focus to note the professional landscape including other’s actions, purposes and assumptions; collaborating with my participants to renegotiate interpretations of data; returning again to the field texts with each participant to assure trustworthiness, and writing “interim texts to find a narrative that promotes an account of participants’ lived experiences” (Ollerenshaw & Creswell, p. 342).

By concentrating on gathering several layers of interrelated data to each of the overarching questions in this inquiry (see Table 2), I was able to demonstrate trustworthiness by noting similar themes and codes in several different field texts when interpreting and renegotiating the stories as lived and told. By staying very close to the field texts when re-storying, metaphors (noted by the facilitator, in her or his language, by me, and others) as embodied (e.g., orientationally, structurally) and enacted (e.g., ontologically) emerged for relational inquiry for each facilitator in CRISP.

Table 2. Data Analysis Procedures

Research Questions	Data Collected	Qual. Analysis Approaches	Reliability Checks
Overarching Question: What metaphors are lived (embodied and enacted) in the practice of professional developers when working toward cultural relevance in science pedagogy?	-Facilitator pre-questionnaire -Transcribed facilitator meetings at SMM -Observations at field sites -Transcribed site meetings -Collected facilitator's written reflections (email, Moodle, notes, questionnaires) -Interviews (transcribed) -Post Teacher questionnaire -Facilitator teleconferences -Field notes -Teacher interviews- retrospective	Depending on the individual field text: 1) Use narrative analysis dialogic/performance approach (Reissman, 2008) to look at the individual's story: how they share, perform, and perceive self. 2) Use Clandinin & Connelly's (2000, 2006) narrative inquiry commonplaces as a holistic analytic approach to interpreting field texts and re-storying data. 3) Using analytic induction to look for consistencies in the metaphors uncovered in data collected for each facilitator.	1) Member-check written narratives with each participating facilitator. 2) Engaged with peer review of my analysis to ascertain whether or not the principal investigator finds my inferences appropriate, given her familiarity with the data collected and based on her experience with these same participants. 3) Shared my analysis with the professional development team at the Science Museum. 4) Triangulated from three related data sources as often as possible.
Subquestion 1: How do metaphors lived in predominant academic discourses, shape facilitators' thoughts and actions?	-Synthesis literature review on academic discourses -Site meeting audio recordings, logs, field notes, and transcriptions -Facilitator interviews -Facilitator teleconference meetings -Transcribed site meetings -Facilitator's written reflections (email, Moodle)	1) Narrative analysis (Look at early facilitator meeting data and write hypothesis about metaphors lived by. Look at next chronological occurrence (e.g., transcribed site meeting) for same person. Determine if the metaphor still fits. Look for exceptions and revise inferences in renegotiation of meaning with participant. The participant will continue to be involved in member checking from initial analysis to final re-storying. 2) Analysis of metaphor (Lakoff & Johnson, 1980) in language	
Subquestion 2: What other kinds of metaphors influence educational researchers' academic discourses and facilitators' conceptions of teacher professional development?	-Literature review on academic discourses -Facilitator interviews -Site visits and field notes	1) Use Textual/Metaphor analysis to examine language used by facilitators. 2) Use analytical induction to determine if exceptions emerge beyond the three discourses identified in the preliminary literature review.	
Subquestion 3: How does collaborative work with facilitators to identify metaphor in their practice contribute to a) facilitator professional learning and b) teacher professional development research?	-Site meeting audio recordings, logs, field notes, and transcriptions -Facilitator interviews -Facilitator teleconference meetings -Observations at field sites -Facilitator face-to-face meeting	1) Use narrative inquiry's (Clandinin & Connelly, 2000, 2006) particular focus on sociality (one of the three commonplaces). Does awareness of image/metaphor contribute to professional development of developers? What lived and told stories do facilitators tell that inform others in the practice? What can focus on metaphors bring to the field of PD?	

Finally, after completing each narrative, I provided each facilitator with his or her interim text for review. Each participant had the power to validate or invalidate the narrative and metaphors selected to representative his or her lived experience and practice. Since the field texts were discussed and negotiated throughout the inquiry, the final interim text identifying each person's metaphor and their story as negotiated in their exit interview was not a surprise. All four facilitators confirmed that the final narratives and metaphors identified in the inquiry highlight key aspects of their practice and are representative of their experiences in CRISP.

Format

Clandinin and Connelly (2000) recommend novice narrative researchers consider works of inquiry from personal preference as models for potential narrative inquiry form. *Borderlands La Frontera: The New Mestiza* by Anzaldúa (1987) is a text that I respect as a narrative work of art from a visionary genius. Anzaldúa, in this extraordinary book, explains and enacts the image of living between and within bordering ideas and cultures we inhabit and that inhabit us. Anzaldúa's text, for me, is a perfect example of what Barone (2001) asserts narrative form does to "promote dialogue that results in an educational process... [and] ... enlighten the reader as to how others author their life stories and give order to the world through their growth, self-development, and reconstruction" (p. 167).

Similarly, my effort while re-storying CRISP, will be invite the reader to fall deeply into the lived metaphors. There will be times when readers may struggle to understand how the participant or myself might live metaphorically in a way that is so

foreign to their own images for practice. Yet, the invitation to peer into the lived experience of another is difficult to resist. Each narrative shared serves as a glimpse into a moving kaleidoscope, an image stable in the mind of the reader for a moment and then with a simple twist, different again. As I approached the task of establishing voice and signature in my envisioned inquiry, I held Anzaldúa's text as the ultimate model for narrative performance creatively incorporating voice, signature, and audience in written form to shift my perspective and invite me to experience her lived metaphor of the borderlands.

I envisioned this dissertation as textual representation of a scholar's journey through narrative and metaphor—from my initial inquiry into the metaphorical language in professional development discourses, in the story of narrative, and in re-imagining metaphors as lived—to the relational narrative inquiry into the experiences of four facilitators. I believed my readers would prefer to examine our shared experiences and analysis in the form of written narratives. By re-storying our experiences, I hoped to offer glimpse of other facilitators, developers, scholars, school leaders, and stakeholders into alternative images of practice and highlight metaphors for professional development that may be outside of the academic discourses in which they “live.” Accordingly, access to these “portals” with the living might be drafted into narratives after research that both purposively and simultaneously explore the commonplaces of place, temporality, and sociality. It is my intent to present the narratives of the four facilitators intertwined with my own stories in a format that provides readers access to the data collected, my inferences and analysis, the facilitators' response (in their voices)

explaining how we worked collaboratively to interpret the experiences and images in our work as facilitators in the CRISP project.

Clandinin and Connelly's (2000) metaphor for narrative also informs my thinking about form. They imagine narrative form as "a soup" (p. 155) created uniquely by each individual with different amounts of main ingredients (e.g., literature reviews, participant descriptions, analysis, research self-study, rich narratives of place) and spices (e.g., creativity with presentation, personal anecdotes, participants' voices) to fit in a various containers (e.g., dissertation, journal article, conference paper). I envision the form of my first batch of narrative inquiry "soup" will fit within the more traditional container of my doctoral dissertation though I will strive to engage my audience in the narratives of facilitators by honoring participants' voices and signature through engagement in iterative member-checking measures and Polkinghorne's (2007) four sources of potential disjunction. I plan to experiment with additional ingredients and alternative presentations in the form of my work to more closely align with other empirical work as described in Riessman's (2008) category of dialogic/performance.

Voice. I am particularly interested in bringing forward the voices of facilitators working within professional development of teachers. Neither during my review of the literature nor during my doctoral program, have I found evidence of empirical study in professional development including facilitator's voices and perspectives of their practice. To skillfully present facilitators' voices, I draw from Bakhtin (1975/1981), Barone (2001), and Clandinin and Connelly (2000) to think about and address issues of voice. Clandinin and Connelly (2000) include the following recommendations: 1) participants' and researchers' voices are to be presented in ways that reflect individual

storied experiences in ways that speak to others and 2) presentation of participants' and researchers' multiplicity of voices is crucial to individuals not being seen as univocal or one-dimensional. Bakhtin (1984) posited that Dostoevsky's novels represent the multi-voicedness of characters, the author, and the readers closely representing the ambiguity and complexity found between and within all individuals. Barone (2001), also drawing on Bakhtin, adds that when neither participants' nor the researchers' voices are privileged over others, the dialogue in the text reminds and celebrates the "diversity of voices offering varied interpretation of phenomena" (p. 157). I re-storied the analysis (see Chapters 5-8) of facilitators' experiences, making every effort to include the unique voices and storylines of my participants and chose ambiguity when declarative statements would feel safer. Related, Clandinin and Connelly's (2000) depiction of the researcher as "always speaking partially naked and ... generally open to legitimate criticism from participants and for audience" (p. 147) helped me to understand the tension I faced as I worked to sort out with my participants if their voices were well represented.

Signature. Authors/researchers in interpretative research create identities by developing a sense of presence or signature within a research text. Clandinin and Connelly (2000) describe these identities as signatures that can range from an overly strong abuse of subjectivity to a weak voice barely perceptible in the presentation of participants' narratives, other theories, and texts. Knowing my own propensity to hide behind the signatures of others when writing about concepts I think they describe better, I needed to continually ask myself as I edited my own writing: Are my thoughts in here? Have I said what I am thinking or have I relied on the theories of others to talk for

me? Can the reader recognize my voice in this section? Also, as I worked to move from analysis of field texts to the research text, I asked my participants during member checking processes what Clandinin and Connelly (2000) recommend as signature-specific questions: “Is this you? Do you see yourself in here” (p. 148)? In this way, I work toward developing an identifiable signature for my own writing in the text but I also recognize the importance of honoring and negotiating participants’ signatures.

Audience. Simply put, I considered my participants and colleagues in CRISP as my primary audience as I collect data in the field and think about interesting stories for analysis. I am thinking about what Clandinin and Connelly (2000) point to as tensions potentially arising over “sticky matters” which they insist, “arise over shared moments, intimacies, secrets, and the desire to find a place for them in the research text” (p. 149). However, I recognize that when my fieldwork came to an end, I needed to find a way to negotiate the construction of my research text for the larger audience—research practitioners, facilitators, and consultants in teacher professional development. I needed to negotiate my approach with audience to address the tensions between what is the acceptable amount of narrative ‘soup’ in the ‘container’ of dissertation format, research article, or conference presentation.

Role of the Researcher: Adopting an “Ethical Attitude”

As in any methodology, researchers must make ethical choices on behalf of the participants when involved in collecting, using, and reporting data. Since my study involved human participants who are, at times, sharing personal beliefs, experiences, insecurities, conceptions and images, the data collected must be negotiated with the

participant. Anonymity and the participants' rights to privacy must be honored, even if the data is exceptionally exciting for the researcher. Betrayal of the trust developed with the participant may happen if the participant is not involved in editing final reports and evaluations of data as narrated by the researcher. Josselson (2007) recommends and defines an "ethical attitude" as a stance where the inquirer takes responsibility to minimize harm by thoughtfully honoring and protecting the participant while maintaining standards for responsible scholarship.

Although several threats related to ethics and human subjects exist in narrative inquiry, the methodology may also be considered as capturing a more complete and trustworthy picture of human subjects than positivist and post-positivist science. As Pinnegar and Daynes (2007) assert, "narrative inquirers recognize that embracing and executing the methodology of narrative inquiry, rather than an exclusive reliance on the assumptions of a positivistic paradigm, provides authentic and resonant findings" (p. 25). These findings, however, are communicated through thick description from the rich contextual relationship formed through interaction between inquirer and participant. When researchers work closely with participants in narrative inquiry it is clear that informed consent, overt research, guaranteed confidentiality, and respect for participants are all necessary and must be achieved through transparency.

Clandinin, Pushor, and Orr (2007) also address ethics in narrative inquiry by incorporating the term "wakefulness" as an image of practice while navigating sites as narrative inquirers. Wakefulness is imagined as the "particular thinking about the quality and impact of narrative inquiries that focus on teachers' and teacher educators' own practices" (p. 21). The three commonplaces of narrative inquiry- temporality,

sociality, and place, researchers undertake a “simultaneous exploration” (Connelly & Clandinin, 2006, p. 479). When one is not attentive or awake during narrative inquiry research, it is easy to focus on only one of the three commonplaces while excluding the others. I worked diligently to balance all three commonplaces in my inquiry of self and others as re-storied in the next four analysis chapters, beginning first with Matthew’s story.

statewide action research network. We met that day without the K-8 teachers to prepare for our first full group meeting scheduled for November 1, 2008 at the Science Museum. While participating in the meeting, I observed the facilitators, noted my thoughts and feelings in my field notes.

I felt nervous on that first day about *not* being expert in science. As introductions began, I made a mental note to not mention that I was a former language arts teacher, anticipating that this group would see my lack of expertise in science as a shortcoming. I chose to leave that out of my introductory story of self. While I watched others making small talk, I wondered: Are others in the group—consciously, or not—thinking about how they will “narrate” their story of self on this first day. Which experiences will they share to help others to see them as they wish? What will they leave out of the first narrative about themselves? What will they make known?

I was very interested in the stories told at this first facilitators’ planning meeting. In new endeavors an opportunity exists for the participants to consciously or subconsciously ‘re-story’ themselves—to narrate a new story of self to others—establishing their “character” in the shared story of the commonplaces. In this way, participants might frame their personal and professional stories; drawing only on metaphors and lived experiences that one wishes to project to strangers in the beginning of a shared experience. The opportunity to work together, initially as strangers, over the course of a year certainly provided each facilitator the opportunity to develop a new story of self, perhaps slightly different than his or her current institutional and social narratives. Determined to capture these stories as told by each person on the first day together, I double checked my digital recorder and pulled my notebook into position.

Matthew's experience as observed. Based on the introductory information Matthew shared during that first day, I could imagine Matthew as a professor, philosopher, and science teacher. He chose to include details in his story of self that he had been employed by a state university to teach pre-service teachers, but had left that job to return to the classroom fearing he was losing touch with classroom teaching. Matthew's choice to highlight his former role as instructor at a university instead of his years as a classroom teacher in his initial story of self intrigued me. Perhaps he was providing evidence to this group that an institution of higher education valued his expertise in science and teacher education? I imagined I might feel compelled to do the same if I were meeting for the first time with a group of people from a university and the Science Museum. Matthew, overall, seemed an attentive listener and took time to formulate his oral responses during the group discussion.

Just before the group began the pre-questionnaire, I shared that my research interest in the CRISP project was focused on analyzing how facilitators narrated their lived experiences and how identifying metaphors might inform our practice. Matthew listened intently. I wondered if sharing that I would be completing a research study was part of the reason why he expressed that he was "feeling inarticulate today." Before having the opportunity to complete the pre-questionnaire Matthew told me that he would appreciate time to review his pre-questionnaire responses before I used the data in my dissertation. I assured Matthew he could revise his written thoughts at any time. I explained that my research methodology required member checking for trustworthiness

(Clandinin & Connelly, 2000) to assure a fair representation of the shared experience and to give back to participants.

By late-morning, I was concerned that Matthew wasn't engaging as openly as he had been in our initial phone conversations. I noted that he was not smiling, had pulled away a bit from the table, and again verbalized, twice, that he was not feeling articulate. He took a long time to complete the pre-questionnaire during the meeting and frowned when asked to wrap up his thoughts, asking if he could have more time to add to his response later. During a break, I overheard him tell one of the Science Museum staff that he might have difficulty with "this progressive pedagogy" (field notes, September 27, 2010) working with teachers on science curriculum in his region. I focused on alleviating his concerns about the project by identifying what he needed to feel competent as a facilitator while building trust that he would have input in my research through our relational experience in CRISP. My work within Connelly and Clandinin's (2006) dimensions of the inquiry space—temporality, sociality, and place—the three commonplaces of narrative inquiry, had begun. The commonplace, sociality, seemed a natural starting point for my work with Matthew. By attending early to Matthew and my "feelings, hopes, desires, aesthetic reactions, and moral dispositions" (Connelly & Clandinin, 2006, p. 480) specifically in CRISP's social context, I entered into an inquiry relationship with his lived story. In the next section, I provide details and analysis of his pre-questionnaire responses in order to better understand his metaphors lived by in practice.

Matthew's pre-questionnaire responses. In the last few moments before we started up the meeting again, I quickly reviewed the responses to the pre-questionnaires.

The pre-questionnaire provided space for longer responses to the following two-part question:

- (A) Tell us about one of your most memorable experiences during facilitation (for example, how many teachers were in the group, why was the group meeting, what was the topic, and what do you think made it memorable for you?)
- (B) Tell us about how this memorable experience might express your “philosophy” or principles. What are some principles on which you ground your facilitation practice?

Matthew wrote about his belief that an “audience” wants to be engaged in “exploring issues that have relevance.” He described his former work at a university as one where he stretched worldviews to help pre-service teachers “grow as educators.” He expressed concern about working with practicing teachers in this project because he did not “want to be one of those many workshop facilitators that is superficial... never really getting past the surface conversations and issues” (Pre-questionnaire response, September 27, 2008). Matthew also wrote on the pre-questionnaire that he currently worked full-time as a middle schools school science teacher in a private school and had taught in various places, rural and urban, for twelve years.

I was particularly intrigued by Matthew’s choice of the word “audience” to describe how he imagined those he would be facilitating. If Matthew thought of the teachers he worked with as an audience, then how did he imagine himself in that shared space? Did he imagine himself facilitating as a performer, presenter, or professor?

Linguists and narrative inquirers are attentive to the words consciously and unconsciously selected when individuals story their lives (e.g. Clandinin & Connelly, 2000; Craig, 2003; Kövecses, 2005; Lakoff & Johnson, 1980). Word choices are important clues as to how we metaphorically conceptualize our worlds.

I started to think about the images elicited by the words Matthew used to describe himself on the pre-questionnaire and orally to the group: professor, teacher, science educator, and philosopher. Did he imagine facilitators as EXPERTS? If so, his thinking resonated with my experiences in facilitation. If this was his primary image of practice as a facilitator and he wasn't feeling confident about being expert in cultural competency, I could understand his reservations and concern at this first meeting.

Matthew's Early Metaphor: Facilitator as EXPERT

Matthew imagined the people he would facilitate as an "audience." He defined the facilitator as one who teaches "relevant" issues, "stretches world views," and shares knowledge. In order to facilitate well, he thought, one must do so from an area of expertise. He was determined to become more EXPERT by studying the resources we provided to the four facilitators.

On that first day, Matthew and I shared a sense of insecurity regarding a self-perceived lack of expertise. I was worried that I was not EXPERT enough in science pedagogy and how it related to cultural relevance to contribute to the group's planning the first event for the teachers. Matthew was intimidated by the fact that culturally relevant pedagogy and action research were not areas of expertise for him.

Matthew and I held an image in our minds of facilitators as EXPERTS in a content area, an image that likely stemmed from how we imagined our work in the past. We had both served as instructors in higher education, hired in as non-tenured faculty to teach courses at state universities. We served in work cultures that valued doctoral degrees, research publications, and academic debate more than did most of our colleagues in the public and private schools. The image of professor of knowledge was deeply rooted in our conception of what it meant to be a facilitator of adult learners. As

practitioners, we valued other sources of knowledge than graduate level coursework—we used examples of experience to add to our stories of self. We were both a part of this project to learn as much as we could from others about cultural relevance in science pedagogy, and we both trusted we could contribute to the conversation once we felt more expert.

Matthew's reflections on day one. When Matthew re-storied that first day again for me in his exit interview two and a half years after we first met, he confirmed his early metaphor for facilitation as sharing expertise. He described how he imagined himself responsible for holding and sharing knowledge. Matthew's language choices reminded me of Lakoff and Johnson's (1980) description of ontological metaphors as a specific way we identify our events, activities, emotions, and ideas as entities or substances so that "we can refer to them, categorize them, group them, and quantify them—and, by this means, reason about them" (p. 25). In his language, Matthew used ontological metaphors to make explicit how he imagined attaining knowledge and, later, sharing his expertise. For example, Matthew described his frustration with cultural relevance as an area to become an EXPERT as a new facilitator in the same way that one would describe trying to pick up a substance. "It was slipping through my fingers," he relayed to me as he recalled his struggle to become EXPERT in cultural relevance early in the project (Exit interview, March 20, 2010). Matthew felt unable to "grasp" and hold onto the concept of cultural relevance in science pedagogy, adding to his frustration with feeling inarticulate with the group on that first day.

Matthew lived by other related ontological metaphors in CRISP, most prominently by BOOKS AS CONTAINERS OF KNOWLEDGE. Since Matthew was

focused early in CRISP on becoming an expert, he sought to attain knowledge through the physical act of reading a text. In our interactions, Matthew repeatedly drew on images of books as resources for expert knowledge. Books were physical artifacts that could be held, shared, exchanged, and envisioned as representative of accumulated knowledge on a topic.

As Lakoff and Johnson's (1980) theoretical framework suggests, if we imagine books as containers of knowledge and knowledge as a substance, then gaining knowledge involves getting knowledge out of one container (the text) and moving it to another. Our minds can be thought of as containers too. The transfer of expertise from one container to another is imagined as a physical act— as one might plan to fill an empty bucket, bank account, or grocery bag. Matthew lived by his ontological metaphors conceptualizing gaining knowledge through the use of his hands and eyes to transfer and embody expert knowledge. In other words, his ritual when working toward becoming EXPERT was, and I speak for myself here too, to turn to the literature.

Lakoff and Johnson (1980) assert, “the metaphors we live by, whether cultural or personal, are partially preserved in ritual” (p. 234). These rituals are a part of how we set about accomplishing our goals in our daily lives. For example, if Matthew sees that he lacks expertise and imagines he must attain that knowledge by grasping it, experience it through some physical sense, then he likely will turn to sources of information that allow him to hold in his hands (or mind), what he seeks. As Matthew retold during the member checking process in his exit interview:

My big concern starting the project was that I felt like my knowledge — I was very interested and had some of the pieces—but still felt my grasp on the whole cultural piece was ... well, sometimes I would have it, sometimes it would just

slip through my fingers. So, what I felt I needed to do for myself was make sure I allowed myself to be as much an expert as possible to do the readings, study them and make sure that I — because I couldn't beat Rachel's [another facilitator] lifetime of experiences — cited some things from the literature and I think I was more or less successful with that. But it really did turn into more—I'd bring out ideas and I would try to give us a starting spot to go from and then everybody else brought their expertise as well and we learned from each other (Matthew's Exit Interview, March 20, 2010)

Again, ontological lived metaphors are apparent in his language as he described his group members “bringing” knowledge or expertise to share, as they might think to bring food to share. Matthew continued by explaining how he found knowledge in one of the texts the CRISP project made available to all participants—*Ready, Set, Science! Putting Research to Work in K-8 Science Classrooms* (Michaels, Shouse, & Schweingruber, 2008) yet was frustrated with the lack of time the teachers in his group had to engage with the books and apply the information in them to their practice. He grappled with the idea that he might better facilitate, given the limited time participants felt they had to engage with the materials, by practicing one of the ideas in the book in his classroom and “being more of an EXPERT” by saying “here's an idea, let's really try to work this through and think about how we can make a visual for this activity” (Matthew's Exit Interview, March 20, 2010). However, if Matthew's teachers in CRISP do not value or live by the ontological metaphor of knowledge as a substance and books as containers, then he may not be able to engage them with the materials in the same way.

I clearly remember the moment when, as a fourth year teacher, it dawned on me that I only taught my ninth grade students in the ways I learned best—not differentiating to best meet the diversity in their approaches to learning. I wrote over and over in my journal: “I teach the way I learn! I teach the way I learn!” The revelation led to an

action research project where I transformed my practice by incorporating Howard Gardner's (1983; 1993) multiple intelligences into a new unit design for video production. My students were engaged in my theater and debate courses like never before. With this transformational moment in my mind, I imagined that by making Matthew's metaphors lived by explicit he and I could identify his underlying assumptions about how others learn, and perhaps think about his adult learners in new ways.

Seeking Cultural Diversity Expertise: Matthew's Revelation

Matthew listened carefully as the other facilitators discussed their most powerful facilitation experiences during the morning of the first meeting. After all of the other facilitators told their stories of practice, the agenda called for a break. Matthew still had not shared a story. When the group returned to the conference table and the principal investigator identified the next agenda item as the topic of discussion, Matthew determinedly interrupted:

Can I share a little piece? I felt like I didn't quite get my piece in earlier and I feel like it transitions into this pretty well. So, one of my powerful experiences when I was facilitating a group was actually with some undergraduates. I wanted to talk about culture with them. Most of my students' experiences came from either the suburban areas or the rural areas around College City with very little cultural diversity. The truth is that I, too, grew up in areas that were not very culturally diverse. I thought it would be good for all of us to have some experience with that because a lot of our students graduate from the local state university and get in places that are more diverse than where they student taught—and are in over their heads. So, I thought wouldn't it be cool to have a panel of speakers that could come into the classroom and share their experiences. So, I went and talked with leaders of different communities and asked them to find me some students to come and speak. I spent a month trying to get students to come and speak on this panel. The students in my classroom were excited. However, when the month ended, I had nothing, ... nobody. So, the day before [the panel discussion] I went and talked to the gal who is in charge of the Black students' organization and asked her about my conundrum. I asked her "Can you help me out?" She said, "Well, let me be straight with you. Students of color at this university do not really feel comfortable being singled out. Most students do not want to be the Black guy who comes to your class and represents all of Black America or the Black world." Her suggestion was that we

students come and immerse ourselves in a different cultural experience where we are in the minority. So, the powerful part of this experience for me was going back to my class and saying: “You know, this is what I wanted to do for you today and it didn’t work out. Where did I go wrong?” And we all, um, well it is perhaps too simplistic to say—but we were all somewhat ignorant. I certainly was. We were able to wade through this issue. We were all trying to figure out what people weren’t comfortable with and tried to make some sense out of it. I just remember that one of the students came up to me after class and said, “This was the best class period of my four years here.” And, I had gone in without any game plan. I just said “here is where I am at and I need some help with this.” So, for me the experience that I bring to [Gloria Ladson Billings’ chapter], or the piece that resonated with me is getting to know folks as individuals because it is too simplistic to make broad cultural stereotypes and it helps to know folks as individuals. (Transcript, September 27, 2008).

With the vivid image of transformation encapsulated in this story, Matthew had expressed both his openness to learning and his newness to facilitative work in cultural relevance. I wondered: Did he tell the story to demonstrate that he was new to thinking about cultural relevance—not yet EXPERT? Or, did he feel he was exemplifying EXPERT knowledge around cultural relevance with the story? It was too early to tell. Either way, I respected and appreciated that he laid bare his early assumptions when learning to incorporate diverse perspectives into his curriculum.

The story he shared opened the door for new thinking about transformative experiences when working with a group as instructor or facilitator. It helped me to imagine the moment when he realized that when he admitted his assumptions to his students, the lesson was transformative for others. He highlighted his realization that he had much to learn from perspectives he had not considered when inviting panelists to represent racialized groups to a White audience. The re-storying of this particular moment with university students provided an image of Matthew’s emerging understanding of perspectives he hadn’t considered before, as well as his ability to make

a mistake and learn from it with his students. I observed him relax and smile as he engaged in the new discussion. He had told his first story, and it was a good one.

Matthew felt better now that he had told this group at the Science Museum about his experience. He was here, after all, for a reason. He wanted more transformative experiences like the one he had just shared from his past work facilitating pre-service teachers. Since that panel a few years earlier, he had taken the advice of the young woman to “experience being the minority” and immersed himself in cultural experiences. He saw the CRISP project as another opportunity to learn how to be EXPERT in cultural relevance. Yet his doubts persisted; he wondered, “How can I teach this? How can I possibly be the EXPERT? I’m in deep.” He picked up the Gloria Ladson-Billing’s chapter and reviewed it carefully for ideas he could put into practice.

Observations From the Field: Matthew’s Journey

Matthew was new to facilitating teachers in cultural relevancy in science pedagogy. He worked over several months to recruit more teachers to his local group, keeping in touch with the facilitator team through email and on Moodle during the year. I found him to be personable, inquisitive, and reflective in his correspondence online, during teleconference calls, and in person. Matthew included me on emails he sent to the teachers in his local group. I noted in an October 7, 2008 email, he addressed the teachers in his group as “friends” and closed the correspondence thanking them for “embarking on this journey” with him. The language in this email indicated another lived metaphor for his practice as facilitator. “Friend” indicated a collegial relationship and “journey” signaled a new metaphor for how he had shifted from imagining facilitating the teachers as expert in a classroom to engaging with them in a new kind of educational experience.

Unfortunately, only three of the seven teachers expected to attend actually showed up for his first meeting so he spent the next three months actively recruiting

more participants using contacts at the universities, desegregation/integration homebound office, as well as private and public schools within a thirty mile radius. By mid January, he had recruited five teachers and one student teacher from the area to participate.

Setting. The region in which Matthew worked drew teachers in from several area communities: the large local school district, a nearby rural district serving Native American children, and the private school at which he worked. In a summary provided as part of his action research presentation at the end of the year meeting, Matthew described his community's population as:

...largely segregated by income, and often ethnicity. Residents can be negatively stereotyped based on their ethnicity and the physical location of their residence... as a long-time resident; I have lived with the stereotypes all my life. These stereotypes are sometimes whispered, but often accepted as truth. It is 'known' that families in the east end of town are wealthier, smarter, Whiter, more beautiful, and more arrogant. The Central hillside houses the 'Gangstas' and poor Whites and Blacks. The West-enders are blue collared, hard-living and drinking and has a growing ethnically diverse element that causes trouble. (Action Research Project Report, May 30, 2011).

These stereotypes troubled Matthew enough that he shared his concerns about them when meeting the other facilitators and his local group. After our January statewide large group meeting at the Science Museum where teachers developed their action research plans more fully, Matthew elected to participate alongside his local teachers by completing an action research project too. He wanted to address his question "Can societal stereotypes be transformed by middle and elementary school science partnerships?"

Matthew's action research project. Matthew felt morally responsible as a

teacher in a private school to expose his seventh and eighth graders to positive experiences with children representative of the entire community. He hoped to break down the stereotypes that he had grown up with as a long time resident in the same community. Through his relational work with one of the teachers in his local group, he felt he had an opportunity to provide his students with a positive multi-cultural experience that hopefully disrupted his White and wealthy private school's students' beliefs about the academic knowledge of the public school children, all first graders, just blocks away. Matthew was no longer worrying about becoming an expert in cultural relevance or action research as a facilitator. He was now focused on taking his seventh graders a mile down the road to experience a local public elementary school's culture, one visibly different from his school's. Without pressure to do so, Matthew also elected to present the project at the final statewide meeting in May where all teachers involved shared their findings with their peers. He was the only facilitator, though we did not request it, who decided to complete an action research project as required of all teacher participants.

Enacting New Metaphors to Live By: Matthew's Shifts

Temporality. Curious about why he had shifted away from thinking of bringing expertise (from books) to his local teachers to living the experience of taking action with them, I asked Matthew (and the other facilitators) to be prepared to describe their practice using a metaphor at our May 5, 2009 conference call. Matthew said:

I feel kind of like I'm a guide in a wilderness area I haven't explored before. And, in some cases I know a little bit more than the people I'm with but sometimes they know more as well. We're all just kind of moving through it together, which is why it's important for me to do a project together—an action

research project—so I would know questions to ask and have some of the same questions other folks might have. (May 5, 2009 Facilitator Meeting Transcript)

Matthew's move from the lived metaphor of FACILITATION AS EXPERT to FACILITATION AS WILDERNESS GUIDE allowed him to explore a new area of inquiry alongside his participants. He accepted that he didn't have all of the knowledge, that they were moving through this experience, and that he might share in that experience with them in order to better understand their concerns. As we discussed in the exit interview (March 20, 2010):

Stacy: The shift in your language is interesting, as you don't seem to envision yourself as having to be the expert anymore. Did this shift opened up some possibilities for you as a participant in your group? Can you tell me more about the choices you made?

Matthew: Part of it is I realized there was no hope of me being the expert. It was my first year at the school where I was teaching so I felt like a first year teacher again. I didn't really have time to do extra projects but I really did feel an obligation to the CRISP project to be an authentic facilitator. I had graded a lot of action research projects [at the university where I worked] but I hadn't really engaged with my own practice using action research, so I felt that was important. I also felt like after meeting Rachel [another facilitator in CRISP] and actively engaging myself in cultural experiences for the last 3-4 years that it just felt like something I had to do.

Matthew's acknowledgement of his choice to abandon his early metaphorical conception of FACILITATION AS SHARING EXPERTISE for FACILITATION AS WILDERNESS GUIDE, based on the exit interview, was closely connected with his goal to be an "authentic facilitator." In order to be authentic, Matthew imagined that he needed to move from merely immersing himself in cultural experiences to taking action in affecting the experiences and attitudes of others.

Early in CRISP, all facilitators and participants were asked to read Gloria Ladson-Billing's chapter "Yes, But How Can We Do It?" in Landsman and Lewis' (2006) *White Teacher/Diverse Classrooms*. The theoretical components of Ladson-Billings (1995, 2006) culturally relevant pedagogy include: academic achievement, cultural competence, and sociopolitical consciousness. Matthew posted to Moodle in December of 2008 about the reading and pointed the facilitators to other authors in the same text that had influenced him as well. Soon after his Moodle post, Matthew's emerging sociopolitical consciousness was evident in steps to engage his seventh and eighth grade students with an action research project "in a collective struggle against the status quo" (Ladson-Billings, 2009, p. 127) as well as his action taken as a "political being" (p. 128) in public confrontation with the teenagers about the name "Coon."

Sociality. Since sociality needs to be considered in the commonplaces between not only the participants and the researcher, but in this case also between participants, it is important to know that Matthew highly valued the lived experiences of another CRISP facilitator, Rachel (see chapter 5). Rachel, self-identifying as a Biracial African American woman and serving as a cultural competency coach in an urban school district, was someone Matthew routinely engaged and checked in with during discussions. After observing her first group meeting on November 1, 2008, Matthew saw Rachel as an expert and role model in guiding teachers toward cultural competency. As noted in transcribed facilitator meetings and participant observations, Matthew sought only her opinion during facilitator discussions on equity and racism. Matthew engaged Rachel directly, inviting her to offer her opinion or encouraging her after she spoke about her work. He included her by asking questions (e.g. "How about your

folks?” “Is that what you think?” “Is [facilitating in CRISP] about science for you or about teaching?”) and compliments (e.g., “I think you are on to something” “That’s really inspiring!”).

Interestingly, after Rachel began meeting with her colleagues in November of 2008, I was unable to find any recorded instances where Matthew addressed other facilitators during our meetings. When Rachel spoke, he listened intensely. When she hadn’t contributed her thoughts, he engaged her. Related, in Matthew’s exit interview, he stated that he “couldn’t beat [Rachel’s] lifetime of experience,” suggesting that he admired her lived experience as a facilitator of teachers and as an interesting person engaged on a daily basis in “the work” of cultural relevance.

Place. Matthew also wanted to be a more credible facilitator by engaging in action research and by taking action as an anti-racist educator in public settings. On December 31st of 2008, Matthew posted to the Moodle website about an experience that he had that was significant as a first step to taking action against racism in a public setting. Matthew retold the experience, happening in a larger city about 80 miles from his home, as follows:

I was standing in the Subway line in Central City mall the day after Christmas. I was trying to persuade my son to order something other than cheese on his sandwich and doing my best to ignore four teenage boys in front of us in line. The boys were enjoying their freedom from their parents by speaking a little louder than necessary and pushing each other around. They looked a lot like the boys I played hockey with back in the day: white, wealthy, and arrogant. My seven year old was almost agreeing to lettuce on his sub when I thought I heard one of the boys say: “Look, it’s Coon.” I turned around and an African American boy was standing in line behind me.... Did that ignorant asshole just call a Black kid a ‘coon’? I’m a pretty quiet guy. I have no problem raising my voice in a classroom, but in public, I’m very reserved. While the boys went on with their conversation I was growing violently angry and uncertain about what to do. I wondered if I’d lose my teaching license if I beat the pulp out of them.

All the while I stood there doing nothing: ashamed, embarrassed, and not acting. When they sat right next to my son and me to eat their lunch, I knew I had to say something. I walked up to their table and crouched down as if I were talking to my students. I said, Did you see that African American man in line behind us? They said: “Yes.” Did you call him a Coon? They said “Yes, that’s his name... (Something like) MacCoon. We call him ‘Coon.’” I said, “Do you know that the term ‘Coon’ is similar to the term nigger? It’s a derogatory name for a Black person.” They said “Yes, but it’s his name” I wish I would have said, “I think that the responsible thing to do is to give him a nickname that honors him instead of insulting him,” but instead I walked away, disgusted. How can such flagrant racism still exist when our schools have committed to teaching diversity? The article that I attached a couple days ago looks at multicultural education as revolution rather than simply tacking up a few posters of African American scientists. So, as I reflect, I can see that awareness of racism and inequity is the first step. The next is to do something about it. Although I might handle the situation at subway differently next time, I did something.

Matthew’s story that December struck me as significant as he expressed to his CRISP peers and me his disgust to his colleagues, confronted the racist language in a public space, adopted a new image for multicultural education as war, and re-storied his image of cultural relevancy FACILITATOR AS WILDERNESS GUIDE to ANTI-RACIST ACTIVIST. The experience was a transformative moment for him and the impetus for his choice to engage his own students in an action research project.

Matthew referred to the Central city experience again in his exit interview

(March 20, 2010):

Another experience that is recorded in [your data] somewhere was right around January is where I heard the cultural slur in [Central city]. It was a huge deal to me that I still live in a society where people can still be so thoughtless. Those boys were so clueless and had no interest in becoming aware. I thought, I teach a whole school of kids like [the ones in Central city] who are so quick to make jokes about homeless people—even the good kids because it’s so far from their reality... And, [choosing to do my own action research project] helped with my growing anxiety with teaching at a private school, feeling like I should do more [with equity] working with that socioeconomic elite, having only twelve kids in my classes, and feeling like I should bring up topics of poverty and equity so they could feel some kind of empathy. But I knew [as their teacher] that my

[seventh graders] really we're still just not engaged and connected. So, I felt a real need to do something like [my action research project].

Matthew adopted new images for and ways to practice during our shared work in CRISP—strongly influenced by Rachel—and in his community. He openly adopted new metaphors to live by in his practice and shifted his approach to working with the students in his classroom, teachers in his CRISP group, and strangers in public places.

Matthew's shifts were unexpected, but perhaps likely not unusual for one so motivated to *be* culturally relevant (Ladson-Billings, 2006). Matthew's sense of place for advocating for equity shifts out of the classroom and beyond CRISP. Abandoning completely his early conception of FACILILATOR AS EXPERT, he lives out new experiences with the eye and ear of an anti-racist activist summoning up the courage to advocate for equity. His sense of his place in the "revolution" shifts from participating in multi-cultural activities to social activism. Matthew's narrative exemplifies openness to change as he makes his way down the path to becoming an activist for equity, moving beyond classroom walls to live new experiences with his students and fellow teachers.

In the next chapter we will explore Rachel's story and examine her approach to practice.

facilitators (Molly, Susan, and Matthew). Instead, she completed the pre-questionnaire electronically, which provided details about how she imagined her practice as facilitator. To prepare her for the opening day session for teachers and facilitators at the Science Museum, I shared our notes and materials from the facilitators' planning meeting with her in advance of the large group meeting in November.

Rachel's pre-questionnaire response. On her pre-questionnaire Rachel indicated she had several prior experiences as a facilitator of teachers, most recently co-facilitating 60 math and literacy coaches and project managers using Glen Singleton's materials for leading *Courageous Conversations about Race*. She reported that the session had been difficult at times and that it has been her experience that:

Anytime conversations about race are brought up the environment gets very tense.... People will hear what they want to hear versus what was said. 'Intent versus impact' is how I like to think of it. My philosophy when facilitating any group, particularly when the topic is race or cultural competency, [is] to keep it personal, local, and immediate. This is the philosophy in the *Courageous Conversations about Race* book and it works very well. I encourage people to speak from their own perspective. I also expect the unexpected, non-closure, and for it to be uncomfortable. I guess those are the principles I operate under as well. I help people understand where they are when talking, thinking or feeling about race and facilitate movement for those who want to move. (Pre-questionnaire, submitted October, 2008)

Rachel was the only one of the four facilitators who spoke directly to the experience of talking with teachers about race and cultural competency. She firmly grounded her image for facilitation in her lived experience as a cultural competency coach, even though the CRISP project was also focused on science pedagogy and action research. In the pre-questionnaire, she not only described her philosophy, but also addressed the tension and her strategies when working with people. Her focus was on the discomfort

discussions on racism brought out in people. Her metaphorical conception of a continuum on which she can locate people to “help people understand where they are” indicates that she imagines her work as identifying people at one point in their lived experiences and moving them to another, but only “for those who want to.”

Orienting people on a continuum. Rachel’s perception of a continuum is what Lakoff and Johnson (1980) describe as an orientational metaphor—“one that organizes [spatially] a whole system of concepts with respect to one another” (p. 14). I include two of the many examples they suggest of how our physical and cultural experiences shape our perceptions based on the human body’s function in our environment (p. 16):

GOOD IS UP; BAD IS DOWN

Things are looking *up*. We hit a *peak* last year, but it’s been *downhill* ever since. Things are at an all-time *low*. He does *high*-quality work.

FORSEEABLE FUTURE EVENTS ARE UP (and AHEAD)

All *upcoming* events are listed in the paper. What’s coming *up* this week? I’m afraid of what’s *up ahead* of us. What’s *up*?

Similarly to Lakoff and Johnson’s (1980) examples, Rachel has imagined other people as moving forward and backward, up and down, or through a continuum (Banks, 1993), phases (McIntosh, 2000), a compass (Singleton & Linton, 2006) or stages (Helms, 1990) toward cultural relevant practices. If one imagines people on a continuum, as I sometimes do in my practice, those perceived as too far back or low on the developmental continuum may be left behind.

Rachel’s orientational metaphor for assessing and determining readiness for movement on a continuum reminded me of my experience as a teacher working with a particular eighth grade boy named Jeff who talked derogatorily about women and girls during class. I tried on multiple occasions to talk to Jeff about his dehumanization and

disrespect for the girls in class. He usually smirked and said he would work on it, only to return the next day with even more insults and negative body language. I thought maybe that as a female, I was likely not going to be able to build respect with him to change his behavior. After sitting down with his parents to discuss the problem, I realized I was not going to be able to get through to him as his father berated his mother in front of me for most of the discussion. I certainly placed Jeff on a point in the continuum that day and determined he was probably not one of “those who want to” move. I did continue to work on building a positive relationship with him, with some success, but I certainly didn’t put all of my energy into trying to change his attitude toward my gender. Instead, I worked on creating a classroom environment where everyone felt comfortable discussing their opinions and brought in literature with strong female characters.

If Rachel worked with groups of people in this way, assessing their readiness to move from one point on the continuum to another, then how would she work with a local group of teachers who are likely at very different points in their understanding of institutional racism and White privilege? Did she imagine herself as the one coaching individuals from their starting to ending points on a continuum or, did she see that as their responsibility after she provides a little cognitive dissonance to see if they’re interested in changing their beliefs? How would she enact this metaphor of people on a continuum? Where did she draw the line on who would be encouraged to change and who would not?

Additionally, I found Rachel’s description of her facilitation philosophy, when juxtaposed with another facilitator—Molly (chapter 6)—intriguing in that Rachel’s

language is focused on the individual's personal, local, and immediate response to the conversations and she expects people to be uncomfortable at meetings. Rachel orients herself in relationships with her teachers differently—as meeting the needs of the people where they are as individuals. Molly, on the other hand, described in her pre-questionnaire an image for facilitation as moving a community of teachers—as a whole group—toward collaboration, trust, or shared risk taking. Where Molly's image of practice focused on building collaboration between teachers by meeting their individual needs in group settings and moving the group toward a common understanding, Rachel's image of practice involves working with people to speak from “where they are”—expecting the unexpected—to move individual teachers to become self-aware of their White privilege. Rachel imagines facilitating group discussions, working as counselor might, using a setting for open discussion to bring out individual's stories and experiences.

It would be quite easy to continue the re-storying Rachel's experience without making transparent the concerns that I had when entering into relational inquiry with her.⁹ However, I must take a moment to interject and examine my place as a White woman in the story I am retelling of Rachel. As I will reveal in these reflections, I struggled to confidently re-story Rachel's experience. I constantly worried that I would naively re-story her experience and reproduce images of Black female anti-racist activists that ignored elements of her experience that I did not understand as a White, female researcher.

In order to avoid pitfalls, I turned to Cross (2005) who writes specifically about teacher education reforms that set up White teacher candidates in positions of power as observers of people of color “result[ing] in learning racism, ignoring power, and ignoring racism,” (p. 270) I believe her warnings apply as well to White researchers. Cross credits Fisk (1993) for the concept of new racism and defines it as “the struggle over the power to promote social interests that are

⁹ In Rachel's chapter, I have elected in these boxed areas to include thoughts specific to my early struggle to understand her lived experience as a Black/Biracial anti-racist activist and my responsibility to locate myself as a White researcher.

always racialized” (2005, p. 267) Cross (2005) contrasts old racism with new racism in order to illustrate how they are different in philosophy and practice:

Table 3: Old Racism and New Racism Contrasted. Cross (2005) p. 267

<i>Old Racism</i>	<i>New Racism</i>
<i>System of prejudice and supremacy</i>	<i>System of power and domination</i>
<i>Works when visible</i>	<i>Works best when invisible</i>
<i>Works through imperialized knowledge</i>	<i>Works through privileged knowledge</i>
<i>Individual racism</i>	<i>Racism built into institutions</i>
<i>Power applied to physical body</i>	<i>Power applied to social body</i>

Although all forms of racism as detailed in this table are unacceptable, I do think that I am susceptible, even though well intentioned, to enacting forms of new racism as a White woman in a system that privileges whiteness. Cross explains that new racism occurs when well-meaning teacher educators unintentionally validate the invisible form of racism by reinscrib[ing] their White privilege and power, other[ing] those they learned about, and subject[ing subjects] to their academic and employment benefit” (p. 270). As well-intentioned White narrative inquirer working relationally with Rachel, I did not want to reproduce new racism or old racism while re-storying her experience in CRISP.

As a White researcher, I might choose “to gaze on another and to reach conclusions without having the gaze be multidirectional... to describe others as different or aberrant... to dominate as [I] see fit for [my] benefit” (Cross, 2005, p. 270). However, to do so would be to enact racism in my inquiry and final report. I believed that through relational narrative inquiry that requires member-checking, Rachel would be able to “flip the gaze back on [her] White observer” and use that gaze to reduce my power and privilege to look and not be seen. Of course, in order to flip the gaze back on my own experience with Rachel in CRISP, I would have to be explicit during our interactions and in my final “performance” of her story. These sections interjected throughout are my attempt to be with Rachel in her experience as storied, to open myself up to her gaze and reduce my power and privilege as White researcher reporting in a racist system of power and domination.

Orienting people in a setting. As described earlier, Rachel was a Cultural Specialist in a large metropolitan district. The district commonly assigned individuals as “specialists” to serve as experts for one or more schools. The K-8 Science Specialists

recruited by Rachel from her district were licensed teachers assigned to elementary schools in the district, often moving science materials between classrooms on rolling carts to teach as many as 450 students a week. These specialists “brought” science to students and teachers in most elementary school classrooms. The classrooms in which the science specialists worked were diverse. District enrollment data for 2008-09 reported more than 38,000 students of which 75% are students of color¹⁰ were enrolled in fifty elementary schools, nine middle schools, eight high schools and other programs. I also note that one of the ten teacher participants in Rachel’s CRISP group did not teach in the same district. The tenth teacher to join heard about the project through a university contact. She taught at a local charter school for girls in the same city and engaged with her students in a more traditional classroom setting on a daily basis.

Complications affecting data collection. Rachel only held a total of three of the six required local meetings with her participants. She met with her participants on November 1, 2008, December 10, 2008 and February 9, 2009. Unfortunately, Rachel’s health was impacted and she required surgery, interrupting the academic year. Upon her return to the district, she attempted to plan times to meet with her teacher participants and was unsuccessful. Regardless of her inability to gather the teachers as a group that spring, she continued to interact as facilitator with a few participants via email. Her group met for the last time at our final meeting at the Science Museum in May.

I did not feel as confident in my relational narrative inquiry with Rachel due, in part, to the limited data set. My data for Rachel was limited to the November 1, 2008

¹⁰ According to the district’s 2008-2009 enrollment data provided online.

meeting observation with transcript at the Science Museum, email exchanges with her co-facilitators in CRISP, facilitator conference calls, observed local meetings with the teachers in her district, and her exit interview. She did not bring her recorder to the meetings, so I did not have additional audio to transcribe and analyze. Fortunately, I was in attendance for her first facilitated meeting with her group and recorded it for transcription.

I could not help but wonder why Rachel did not record her local group meetings. I used my recorder at the November 1st session. At another local meeting I attended that fall, she had her recorder but did not have working batteries. Even though it was a requirement of her contract with the project, Rachel did not provide any recordings of her local meetings during CRISP. Was it by accident that she did not use the recorder? Hill-Collins (2000; 2009) reports, as an example of black women's activism, that researchers found "that Black women use a variety of strategies to undermine oppressive institutions" (p. 225). By not turning in data, was Rachel—the only Black/Biracial woman in CRISP—resisting contributing her part to the narrative inquiry led by a White researcher? Although Rachel never confirmed that being a participant in my narrative inquiry positioned her as an object of study despite my best efforts to convince her otherwise, her actions indicated possible resistance to being studied. She was an organized person, yet data was not turned in as required. Although Rachel invited me as a participant observer at anytime, no meetings were scheduled beyond February of 2009 to attend.

I also questioned whether I truly had full access to Rachel's thoughts and reflections on practice with teachers toward cultural relevance. Hill-Collins (2000; 2009) describes two dimensions in Black women's activism—institutional transformation and group survival—as linked. Hill-Collins cites long-time civil rights activist Bernice Johnson Reagon (1981, 1983) as seminal to the idea that in order for Black women activists to address institutional transformation in coalition with other groups, a "barred room of community is necessary and often may be the only form of resistance available" (2000; 2009, p. 223). Rachel saw CRISP as an opportunity to address systemic institutional racism in coalition with the university and Science Museum. We shared that passion as anti-racist activists working together to engage teachers in cultural relevance in science pedagogy. Yet, I did not feel invited into her inner world or her community—all hidden, perhaps, within her "barred room." I suspected she had other people in that space with her who "offered a nurturing and safe space" (p. 222). However, I did not have access and felt there was a lot about Rachel's lived experiences that I didn't know.

The next section is a “data walk” through this first meeting. I invite you to join me as I work through Rachel’s narrative to identify her lived image for facilitation. I begin with a short synopsis written from Rachel’s perspective as we re-storied her first meeting by analyzing existing data, including her exit interview.

Rachel’s first facilitated meeting.

Rachel was looking forward to working with her district’s science specialists to incorporate culturally relevant pedagogy. She felt that making science culturally relevant meant making it inclusive, not exclusive. Rachel wanted teachers to understand, respect, embrace and value the cultures their students represented by including the accomplishments of scientists from all cultures. Rachel wanted to make cultural connections for students so that science “look[ed] like the students who are learning...and students can make scientific connections that are relevant to their lives” (Pre-questionnaire, October, 2008). She wanted teachers to make connections for students that led to engagement, resulting in improved academic achievement. Meeting with her group of ten teachers for the first time on November 1st, Rachel prepared utilizing materials (books, poems, and stories) from her work as a competency coach. She welcomed co-facilitator, Matthew, and me as participant observer to attend her meeting.

Rachel’s approach to facilitation was of particular interest because she was not able to attend our planning session in September and I was unsure as to how she would prepare for her first local teacher group session in November. In each analysis chapter, I’ve provided narratives detailing the other facilitators’ approaches to their first meetings with their local teachers, but Rachel’s strategy on November 1, 2008 was notably different from the other facilitators’ opening sessions so I have chosen to provide more details and depth. By re-storying her first session, one might better imagine what her teachers experienced and understand her practice as lived.

As part of the materials provided to all facilitators and teacher participants for the first local groups meeting, held at the Science Museum on November 1, 2008, the

facilitators agreed that Mark Cohen's (1998) article "Culture, Not Race, Explains Human Diversity" from *The Chronicle of Higher Education* was a good place to begin the conversation. While observing and participating in her first meeting, I noted that Rachel did not talk about the reading selection provided specifically for the hour-long discussion with her teachers. Instead, she brought outside resources from her multicultural library. She talked frankly about her ethnic and racial identity as an African American biracial woman, created a warm atmosphere, encouraged everyone to participate, and laughed often.

Her movement back and forth between her expressed beliefs, personal stories, images of good teaching, and images of self were evident in how she talked about herself, as well in her practice as a facilitator. In order to understand how Rachel's story of self is conceptualized, I created a table (see Appendix L) using embodied and enacted as my main themes for the analysis, coding from the transcript of her first session. I provide this table as an example of one of the ways that I organized raw data in the field texts to make sense of the ways metaphor was embodied and enacted.

Since Rachel had been unable to attend the first facilitators' planning meeting, we prepared for the opening statewide meeting at the Science Museum without her input. As part of the day's agenda, each facilitator was given an hour to meet with their local group participants to discuss the selected article— Mark Cohen's (1998) article "Culture, Not Race, Explains Human Diversity" from The Chronicle of Higher Education. We supplied all of the information to the facilitators and teachers well in advance and Rachel agreed to allow Matthew and me to sit in on her session that morning with her local group. When she started off her meeting, I thought maybe she had not carefully read the emails with the recommended reading for these first meetings with local groups. It soon became obvious that she would not be addressing the article we had supplied.

When I asked Rachel later about the article, she laughed and said that she had "forgotten all about it." I didn't pursue it further but I did wonder if she didn't like the article or if it didn't fit with what she felt was important to address with

her local group of teachers. She had carefully planned for the meeting with a selected poem, multiple books to recommend, and a process to include everyone in the discussion. I wondered if this instance was another example of resistance (Hill-Collins, 2000; 2009).

Encouraging courageous interactions. My interpretation of the data and my lived experience as participant observer was that she facilitated without pretense, speaking from her heart. Rachel's enacted practice included listening intently and attending to each participant's needs. She openly reflected on the shared experiences of each teacher and assured all group members' voiced stories were heard. When a few participants spoke about feeling guilty for being White, Rachel revisited their concern with encouragement to reconsider their feelings of apology or guilt:

It is interesting that two of you say, Beth and Hannah, that you sometimes feel guilty for being White? What was the word? "Apologetic," for being White? I would like you to explore that more. I mean, what are you apologizing for and if there is an apology that needs to be made, then is it yours and not what came with you?

She followed up her question with a story from an experience at a recent conference in New Orleans that detailed an emotional, transformative moment when a White principal apologized for "teaching the bullshit for too long" from historical texts that are not representative of the truth. Rachel described the moment when the principal stood up, sobbing, and apologized to everyone at the conference for "not knowing what she didn't know." The teachers in Rachel's group listened with rapt attention, nodding their heads and murmuring as she shared stories and affirmed the stories told by others. Rachel spoke openly with her participating teachers, provided a similar story from her own experience, and created space for the apologetic teachers to let go of their guilt, if they were carrying it on behalf of all White people. By creating a safe place for the group to

discuss their guilt and speak to the conflict they felt internally about race, room for change was possible.

When the conversation shifted to international experiences that had transformed thinking about racism and schools, I felt comfortable sharing some of my experiences as a White American woman teaching English in Japan in 1989 and 1990. I selected the story as I felt it demonstrated to the teachers participating in the meeting that I had lived outside of the United States and had appreciated what it felt like to be the racialized “other.” Although I did not share as many of the details of my experience, I did explain that while I lived in Japan I was called “gaikokujin” (外国人) which, loosely interpreted from Japanese to English means “outsider” or, more literally, “foreign-country person.” The experience of living as an outsider for nearly two years in another country opened my eyes to how the Japanese people in a city of a half a million people saw Americans at that time.

In 1989-1990, I was often stereotyped by my Japanese students (ranging in ages 4-73) based on their knowledge of American women as depicted in the movies. High school students asked me point blank if I carried a weapon. I was once asked while teaching a night class at a college prep facility if redheaded American woman also had red pubic hair. Students in the police academy, where I taught on Tuesday afternoons, asked me if all Americans carried guns and shot people to get what they wanted. These were questions that would never be asked of Japanese teachers, as my horrified Japanese colleagues explained afterward.

Men assumed I was promiscuous because I was a White foreign woman. When I left my last evening class and made my way home through downtown, I sometimes encountered groups of intoxicated Japanese men who would call to me and, sometimes, try to touch my body inappropriately. When I asked if this was generally a problem for women in Japan, I was told by my Japanese colleagues to avoid downtown (and this was confirmed by the police officers at the academy) because if I was raped by a Japanese man who witnesses saw having just one alcoholic beverage, I would be seen in the courts at fault because I was a foreign woman. After being warned, I avoided being on the

streets after 8 PM by boarding a bus for home (when Japanese business men were most likely to be moving from one drinking party to the next). However, I experienced a different assault there. Young students would stand up, scream “Gaikokujin! Gaikokujin!” and point at me in shock. Elderly people would move away from me if I sat down next to them. Many people openly stared, curious perhaps about my hair and skin. Eventually, I avoided all of this by purchasing a small motorcycle, helmet, and borrowing my husband’s leather coat to disguise myself as a man. Without a legal license to do so, I drove home the rest of the year undisturbed.

I stood out in a crowd because of my height, curly brown hair, and Mediterranean skin color. I could not “blend in” and enjoy the privilege of being a “normal” citizen. The only friendships I managed to establish were with 4th and 5th generation Koreans and one White male Canadian who taught in a nearby village. My Korean-Japanese friends’, also called “Gaikokujins,” ancestors had been brought by Japanese soldiers to serve as indentured servants and slaves many generations previously. The lived experience as an “outsider” in Japan opened my eyes to the assumptions and fears about “others” that society’s make, as well as what it might feel like in America to not be White. I thought about and chose to share some of these lived experiences as I participated while Rachel facilitated her local group of teachers.

When I reflect on why I included this extended version of the story of my experience in Japan as part of Rachel’s final narrative, I think it because the experience—now 21 years behind me—truly opened my eyes to systemic classism and racism. While living there, I not only began to understand how the educational system in Japan worked to privilege some students and punish others, but I also lived for the first time in my life as a second-class citizen. The lived experience of being stereotyped, oppressed, and sexualized on a daily basis because of my appearance tuned me into the experiences lived by people of color in the United States.

Rachel exuded confidence, care, and authenticity during this conversation. I noticed that throughout the session, Matthew sat at the edge of his seat listening intently to every word she said. He was there to watch a cultural competency coach—an “expert facilitator” leading her group through a provocative reading and a discussion on racism. Afterward, he expressed his excitement and gratefulness to her for inviting him in and said he felt more confident leading his own group through a similar discussion later in

the day. He had an experience that helped him to imagine how to have a conversation about race with his own group of teachers, and he felt he knew what to expect.

Meeting affective needs. Rachel worked throughout her session to address the affective needs of the group by attending to their physical needs for comfort, space, face-to-face interaction, breaks, and resources. She addressed participants' affective needs by engaging them in discussion that brought out their experiences and reason for joining CRISP. After doing so, she had the group reflect on the poetic words of a Hopi Elder hopeful about the future. Her choice to bring the Hopi selection is another example of how unique her approach to this first meeting was when compared to the other three facilitators. Rachel did not discuss the assigned reading at all, brought in multi-cultural materials to share, and incorporated the words of a Hopi elder into her session.

Rachel also encouraged and advised participants by quoting elements of their own experiences back to them, validating their feelings, and relating it to their students. For example, one participant described her transformative experience as a first year teacher in an Inuit village serving as the White teacher and the top wage earner in town. Reflecting openly, Rachel explained:

[Students] don't get to hear the experiences and emotions that come with... you know [points to Beth and quotes Beth's earlier statement]? "I'm going to stop because I am going to cry" because the experience impacted you so much that it still gets you emotional after so many years. That you were separated because of something you have no control over—because of the fact that you made more money [than the villagers] and the color of your skin. And those are the conversations that are hard to have and are hard to share with students, but they [students] don't see us [teachers] as part of them nor do we them as part of us.

Rachel's movement back and forth between familiar examples brought to the conversation by participants provided opportunities for the individuals and the group to reflect on the impact these experiences had on their lives and in their practice. These moments drawn out from the group conversation by Rachel were moments when people were changed by the experience after immersing themselves in new cultures or experiencing racism.

Setting the scene for becoming culturally relevant teachers. Another moment that depicted Rachel's focus on affirming shared experiences as moments that transform teacher-student relationships was after a participating teacher shared a story from her classroom. The teacher described a situation when a child began screaming at her classmates that no one would understand because no one else's father had been killed in a gang fight that summer. This teacher explained that she had gathered the child up in her arms and told her how sorry she was for this child's loss and how proud she was of her for telling the class about how she felt. Rachel affirmed: "she knows that you provided that space and that you acknowledged her in front of her peers, that she was special, that she had a unique situation" (November 1, 2008 Transcript)

I wondered if Rachel was consciously providing this same kind of safe space she talked about as being essential for K-12 students for her teacher participants in CRISP. Not all of the experiences shared had positive endings, indicating perhaps that members felt safe to share their perceived failures as well. Overall, I noted that Rachel spent a much greater percentage of time talking in her group session than did the other facilitators in their first local group sessions.

Rachel's orientational metaphor for how people change. Returning again to Lakoff and Johnson's (1980) orientational metaphors, Rachel strongly encouraged members to do the "difficult work" of confronting biases, issues of race, and privilege from the lived metaphor "inside out." For instance, Rachel made eight separate references to the idea that culturally proficient work begins with self-reflection and work to change from within. Rachel's narrative is consistently focused on participants internal processing as essential for change as shown in these excerpts:

- If the *inside* is not really feeling real good, the classroom is not looking real good...
- This work is on the *inside* out...
- Nobody can give you the answers, you have to search for it...you already know *inside*.
- That emotion that you carry *inside* comes out in your classroom...
- We are all holding *in* so much stuff...
- It comes from the *inside* out, not the outside in...
- And the culture is what we created, what you've created *in* your classrooms, *in* your hearts, *in* your minds...
- So that's why it is for me it comes down to the *inside*...

Recalling Matthew's ontologically based metaphor of knowledge as a substance moving from one container (a book, accessed by his body through his hands) to his mind (an internal container), Rachel's orientational metaphor of change imagined as from the inside out or internal (invisible) work moving people to external (visible) results. Change imagined as happening through ontologically based metaphors will inform a very different pedagogical approach in the professional development than would preparing for professional development created to support change happening, as she stated, from the orientational metaphor "inside out." Rachel's strong sense of change

happening from within, coupled with her alignment with Glen Singleton's framework¹¹ is what shaped her ongoing work at local group meetings and effort to meet each individual's needs.

The evolution of Rachel's metaphor. Based on early data analysis, I began to narrow her image for FACILITATION AS CHANGE AGENT. Change agent seemed a good starting place due to Rachel's focus on the internal work necessary for teachers to internalize the lived experiences of White privilege and institutionalized racism. Using Rachel's language identified in correspondence, observed meetings, and conversation I defined FACILITATION AS CHANGE AGENT as follows:

- A change agent engages in conversations that are difficult and painful, causing discomfort for participants. A change agent understands and expects the unexpected. The work is local, personal, and focused on the immediate needs of the community in which the teacher works. Participants are encouraged to speak from their own perspectives, from where they are, and then move or change. It is work from the inside out.

Because of past interest in Mezirow's (1991, 1996) Transformation Theory, I recognized that some of Rachel's language (e.g. "transformation," "change," and "internal work") was reminiscent for me of adult learning pedagogy. However, I did not ground the definition above for CHANGE AGENT in Mezirow's "line of development of the emancipatory paradigm [from Socrates] "through Marx and Freud to Freire and

¹¹ Singleton's *Beyond Diversity* workshops are designed, in part, to unpack White privilege and institutional racism to move people's beliefs about their students' deficits (race, poverty, ethnicity) toward advocacy for their students.

Habermas” (1996, p. 164). Instead, I imagined CHANGE AGENT as persistent work with adults toward anti-racism and equity.

I noted while observing her in practice, reviewing audio recordings, reading her correspondence, talking with the teachers with whom she worked that Rachel’s practice was consistent. During member-checking to gather feedback in the spring of 2009 as to whether or not she agreed with my analysis and inferences, Rachel confirmed again that she found the CHANGE AGENT metaphor and my review of her first meeting appropriate for the representation of our relational experience (Personal Correspondence, May 6, 2009). Rachel was confident enough in my early analysis that she encouraged me to feel free to use her real name¹². However, I was not yet satisfied that I understood or reflected the complexity in her lived metaphor of practice.

Engaging in courageous conversations. Lack of a complete data set was, as shared earlier, a complication in my relational narrative inquiry with Rachel. However, there was another “blind spot” for me in our work together. Though I had been active as an instructor of teachers in the past and had engaged with James Banks (1993) and Peggy McIntosh’s (2000) to incorporate their frameworks, I had not yet experienced Glen Singleton’s Beyond Diversity workshop nor had I read his book *Courageous Conversations about Race* (2006). After completing the initial narrative inquiry of Rachel, I was invited to participate in Singleton’s workshop offered by the same school district and I welcomed the chance.

Participating fully as a White female, yet carrying Rachel in my mind, proved to be the catalyst for me to feel more confident restoring our shared experiences. I learned

¹² However, for consistency, all names are pseudonyms.

more about Singleton and Linton's (2006) conception of a continuum—a compass model with four quadrants representing the moral, intellectual, emotional, and social responses to conversations about racism. The authors invite readers to reflect on these questions: “Where do you initially locate yourself on the compass...Where do you travel on the compass? Do you experience significant or minimal movement?” (2006, p. 21). Noting Singleton and Linton's (2006) language choices of “locate,” “travel,” and “movement,” for reflection while using the Courageous Conversation Compass, I could better imagine Rachel's focus on locating individuals on a continuum. Seeing the same materials that Rachel saw, engaging with people in the same activities, and watching people become emotional about their race-based experiences helped me to understand the context in which she lived and worked.

At Rachel's local school district Beyond Diversity training workshop, I engaged with the group—about seventy five percent of the participants identified as White and twenty five percent as Black—for a full two days. One aspect of the experience that fascinated me was when the facilitator required that we move to tables with people who did not look like us and whom we did not know. The group of Black women sitting at a nearby table complained openly to the Black male facilitator about being split up to mix when they “had so little time with each other as it was.” Begrudgingly—and with the facilitator's assurance that they would be able to get back together the next day—they separated to sit among the White participants in the rest of the room. Resistance to this type of request from facilitators is reported in the literature (e.g., Williams, 2006) and was anticipated by the facilitator at the workshop. However, I found myself thinking about Rachel's experience in CRISP as the only person of color and working with all White teachers from her district. Had she moved as begrudgingly toward the facilitative work with White teachers in her district? The women at this meeting were her colleagues, engaged in similar work at different schools.

Later, when I read Collins (2000; 2009) I thought about this incident as an example of the desire of Black women activists to enter the ‘barred rooms’—the safe zones where they could talk openly in a community both to resist internalizing racism and to “foster autonomy” (p. 223). I appreciated the need

for a group like that—a safe community that understood so well your experiences and could nurture one to continue to fight on behalf of change.

Another aspect of the experience that I found informative happened the second day. After a busy day and several great discussions about racism, the facilitator invited us to sit anywhere for the final discussion. I sat down with the four of the six Black women who had regrouped from the day before. I instantly felt I had intruded. It was very difficult to stay put when the body language of each person indicated to me that I was not wanted. A White woman in her mid-twenties sat down next to me and tried to engage others in conversation. She was not acknowledged with eye contact or verbal responses—and excused herself within the first three minutes of the next activity. I engaged in polite conversation with one woman who sat next to me, but was ignored by the rest of the group for the remainder of the meeting. As I sat with the women, I thought of Rachel and the experiences she had had working in “hostile work environments” the year previously with teachers in the school in which she had been assigned. Was what I was experiencing in that moment what Rachel had felt on a daily basis as the Cultural Specialist with White teachers who were resistant to her role as an anti-racist leader?

Early in CRISP, I knew Rachel worked full-time for equity in her district. After I read Singleton and Linton’s (2006), I imagined Rachel as an “anti-racist leader” on the frontline fighting racism by facilitating practicing teachers toward transformative, system wide change. That change began those teachers learning to “effectively talk about race” (Singleton and Linton, 2006, p. 228-9). She practiced as a COUNSELOR might, leading group session discussions to help participants examine life experiences and transformational moments exposing White privilege.

I knew that prior to CRISP Rachel was working at the district level with her colleagues to provide a strategic plan building a foundation for systemic conversations about race for true transformation system wide. As I understood more about her as a COURAGEOUS COUNSELOR, the metaphor FACILITATOR AS CHANGE AGENT began to expand to include other related images. It seemed to me that Rachel was

fighting on all fronts. She was an ANTI-RACIST ACTIVIST, a FORCE to be reckoned with— a WARRIOR for children. The word AGENT didn't seem strong enough, unless I imagined her as persistent as Ian Fleming's Agent 007. Since CHANGE AGENT continued to not sit well with me, I turned to a closer examination of the commonplaces (Connelly & Clandinin, 2006) to better understand and appreciate Rachel and my lived experiences in CRISP.

My Struggle with Re-storying Rachel: A View through the Commonplaces

As demonstrated in the first half of this chapter, Rachel confounded me in our early relational work together. In order to avoid unintentionally validating invisible forms of racism (Cross, 2005) as a White narrative inquirer, I made my thoughts transparent by highlighting it in the boxed text while re-storying our relational work in the first half of this chapter. In the sections that follow, I place myself in the text alongside Rachel as we work through the three commonplaces to select appropriate metaphors for the story of her experience in CRISP.

Keeping Clandinin & Connelly's (2006) three commonplaces (temporality, sociality, and place) as places to direct my attention in narrative inquiry, I worked to understand her past lived experiences. I sought moments to get to know her better during the project. However, I sometimes felt her responses—particularly around her education—were evasive. It wasn't until I broached the subject with direct questions in her exit interview on March 27, 2010 that she revealed to me that she wasn't a licensed teacher or counselor. Until that day, I assumed that she was a licensed counselor based

on what she had shared with me about her past, her interactions with her local group, and how she interacted with the other facilitators in CRISP.

Her level of discomfort with her pathway to her current role was high enough at one point that she requested that some of our conversation be “off the record,” and I have complied. Using the three commonplaces to focus my analysis in relational inquiry with Rachel was key to better understanding her lived story and image of practice. In this section, I’ll organize the narrative inquiry into focused attention to the commonplaces.

Sociality

Narrative inquirers are concerned with personal conditions and, at the same time, with social conditions. By personal conditions we mean the [inquirer and participant’s] feelings, hopes, desires, aesthetic reactions, and moral dispositions. (Connelly & Clandinin, 2006, p. 480)

Each time I met with her, Rachel expressed either excitement about doing the work with teachers in CRISP or frustration that it wouldn’t make a difference. Later, when she stopped meeting with her local group, I wasn’t sure if she had lost interest in bringing the group together because of ill health or if she was just tired of trying to engage teachers in conversations about cultural relevancy. I imagined she was tired of starting the same conversations over and over again, watching some teachers recede back into denial, guilt, sadness while “her kids” suffered the consequences of institutional racism with “color blind” adults. I imagined that, as the only African American in the room, Rachel found herself constantly being asked to speak for not only Black people, but for *all* people of color.

As Rachel periodically vacillated in conversations from hopefulness to despair about people actually changing, I thought of times when I advocated for culturally relevant pedagogy in schools and was met with resistance. Based on ten years of engaging teachers in conversations about equity, I knew it was difficult work to bring people together to talk to each other about racism, to address the socially constructed (and metaphorical) frameworks for how people live together in community, in schools, and in professional development. I had observed that many who facilitated these sessions in local school districts burned out in a few years and left ‘the work.’

When I co-taught practicing teachers in a masters program, we often hired outside facilitators to talk about White privilege with our graduate students. Why did we do that? In retrospect, I think it was because the students inevitably became so angry with the person who talked about White privilege that we found it beneficial to have it be someone outside of our learning community. I always felt sorry for those we hired because I knew their evaluations would be brutal—most of the teachers that we worked with were from districts that had not yet invested time and money in “diversity training.” I noted that nearly every year the facilitator we had hired previously had moved on to a new position in another district. I assumed it would be very difficult as a cultural competency facilitator to live in dissonance, be used by your employer to ‘shake things up,’ and to be seen by your colleagues as an agitator. Perhaps Rachel was tired of being in the trenches, representing the enemy, and fighting in the war against institutional racism. As she explained when introducing herself to the other facilitators on November 1, 2009:

We just had a staff meeting yesterday with our professional development people and coaches...Having conversations about race is really, really challenging! So, for me it is about figuring out why is it important to me and obviously I have a personal investment being an African American woman working in two predominately African American populated schools and watching the kids fail.

Again, I imagined her as a TIRED WARRIOR¹³ for equity and felt a great deal of empathy when she vacillated between hope and disappointment during the project. She wasn't just engaged with people as a CHANGE AGENT; there was something deeper that kept her in the work.

Temporality

Events and people always have a past, present, and a future. In narrative inquiry, it is important to always try to understand people, places and events as in process, as always in transition. (Clandinin, Pushor, & Orr, 2007, p. 23).

I was eager to speak with Rachel about her experience in CRISP and connections to her work climate in the same school district that academic year. I set up the exit interview at a local café. After we caught up on summer plans, we settled into a more focused conversation about the lived experiences she brought to CRISP. I began pursuing details about her current role in the school district. Rachel explained that she was hired as one of many “cultural specialists” who worked to advocate for students who were in trouble. In her role, she met with family members and teachers to try to bring the cultural context forward and identify misunderstandings that may be a factor

¹³ After completing the final narrative for Rachel, I am across a reference to “war-weary warriors.” With assistance from one of my co-advisors, Tim Lensmire, I found the reference in Springer’s (2005) *Living for the Revolution: Black Feminist Organizations, 1968-1980*, as a title to describe by Radford-Hill (2000) the exhaustion after twelve years of “needing to prove to other black women that feminism was not for white women only...confronting white feminists with the demand to share power and affirm diversity...fight the misogynist tendencies of black nationalism” (p. 139).

in the behavior the child exhibits. She explained her frustration with trying to get people “who only see the behavior” to understand, from the child’s perspective, what lead to the outburst. She complained about the day-to-day work with White teachers “who don’t get it” because they see themselves represented in their subject matter everyday, never realizing they have “omitted the rest of the world.” Rachel paused after explaining her frustration dealing with adults involved with “an angry Asian boy” and noted “it’s kind of like this [CRISP] project, like why does it have to be like this?” (Rachel Exit Interview, March 27, 2010).

Rachel’s “this” referred to her frustration with the challenges she faces working with teachers. Her “this” also refers to her frustration with the institutions that perpetuate racism so that we have to initiate programs like CRISP, professional development like *Courageous Conversations*, cultural competency coaches like Rachel to try to get White teachers to understand and, hopefully, fight against racism. Rachel’s “this” refers to the ongoing misunderstandings between students, teachers, communities and schools.

Rachel hadn’t shared much information with the other facilitators and teachers about her role in the large urban school district, leaving most to assume she was a licensed teacher or counselor or administrator. I was very curious about her educational background too as I found her approach to facilitation enacted more like a counselor than a teacher, with her focus on individuals instead of groups and on transformational experiences from the inside out. I confirmed that Glen Singleton’s (2006) *Courageous Conversations About Race* was fresh on her mind when she started CRISP, and asked Rachel for specific details about her education:

[My education is] just life—I'm going back to school now getting a degree in criminal justice but [what I brought to CRISP] was life experiences, growing up—experiences that I had, ... a blessing. I haven't had any formal training. I actually resisted most of the training, like—'are you kidding me? You're telling me how I should work with my kids!?' No!' So I didn't set out to be any of this. My most transforming experience was the Restorative Justice Training I had... with that whole philosophy of repairing [as] we're a bunch of wounded walking souls, needing a lot of repair...I had to deal with [my realizations like] 'Okay, you don't get it... and that makes me mad' but we can only do what we can do with what you have. (Rachel's Exit Interview, March 27, 2010)

With an opening now to step back in time with Rachel and understand more of her life experiences that she brought to her practice as facilitator in CRISP, I asked her to help me understand more about her past roles.

Rachel also shared that she was involved for seven years with the state's professional basketball league and worked on a four year long project to impact gang activity. She told me about working with one hundred twenty "gang banger killer warriors" who taught her to "close your mouth and pay attention...and that is key to what I do now, noticing the child I'm working with" (Rachel's Exit Interview, March 27, 2010).

Her next work experience was with an alternative high school where she worked for five years as an unlicensed staff member with students exploring career pathways. After her experience at the alternative high school, she "worked for a development program for adjudicated boys [where she learned] how the system was experienced by children and how rigid it is." After that she went to work for eight years at a local integration district as an educational assistant with the title of behavior specialist working with teachers and helping them understand cultural relevance "which was difficult because [teachers] just *don't* understand." She made another shift in the prior

academic year to begin work as a cultural competency coordinator for her current employer. She had first worked across five schools to determine the current cultural climates, eventually finding herself assigned to a school with a particularly "toxic environment" where she could not effect change. Her recent reassignment to another school building had relieved some of her work related stress though she expressed again her feelings of frustration with having good plans in place for teacher professional development that "just kind of went away."

Rachel's plans following completion of her degree in criminal justice do not include teaching or social work. She is interested in reforming the criminal justice system, making changes to mandatory sentencing, policy, and probation. Her story reminded me of the stories shared by the cultural competency facilitators I hired in the past to create cognitive dissonance for teachers who had never considered their privilege. Rachel was tired of the work with teachers "who don't get it" and actively pursuing a new career outside of the school system.

Place

The specific concrete, physical, and topological boundaries of place or sequence of places where the inquiry and events take place. (Connelly and Clandinin, 2006, p. 480)

The CRISP project sense of place was where we were located with our participants and co-facilitators at different points in time. As described early in this section, the setting for Rachel's work was within her district with participants who served as science specialists in K-8 settings. When she met with her local group of teachers, she asked participants to take turns hosting the meeting in their classrooms.

The only problem was that many of the teachers worked off of a cart, but a few did have a space of their own.

Though Rachel was confident in her work as a cultural competency coach for teachers in local settings, she confided that she “was terrified because I don’t know anything about science” when we met at the Science Museum for our statewide sessions. She explained “so I kind of went with the approach ‘well, what do you people think about me? That was my focus... how will you engage with me?’” (Rachel’s Exit Interview, March 27, 2010). In my observations at the large group sessions and science activities, I noted that Rachel openly shared and laughed about her discomfort with science with those around her. However, she engaged fully in the planned activities, exhibiting openness to learning about culturally relevant science pedagogy.

Our sense of place as facilitators primarily was in the shared space of our conversations, whether in a conference call late on a Sunday evening, at the Science Museum, face-to-face, or online. Rachel had much to share with her peers, and her reflections frequently helped others think from a new perspective when we were together in our facilitator “place.” She engaged with her co-facilitators as a change agent as well, finding ways to make connections between White privilege underlying their interactions with teachers. For example, Rachel offered a different explanation for people choosing not to change their beliefs about kids. Prior to one of our last facilitator conferences calls, Matthew and Rachel posted descriptions of teachers’ transformational moments noted during the project. Matthew described a moment in his local group’s meeting where a teacher began to rethink her assumptions underlying her action

research study question. The teacher's reflection during Matthew's group meeting that I participated in was captured on the digital recorder. The teacher posited:

Is it that [students of color] don't know how to study? And then I think maybe they don't care or maybe I am not making science culturally relevant. So then, really, it may possibly come down to the curriculum? There are kids who know how to jump through the hoops... This colleague said that 18% of students, from research, learn science in a certain way (like how we learned science, the way we've always been taught science). Only 18%! Most science teachers are part of that 18% who learned science that way and now we are teaching science to all kids the way that we learned. So now everything is turning upside down for me and I'm thinking "Oh My Gosh! Maybe the whole thing is really just me and how I'm teaching!" I think I should just throw this [line of inquiry] out but then I think I should just continue with this data collecting [on study habits] but it may just tell me that no, [learning how to study] isn't really what is going to help. (Matthew's Local Group Meeting, February 28, 2009)

After sharing this potentially transformational moment with his co-facilitators, Matthew shared his bewilderment and frustration when this teacher came back to next time local meeting and said "Oh, I decided it's not me... it's the kids." Rachel responded pointedly, "Well, that's the privilege of being White" (May 5 transcript, final facilitator meeting) offering a perspective from her lived experience working with teachers.

Whether participating with her co-facilitators in our debriefing sessions or working directly with her local group members, Rachel's focus remained on opening others up to new understandings of their unconscious or conscious participation in White privilege and institutional racism.

Rachel's Story of Change

Rachel shared with pride the interpersonal work of a few group members during our facilitator debriefing sessions early in the project, focusing in particular on two of the teachers with whom she was communicating more frequently via email. I noted with

interest that these individuals engaged directly with Rachel through email and face-to-face conversation while they designed action research projects with a journal-writing component. Rachel was pleased with their progress and posted an email to our Moodle site that she had received in late February, 2009 as an exemplar of the kind of epiphanies she wanted her local teachers to have about their practice:

Hi Rachel,

OK, I just had a realization. And I know we had said this in one of our CRISP meetings - that cultural relevance is a way of being and not something that I do -but today as I am preparing to write a paper for a long overdue Graduate credit, it finally dawned on me.

That no matter what strategy I try or book I read, that cultural relevance or cultural competence is a way of being. And changing a way of being is hard! I'm thinking that it is as hard as changing religion, political parties or any other fundamental paradigm that I have. And the reason that I am writing this to you is that for the past few months or so of working with you and CRISP I have been looking at it as something that I have to DO versus something that I have to BE. It feels as different as an actual physical change more than just a mental shift.

Anyway, I don't think I was ready to BE anything different before. I was very focused on science and science teaching and BEING a better science teacher in the strictest sense of curriculum and curriculum strategies but I was never ready to address the actual students sitting in my classrooms. I was watching a YouTube video today - there is a DVD from the book "White Teacher/Diverse Classroom" and it mentioned that teachers have to study their students. And that making assumptions, a microsecond action, is a short cut that teachers and in fact all people do - and it is in fact a part of our human-ness. But it is the teacher that is willing, open and self-aware to look deeper into that assumption/pre-judgment of a student and dig deeper, past that quick assessment of a student - and into that student's culture and background that will really help.

It is my ah-ha moment of today. And I think that my own self-awareness of a new way of TRULY being will then lend itself to classroom strategies to help my students in science - not the other way around.

-Beth

Rachel posted the entire email exchange on the facilitators' Moodle website and retold

the story at our next facilitator meeting. The shift in this teacher's thinking from "doing cultural relevancy" to being culturally relevant resonated with Rachel as the key element of true transformation. Rachel's selection of this particular moment as an exemplar, evoking metaphors of transformation, moving from doing to being (Ladson-Billings, 1994; 2009), deepening understanding of self, and becoming aware of privilege served as an example of how she imagined success in her lived metaphor of FACILITATOR AS CHANGE AGENT, ANTI-RACIST LEADER, COURAGEOUS COUNSELOR, and WARRIOR FOR EQUITY.

openly worry about her level of expertise with science or action research. She seemed certain about her role and responsibilities in CRISP.

On her pre-questionnaire, Molly wrote about how her experience working with EL learners informed her philosophy for building trust with her teacher participants. As Molly wrote on her pre-questionnaire survey:

My philosophy to working with teachers is the same one I bring to my instruction with EL learners. You must understand where the person is coming from; what biases they hold; what prior knowledge and experiences they have; what their learning style is; how they communicate and show respect for diverse opinions and how open they are to self reflection and modifying their own beliefs based on new information. I take time to get to know each person as an individual first as well as establish trust. Establishing personal relationships are extremely important to accomplish this.

Molly sought to build collegial relationships with the teachers in this district with whom she had a few connections. The small, primarily blue-collar town, was not too far from her home. Though she did not live in the rural community, she knew a few of the teachers involved through church. As the past partnership director for her university, she was not a stranger to this school district's leadership team. There was already a level of trust that she might build on doing to do more focused work on culturally relevant pedagogy with teachers in the schools. It is important to note, however, that Molly's expressed goal to establish trust with participants was *only part* of her image of practice.

Molly's conceptions of facilitation. In an effort to draw out initial lived metaphors on our first day, we generated questions for discussion that were intended to draw out stories from their lived experiences related to conceptions of facilitation.

Molly did not share a story from her past, instead she reflected on her principles for

facilitation including the following:

I've found it so important to establish a community where people feel safe, you know, to admit that "I don't know that" because I think a lot of talking comes out of people feeling like: "Oh, I have to show my knowledge" or "I have to impress the people around me." I think it's valuable to spend time building the trust so that... when we were trying to figure out something really, really difficult, and I have to admit that I don't know exactly how this works either... So, [I strive for] that collaborative spirit of investigating [when teachers] realize that... we all have [only] a partial understanding and together we're going to get it a little bit better. But we're still not going to know everything there is to know and so... I feel really good when people come to that point where when they're starting to say that they trust each other and they're starting to say what they don't know as well as what they do know.

It was important to Molly that her participants felt they could contribute their ideas to the group, and that they saw their contributions as part of the group's shared knowledge and expertise. Molly's image of a "collaborative spirit of investigating" within a community is reminiscent of communities of practice (Lave & Wenger, 1991; Wenger, 1998) and shared inquiry (Cochran-Smith & Lytle, 1990; 1999; 2001; 2009). Had she been influenced by the literature on communities of practice and, later, professional learning communities (e.g., Louis & Kruse, 1995; DuFour & Eaker, 1998; Grossman, Wineberg & Woolworth, 2001)? I knew that these researchers heavily influenced my conceptions of the critical role community plays in school change and teacher development as I had co-facilitated in a graduate program grounded in these researchers' theoretical frameworks.

Based on Molly's language used at this first meeting—eliciting images of togetherness, collaboration, building relationships, moving from individual to whole group understanding, and community—I wondered during initial analysis if she lived the metaphor FACILITATOR AS COMMUNITY BUILDER. I did not find evidence

that Molly lived by the metaphor FACILITATION AS EXPERT as Matthew (chapter 4) initially did. As a matter of fact, she described several times that it was important that her group members understood she was not an expert and did not have all of the answers they sought. Instead, she provided descriptions of practice at the first meeting and on her pre-questionnaire indicating that she imagined the facilitator responsible for building trust to create a community. Also, unlike Rachel (chapter 5) who lived by FACILITATION AS CHANGE AGENT, directly attending to individuals doing the internal work to become cultural relevant, Molly was interested in bringing out how each participant might contribute to the whole group.

As I was worried early in the inquiry that my past practice as a facilitator of learning communities would influence my initial analysis of Molly's data, I returned to the literature to check the language used to describe the framework with what I was hearing and documenting from Molly. The term communities of practice emerged from the seminal, collaborative work of an artificial intelligence scientist and anthropologist—Etienne Wenger and Jean Lave (1991). Lave and Wenger (1991) asserted that workers socially construct knowledge in communities of practice and engage in situated learning throughout their endeavors together. Their theoretical framework shaped the field of situated learning and provided schools, businesses, community groups, and higher education with new metaphors for imagining apprenticeships in shared practice. LEARNING AS COMMUNITY or COMMUNITY AS SHARED PRACTICE became metaphors that helped organizations rethink how people engaged in their practice and mentored new practitioners.

Wenger (1998) asserted communities of practices must meet all three of the following criteria: member commitment to a shared domain of interest, engagement in joint enterprises, and development of a shared repertoire of practice. Communities of practice in schools are often called professional learning communities when collaborative professional development is either mandated for, offered to, or generated by teachers as part of school reform or engagement in reflective practice (Little, 1990).

Temporality. Molly's metaphors of practice may also have emerged from her educational studies based on traditions in sociology and anthropology in educational research as well as her lived experiences with EL learners. I found Wenger's (1998) descriptions of the three community of practice criteria to be consistent with the language Molly used to portray her practice; requirements that all members had a shared interest, engaged jointly in the inquiry, and developed shared repertoire of practice. Molly certainly situated learning as happening at the workplace, in community. The CRISP project afforded her with a group of teachers committed to developing culturally relevant science pedagogy.

Molly may also have imagined her facilitative work as a cultural activity in which all group members develop shared knowledge, values, norms, beliefs and habits (Giles & Hargreaves, 2006). Or, she may have also been influenced by research focused on the work of inquiry with a community of learners (e.g., Cochran-Smith & Lytle, 1999), professional learning community (Louis & Kruse, 1995; DuFour & Eaker, 1998) and practitioner research (Zeichner, & Noffke, 1998). The language in each research line was coherent with Molly's image of practice. Though I did not know her well enough at this point in the project to identify which specific researchers or practitioners

had influenced her practice, Lave and Wenger's (1991) theoretical framework from communities of practice seemed a fundamental influence. I made a note to member-check with her at a later date.

I had many other questions about Molly's image of practice and looked forward to engaging with her in the commonplaces. I hoped that through the experience of exploring the commonplaces together, we might better understand metaphors Molly lived by as she enacted her image for facilitation with the K-12 group of teachers, all in a single, rural school district. I was curious about how well she knew the teachers already, how she would develop trust in a group of teachers who already worked together, and if they would accept her views as an EL higher education "outsider."

Place. Molly's group of nine teachers all taught within the same rural school district. The town, located in a region of the state known primarily for manufacturing and farming, has experienced a significant influx of Hispanic families immigrating to the area. In 2009, people identifying as Hispanic in the town numbered 890, nearly a fourth of the town's total population. Of the 890 Hispanic respondents, 523 identified as foreign born.¹⁴ In the 2008-2009, over 50% of the kindergartners were identified by their parents or guardians as Hispanic.

I visited the town on two occasions to meet with Molly, participate in local sessions, and visit the schools. Planning to meet at a local bakery before the teacher meeting began, I waited in a parking lot in the center of town for thirty minutes observing the activity around me. The bakery served delicacies that I recognized from the local Hispanic-Latino market in my home city. The town was very quiet—typical on

¹⁴ <http://www.city-data.com/city/>

a Midwest afternoon—with a few young Hispanic or Latino children playing about in the nearby park under an adult’s watch. As I drove to the nearby middle school, I was struck by the age of the building. Likely the original school in the area, built in the late 1800s, it showed its age. I also noted the smell of damp wood and stone when I entered the building and wondered about the condition of other similar rural schools in the state.

Even though our focus was on culturally relevant pedagogy for K-8 teachers, nearly the entire K-12 science teaching faculty and one teacher of EL learners signed up to be a part of the CRISP project. This was the first of seven local meetings that Molly organized. I observed two of these meetings. Molly recorded six of her local meetings as part of her data collection responsibilities. Molly also planned visits to all CRISP teachers’ classrooms in her region (not a requirement) and observed each, providing feedback on lessons they created for EL learners.

On the days that I shared in the events that took place relative to CRISP, we met in an extra classroom that now served as a teachers’ lounge immediately following school. Molly provided the same pastries I had noticed in the local bakery to the teachers, sharing what she knew about each kind and encouraging everyone to try them while some teachers expressed curiosity and enjoyed trying the baked goods for the first time.

Sociality. I recognized early in this relational inquiry that Molly's descriptions of how she imagined her practice resonated with my lived metaphors (chapter 1) of practice as facilitator of learning communities in the 1990s. Often when Molly spoke about facilitation, I completely concurred with her sentiments. For example, Molly asserted that:

[Facilitation is] about getting people to feel [they are valued], to take risks, and to trust each other enough to do that. And, if you don't believe that I care about you first, as a person, you're not going to be able to engage in [or] take on something new. (Facilitator Meeting, September 27, 2008)

Molly's care for and trust building with the teachers, as her words note above, remained a constant in her image for facilitation and reminded me of lessons learned in my experience facilitating learning communities of teachers in the past. I had also worked diligently to show genuine care for all in the community so that all felt valued and safe enough to contribute their ideas to the whole group.

Molly also asserted that facilitation is also about developing a safe place for the teachers "to admit that they don't know it all [because] teachers have that perception that they are supposed to be expert and ... portray... confidence in what they are teaching their students" (Facilitator Meeting, September 27, 2008). Molly was also quite willing to admit that there were times when she would tell the teachers who she was working with that she "didn't know exactly how this works either, so let's try to figure it out together" (Facilitator Meeting, September 27, 2008). I recalled doing the same when working with teachers to integrate the National Board of Professional Teaching Standards (NBPTS) into our learning community masters program. I felt we

took leaps together because we valued the shared knowledge and contributions of all school and university-based practitioners in the learning community, not just the few.

Finally, Molly described working with each individual in the group, explaining that it is essential to “connect personally with people...that you see them first as a human and second as a person who comes [and] maybe just had a bad day...” She envisioned teachers as each bringing their own personality and issues to the community, differences and experiences that she needed to honor and support in order to move toward true collaboration. “I mean, you’ve got all of this baggage that you bring with you,” Molly explained, “and that’s going to impact how ready you are to even receive anything that we have to say!” (Facilitator Meeting, September 27, 2008). I remembered my practice of incorporating the use of the Native American tradition of having a “burden basket” at the doorway. Learning community members would leave notes there about things they were struggling with that I needed to know (or sealed it in a signed envelope to indicate I should not read it). Leaving their burdens at the door was our tradition when we spent full weekends working together.

Molly articulated a clear image for how she lived her practice as facilitator, and it certainly resonated with my own. The fact that we were so similar was both fascinating and problematic for me as I tried to separate out my image of facilitation from Molly’s. I felt strongly that Molly and I shared a literature base that supported our image of practice with teachers. Because I believed our lived metaphors of practice were within similar conceptual networks, I was not as confident about my analysis and re-storying until I received confirmation from her during member checking at her exit

interview. Up until that last interview with Molly, I worried that I had transposed my images of practice with hers.

Molly's clarity of purpose in CRISP. After responding confidently in the group discussion around facilitation philosophy and practices, Molly replied without hesitation to the Science Museum director's query about the purpose of the CRISP network. While the two other facilitators listened intently, Molly explained:

I think one [purpose] is to facilitate teachers' self-reflection... to understand both the scientific process and what's important in standards—but then also [explore] how do kids make meaning out of that, especially when they are coming from a diverse background where either their experience, their knowledge or their beliefs may not be exactly compatible with middle class, White, American English speaking expectations. Teachers should be able to examine their own understanding on both sides of the issue and explore or investigate in an action research way: “What can I change about my teaching?” “First of all, what do I need to know about these students and where they are coming from?” And, later: “How can I change my instruction and determine if, actually, the outcomes are better?”

As shown in Molly's words above, she identified reflective practice as the key for teachers to understand how content knowledge, state standards, student learning, cultural knowledge, and assumptions from White privilege interact in school settings. She also identified key questions a teacher might ask as part of practitioner research—questions her facilitator colleagues have not had the opportunity yet to formulate with their teacher participants. She imagines teachers utilizing reflective practice in action research to eventually improve student achievement outcomes. Based on her earlier statements, we knew too that she imagined all of this reflective practice and shared inquiry happening in a professional learning community. However, I worried that my first attempt at naming her lived metaphor —FACILITATOR AS COMMUNITY BUILDER— was appropriate. I believed her image of practice was multifaceted and

not entirely accounted for by the term “BUILDER.” Perhaps by paying particular attention to connecting metaphorical concepts discovered during our relational inquiry in CRISP, Molly and I might co-identify a metaphor lived in her practice.

Systematicity of Metaphor

Molly’s layered description of facilitative practice was difficult to name with a single, conceptual metaphor. Matthew had adopted a new image of practice, FACILITATOR AS WILDERNESS GUIDE, midway through his experience in CRISP. Molly did not name her conceptual metaphor. Instead she described, embodied, and enacted a variety of metaphors in practice. I saw my role as narrative inquirer with Molly as piecing together a complex and mysterious puzzle—perhaps purchased at a garage sale in a beat up box—imagined as thousands of pieces with some missing or broken. I imagined sorting her data out, like that puzzle, based on my initial impression and interpretation of the image on the puzzle box cover. However, while sorting pieces, I began wondering if I had the right box cover for the puzzle. I also needed to be careful not to create Molly’s image of practice using pieces from *my* puzzle box. By identifying metaphorical concepts that Molly systematically linked together in her language about her practice, I hoped she and I could discover an encompassing metaphor for her practice.

Lakoff and Johnson (1980) referred to the idea of using “metaphorical expressions in everyday language [to] give us insight into the metaphorical nature of concepts that structure our everyday activities” (p. 7). They call our attention to the systematicity connecting many metaphorical concepts that provide parts of a more

complex image of practice. For example, using the conceptual metaphor TIME IS MONEY, they assert “because the metaphorical concept is systematic, the language we use to talk about that aspect of the concept is systematic [e.g., TIME IS A RESOURCE, TIME IS A VALUABLE COMMODITY]...forming a single system based on subcategorization...characterizing entailment relationships between the metaphors. Entailed relationships are the embodied attributes associated with the metaphor. For example, the conceptual metaphor TIME IS MONEY entails that bodily experience of TIME AS A LIMITED RESOURCE, which entails that TIME IS A VALUABLE COMMODITY (p. 7-9). In Molly’s narrative, if she lived within the systematicity of the conceptual metaphor FACILITATION AS COMMUNITY BUILDER, the entailment relationships could include imagining the TEACHER COMMUNITY MEMBERS AS CULTURAL CONTRIBUTORS, TIRED TRAVELERS, and PARTS OF THE WHOLE. Following Lakoff and Johnson’s (1980) examples of systematicity in metaphorical concepts, I began working toward identifying a singular overarching conceptual metaphor in Molly’s oral and written descriptions of practice by coding and categorizing related images.

How Did She DO That?

On the last day of the CRISP project, all teacher participants presented their action research project to the other participants in a conference held at the Science Museum. Molly’s group had two special requests for the facilitator team: Could they present their combined action research project as a group? And, would we cover the cost for printing their newly written guide for teachers incorporating Tier II and III

vocabulary for EL learners in K-8 science classrooms? No other group of teachers in CRISP had worked together to produce a common project, nor combined their efforts toward a common goal in a school district. After some deliberation about how the guides would be distributed to all participants in CRISP, the Science Museum agreed to pay for the printing costs.

How did Molly facilitate her group in such a way that they achieved this result? What lived metaphor best captured her enacted practice with her group members that lead to the group ownership and pride in the project displayed at CRISP's final session? Had she engineered or, in some way, dictated the group's work so that EL learners were the sole focus? Had this idea to combine efforts, while doing grade level specific work, to create a larger summative publication come from her leadership? I wasn't the only one wondering about how this group had become so focused in their inquiry. After reviewing the guide the group created, listening to their shared presentations, and talking with the teachers, the other facilitators were curious about how Molly had directed her group to a common project addressing vocabulary in science to support the needs of EL learners.

Susan, in particular, was very curious about Molly's facilitation strategies to achieve their final group product. During Susan's exit interview, she wondered aloud, "How they all did the same project?" Susan remembered Molly saying that her group had decided to focus on Tier II and III¹⁵ vocabulary with EL learners, but Susan was

¹⁵ Tier II are high frequency words like analyze, describe, detail, demonstrate, solve, "resemble, abundant, and differentiate..." and Tier III are low frequency words like "igneous, moraine, poikilothermic, haploid, and nucleotide" (Bradley, et al., p. 7). See publication at: <http://www.lulu.com/product/file-download/cultural-relevance-in->

“never was sure how they got there” (Susan’s exit interview, March 26, 2010). Molly and I were also curious about how Molly achieved the results that she did. Deeply fascinated with her region’s unique group result, I analyzed Molly’s group meeting audio recordings and related correspondence before reviewing the results with her during our exit interview.

From the Field

Molly shared in her exit interview on April 15, 2010: “Honestly, I struggled after [CRISP] for a while thinking ‘Did I push them into this?’ because it was not my intention to do that. I was thinking I know I didn’t intentionally do that—so I just had to excuse myself from that thought saying [to myself] ‘it is what it is.’” At that time, I had completed an initial overview of her full set of data and wanted to hear how she thought her group had come to the idea that they should do a shared inquiry. To answer the question of how her group ended up with a common inquiry, I elected to re-story her lived experience focusing my analysis on the following key local group meetings: November 1, 2008; January 22, 2009; and March 4, 2009, and related summary reports that Molly posted to CRISP’s Moodle website.

Molly held an initial regional meeting with her group to introduce herself, get to know each teacher’s role, and answer questions about the CRISP project in October soon after our first facilitator meeting. Her second meeting with her group was at the Science Museum on November 1, 2008. Interested in how she storied herself to the teachers, her enactment of her image for facilitation, her expressed beliefs about racism,

I analyzed the transcription for the meeting. Organizing key pieces of the field texts, in this instance— transcribed audio and notes from facilitator-led meetings—into a table similar to Rachel’s (appendix L) illuminated aspects of Molly’s practice. I was particularly interested during analysis of Molly’s meetings in identifying how she embodied and enacted metaphors, asked questions (Appendix M) and facilitated groups toward finalizing action research projects (Appendix N). Using the data, I will re-story the first group meeting on November 1st from Molly’s perspective.

November 1, 2008. *One of the other facilitators, Susan, was sitting in on my meeting so that she might feel more confident later when she met with her group to talk about Cohen’s article: Culture, Not Race (1998). The principal investigator was also in the room, but I wasn’t nervous about that as these types of discussions with science teachers were the kinds of conversations that I enjoy.*

It was important to address my participants by name on November 1st, our second meeting. After meeting at their high school in October, I wanted each person to trust that I knew them and what grade level they taught. I made an effort to not only connect with each person by name, but I also assured them that I recognized their community’s twenty-years of good progress made as the rural community integrating Latino immigrant families—though it remains a light co-existence. I explained to the group that I felt they were in a unique position as most live within the small community in which they teach, and so all have a larger stake in assuring the success of all children in the local schools.

I reminded the group that I was not an expert in science and reminded them that they were. After providing some time for everyone to review the article as I was sure it would help everyone feel more confident in sharing their ideas, I engaged the group in discussion with opening questions. Questions are my forte. I see it as my role to model inquiry and to assure all have a voice in the conversation. Some of the questions that I asked to get the conversation going are as follows:

- *What’s interesting about this as a scientific article? As cultural?*
- *Was there anything new to you—anything unknown?*
- *Was there anything that confirmed something you knew already?*

When people contributed their thoughts to the discussion, I made a conscious effort to honor those who spoke up and encourage others to join in as well. I asked questions like:

- *And from this side of the room?*
- *Anything else, either in response to what someone else said or on your own?*
- *And do the rest of you do that as well?*
- *Now let’s try to deconstruct this. What’s going on with us, with families, with other teachers?*

- *What do the rest of you think, and where do you think [kid's focus on differences] comes from?*
- *What kind of implications does it have for our students... all students?*
- *So can we talk about that a little bit, too?*
- *Does that make sense to you?*
- *OK, and we've really identified that fear... it's important and we've been talking about it a lot. [Let's go] back to the article...*
- *Anybody else? What are you thinking about?*

I also worked hard to ask questions that deepened our discussion about culture and race. In order to create trust in a community of practice, we need to understand what each individual brings from his or her experience. In order to dig in and focus on cultural relevance, I pushed us to respond to questions like these:

- *What do you know about opening up a discussion [on race and culture] with people?*
- *[What about science] allows us to talk about [race and culture] that's really emotionally charged?"*
- *[Reads a short passage] How do you react to that...what's below the surface?*
- *Let's think about how that's been affecting your teaching or maybe just how the school operates...*
- *Let's just talk about that and about the challenges and opportunities that we have...*
- *How can we really make our teaching effective, and how can we help kids learn together?"*

Finally, I closed the meeting by thanking everyone for their input and sharing with them how excited I was to work with them in CRISP.

I admit to being quite impressed with Molly's preparation for the first discussion with her group on racism. Her questions and redirections engaged the whole group in what often is an uncomfortable conversation. Her warmth and openness invited personal stories from the context of lived experiences in the community, recently traumatized again by a raid seeking illegal immigrants. She knew them each by name and understood their local context. She told the group that they would meet again in early December to review the selected texts and discuss action research.

January 22, 2009. The next regional meeting I'd like to highlight was recorded on January 22, 2009. This meeting was structured quite differently than the local group meetings Molly held earlier that fall as she met separately with three subgroups of

teachers who had teamed up by grade levels taught: K-3, 4-6, and 7-8. The transcriptions revealed that Molly moved through a pre-planned agenda with each subgroup, beginning with a review of what the other CRISP participants in their school district were thinking about and ending with their action research ideas. Molly reported in her meeting summary report that:

Our task was to figure out what they would use for evidence and data sources and then make an action plan. It was probably the most difficult thing they have done. I think having to be specific rather than think in generalities about their own teaching and student learning was really new for most of them. I also shared with each group what the other groups were thinking of for their research questions. I provided quite a few examples of possible evidence, trying to avoid paper and pencil tests. Finally each group started throwing out their ideas. I wanted them to brainstorm a whole list before they picked the way they would get evidence. ... I left them with a template for planning their action research and suggested they try to pick three data sources so they could triangulate their data. (Moodle post, January 26, 2009)

I noted in the transcripts that although a few individuals did have action research ideas that focused on EL learners, most did not. Molly did not, other than speaking from her own experience as an EL instructor, tell any of the teachers that they should incorporate EL learners as part of their study. She offered advice to participants, speaking from her experience as a teacher educator, and walked them through the action research process until they were satisfied they had addressed each element. She listened carefully, building each subgroup's understanding of action research by reporting and explaining the ideas of others involved in CRISP from the district. She freely offered resources—surveys, assessments, tools, materials, and time— while encouraging each member that they were in the “hardest part” of having to generate a good question.

Molly's style was consistently personable. She talked warmly with each group, getting updates on the news from within the school and the community. She listened

intently, as evidenced by her recorded retellings of what she heard in one group when she spoke to the next.

After our second full group meeting at the Science Museum, Molly also noted:

When we met on Saturday I was surprised that they had been actively discussing their research and had come to the conclusion that rather than have different topics they all wanted to focus on a similar set of questions as they thought it would be more powerful and also inform their district curriculum writing later on. They sort of appointed [Joe, the most senior teacher in the local CRISP group] to help them organize which standards they should address as one of the questions related to identifying key concepts for each lesson...I was impressed with their energy and how much they were excited about the action research process. I think they felt even more empowered since they were going to be doing similar research, hoping that they would have more convincing evidence to present to their peers. They really want to change “the system” along with their teaching. We will focus on that as part of the discussion in March. Our next meeting we will make sure everyone is clear on how to get going with their instruction and data gathering. (Moodle post, January 24, 2009)

Molly’s online post indicated she was surprised at the decision her local group made to adopt the same action research questions across the grade levels. The story she told of their choice highlighted the following key points: that the group made this decision without her, the group appointed a lead teacher, they decided on two questions all planned to address, they refined their ideas without her, they were feeling empowered doing shared research, and they desired to change the system as well as their teaching.

It seemed too good to be true.

Molly’s re-storying of their decision also spoke to the kind of shared inquiry and community building that she described to her co-facilitators in September. The story of her group’s ownership of their action research project might serve as a gold standard in Molly’s image of practice. Therefore, I found myself questioning her surprise in the story that the group had come to this decision without her consciously or unconsciously

encouraging them to do so. I began to wonder if she had a role in engineering their decision to complete a shared project specifically on EL learners—Molly’s area of expertise. Curious about how Molly would now be engaged in the group’s collective inquiry (and still wondering about her enacted practice as facilitator), I looked to the transcript from their next local group meeting in March.

March 4, 2009. On March 4, 2009 I visited the full group meeting together again at the middle school. At this point, group members had revised their action research questions to include the grade level standards and related vocabulary. Many teachers were beginning to engage in data collection. As all of the teachers had elected to incorporate EL learners as a focus of their projects, they were engaged in deep conversation about their collaborative work and the positive energy in the room was contagious. The middle school teachers challenged the value of spending time on Tier II vocabulary. After others responded and it became clear an expert opinion was needed, Molly was asked to contribute her expertise as an EL educator. She asserted:

[This action research project] is not what *I* want you to do, it’s what *you* want to do—but I’m just letting you know that from an ESL perspective, unless you do focus on [Tier II] vocabulary intentionally your students aren’t going to learn it... Elementary teachers understand the importance of vocabulary...[and] content [secondary] teachers just assume that kids know those [Tier II] words.

Even though she had a strong opinion, as in this example, she was willing to wait to provide input from her expertise as an EL educator. However, she was explicit that they did not have to change their project because of what she was about to tell them. In this way, they continued to own their action research project and she was able to serve as a resident expert to help them make research-based choices in structuring their study.

Because Molly had spoken so adamantly on this single issue, I asked her about it afterward. Molly shared with me immediately following the meeting that it was very important to her that everyone in the group, especially the secondary science teachers, understood the importance of teaching Tier II language in science pedagogy, especially to support the voice of the lone EL teacher who participated with her science teacher colleagues in this CRISP group.

Overall, Molly engaged with the group as warmly as she had in past meetings. Her facilitation as enacted in this meeting had the same conversational tone, but was clearly organized toward a purpose. She moved the group through review of key elements of action research, making space for each to share their questions and concerns. She reviewed EL terms and strategies when necessary, building on prior knowledge and related texts supplied by the project.

She returned to her questioning techniques as I had noted in her November transcript, encouraging deep discussion by inquiring with specific questions for each member. She served as a resource but drew on the expertise of those in the group, by saying such things as: “you would know Rachel—when do your kids have a word mastered?” and “how does that idea sound to you Stacy?” including me as well. I noted, again, that Molly often responded by paraphrasing what was said and then posing a question to deepen or redirect the conversation to someone who had not yet contributed. As with each meeting Molly organized, she ended by reviewing next steps, making sure all had their questions answered, summarizing new ideas, offering her assistance, and thanking everyone for attending. She attended to the socio-cultural needs of the group,

kept them moving forward, and engaged them in shared inquiry about their action research.

So... What Metaphor?

Over the course of the project, Molly's conceptual metaphor remained as elusive as a complicated, that incomplete garage sale puzzle. Though I felt confident that the systematicity of metaphorical concepts revealed in Molly's data could be described with a single overarching metaphor, I was not confident that the image I had in mind for her based on my analysis so far was correct. At that time FACILITATOR AS ENGINEER was the image I had in mind as her conceptual metaphor. The facilitator I envisioned as ENGINEER leading a team of individuals to collaboratively design, trouble shoot, build processes, and complete a project. My positive image of engineer was informed by my understanding of a longtime friend's work in the Army Corp of Engineers. My friend worked with communities to determine needs, identify problems, write proposals, and move projects to completion.

However, I realized that the word "engineer" had a negative connotation to it that I wasn't sure fit as a description of Molly's practice. For some, engineer elicited images of a conductor choosing the direction and speed of train on a set track. Engineer also evoked images of an individual manipulating others in relationships (e.g., "Who really engineered that scenario?" "The Democrats engineered that vote," "He superbly engineered that problem to distract her"). If Molly was actively facilitating discussions to funnel other people's ideas to align with her own area of interest, ENGINEER would

fit as a conceptual metaphor for her practice as both a positive and negative image. If Molly was not “engineering” the group, another conceptual metaphor would be needed.

I remained perplexed and frustrated. Molly’s Moodle post on January 26th, 2009 reporting that her group had decided, on their own, to do a shared action research project specific to EL learners held up after review of the data. However, I remained skeptical that she did not have *anything* to do with their decision, and so I hung onto the concept of “engineer” until I had the chance to gather more data and talk with her about how to solve the mystery.

Ears and a probe? Before our last planning meeting on May 5, 2009, I asked all four facilitators to think about a metaphor that best described their practice. Matthew shared his image of the WILDERNESS GUIDE with the group. Molly spoke next and told us that she imagined herself as the “ears” and the “probe” when she thought of her practice as facilitator (Transcript, May 5, 2009). She explained that she chose “ears” because she listened intently to the teachers she worked with “probe” as she prodded each person to investigate underlying assumptions and concerns. I sat there listening in silence. “Ears” and a “probe?”— How was *that* connected with engineering? I was missing something important about how Molly enacted and embodied her work with communities of practitioners.

Just the facts Ma’am. I was nervous about engaging fully in a relational inquiry with Molly whenever we met to debrief. While I waited for the “right” moment to member check with Molly about the metaphors emerging from our experience, I reflected on the fact that I had a hard time getting to know her during CRISP. About

midway through the project, I shared my concerns with my advisor and we discussed the dynamics at play that might have been interfering with my ability to “analyze” Molly. I admitted that I was intimidated collecting data from a professor with an excellent understanding of what it means to be a participant in a research study. She knew that every piece of data I collected would be analyzed for use in some public form—either for the Science Museum, a journal, presentation, or my dissertation. Because she knew that, I worried that her data as submitted would only paint a rosy picture of practice. I felt bad for thinking this way but I also thought that I must remain skeptical (and she of me) in our relational inquiry.

In retrospect, I think I did not initially trust Molly’s assessment in that January Moodle post—that she had not directed or engineered her group of teachers toward a common action research product. Perhaps too, Molly did not trust me as a beginner in the field of research to tell her story well in my dissertation? “Tell me again about this Narrative Inquiry methodology?” she had asked me in March. It wasn’t until the exit interview a year after the project ended that I felt we were able to break through the tension I felt and reflect openly about the experiences shared in CRISP.

Eventually, after completing a full review of Molly’s data, I felt confident that her assessment that her group’s decision to complete a shared action research was not “engineered” by their facilitator. The puzzle I had forced together using pieces of data showed me an image that did not look right to me anymore. There had to be a different image for her lived experience as a facilitator in CRISP that used these same pieces of data and named the systematicity of metaphorical concepts identified during my analysis of her dataset. I started the analysis process over again. The mystery puzzle

began to form a new image—one that didn't require forcing pieces into not quite right spaces. Excited and confident, I set out to share my thoughts with Molly at her exit interview on April 15, 2010.

Molly's Conceptual Metaphor

We met for lunch on a pleasant spring day at her campus' café. After she decided the café too noisy, we brought our food to her office space to continue our conversation. As we were walking to her office, I was thinking about that fact that Molly had been very aware of my role in this project as a doctoral student collecting data for her dissertation. Molly had carefully responded to every request for information, posted summaries after each meeting held, recorded all of her local group meetings, and participated fully in recorded discussions. At that moment, we were walking back to her office because she wanted to assure that I had a good recording from which to transcribe her exit interview. She was taking care of my needs too as a member of the research community. I felt grateful for her kindness.

In preparation for this last interview, I determined that it would be best to build trust with Molly by walking her through the stories I'd developed using the data from each of the facilitators and sharing specifically how the narrative inquiry process had led me to highlight certain core aspects of their stories in my dissertation. Molly appeared to be very interested in how each story was constructed and told me that "it's really good to hear what happened." When I finally got to her story, I described my conundrum while trying to determine her conceptual metaphor. We talked about her

experience in CRISP as two researchers, both puzzling over aspects of the data that either highlighted or hid the conceptual metaphor.

I summarized what I knew. Molly had facilitated this group of teachers within the context of their school district to create a product that combined nine individual action research projects integrating Tier II and Tier III vocabulary for English Language Learners into the state standards in the form of a self-published guidebook for K-8 science teachers. She was instrumental in that she brought EL learner and teacher educator expertise to this group of science teachers. She asked guiding questions, supported their ideas, provided examples, and ended up with a group that elected to complete a shared inquiry in an area of expertise for her. It seemed like she must have somehow orchestrated or engineered, consciously or not, this end result.

I explained to Molly that after I completed a thorough analysis of her facilitation at each meeting, I became convinced that Molly did not “engineer,” or “direct” her group’s decision to complete action research projects on EL learners. Instead, I proposed, she lived metaphorically as an architect. By carefully listening to the group, relaying back the ideas of individuals, offering suggestions based on her experiences and drawing on the expertise of all members, Molly had created a new shared space—one constructed out of the ideas and visions of all, but lived in by each quite comfortably. I asserted to Molly that FACILITATOR AS SOCIO-CULTURAL ARCHITECT was the overarching conceptual metaphor that provided a single system entailing relationships between the other metaphors that had surfaced in her complex lived practice. As an architect would do while working with a community to create shared space, she had listened and probed while working with the teachers. She paid

attention to their socio-cultural needs, met with sub groups to determine specific goals, reported back to the whole group, focused on getting all to contribute, and created—with the group—a space for shared inquiry.

After sharing my narrative analysis of her work and discussing the possibility of FACILITATION AS ARCHITECT with her, Molly nodded and said:

I do think I see it as always trying to create more systemic changes, to have some idea where things could go or what's needed. My work is all about creating a framework that's not so scripted... [I] provide direction for people to have some idea of what the possibilities are... (Molly's exit interview, April 15, 2010).

She smiled and added: “You know...my dad was an architect! I like architect because you draw plans but then you present it to the person and they personalize it. They live in the space” (Molly's exit interview, April 15, 2010). As we laughed at the irony of the metaphor given her father's chosen profession, I felt confident we had finally found the conceptual metaphor that encompassed her image of practice.

me that although she didn't know anything about action research, she was interested in engaging the teachers in her community with the statewide network in CRISP. I was excited to meet her on that first day at the Science Museum (in September, 2008) and looked forward to answering more of her questions about action research. I appreciated her honesty about feeling unprepared as a facilitator for some of aspects of this project. She smiled cordially and listened while her new colleagues in CRISP engaged in conversation at the table.

Susan's Pre-questionnaire and First Facilitator Meeting Responses

Susan, our most experienced school-based facilitator, brought many years of teaching and professional development facilitation to her role. On the pre-questionnaire she reported having extensive experience facilitating groups of teachers, working with them on twenty or more separate curricular committees and task groups for her previous employer. Susan did not identify cultural relevance as an area she hoped to learn more about facilitating. Instead, her focus was on learning more about action research. She stated, "the [action] research component is new to me... I need information/practice on this aspect of facilitation" (pre-questionnaire, September 27, 2008). Generally, Susan's pre-questionnaire responses didn't provide stories with enough detail to establish a description that allowed me to generate an interpretative metaphor for facilitation from Susan's lived experience, so I turned to her stories told on the first day to begin identifying possible metaphors for her practice.

A story from practice. Susan wrote on her pre-questionnaire that she had a

good experience in the past working with “approximately 15 science teachers who were newly selected [by the district] for a Science Leadership Team charged with reviewing curriculum and recommending revisions” (September 27, 2008). During the meeting we asked Susan to orally describe an example of her best facilitating experience. Susan elaborated on her pre-questionnaire example, contextualizing the experience:

So, ... we were trying to establish a science leadership chain in the district. We had a range of people that had been identified, and these were people who were not quite sure about the other people who were there, what they were there for, and what they were supposed to contribute. [The teachers had] that feeling of “I don’t really know why I’m here.” (Facilitator meeting, September 27, 2008)

The first two sentences of her story elicited images in my mind. First, she used “chain” to describe how she imagined the relationship between the people involved in this curriculum review process. It is important to note that it was the district leadership’s decision to establish a science leadership team. Susan used “chain” in her story, revealing a metaphor of linking people together to accomplish a task and perhaps also hinting at a chain of command in the district. Second, Susan used “we” in the beginning of this story suggesting that she imagined herself as a member of the district’s staff development team, a group that had the power to organize teachers around a task. Her inclusion of individuals’ confusion about how they were “supposed to” contribute indicated that those who were invited were surprised, perhaps not the decision-makers in this district. These images indicated that the place where she had worked was hierarchal in structure.

Susan continued her story by describing how she usually opens a meeting with a new group and shared what she felt was unique about this particular experience:

I guess that I have always started out by making sure everybody has a voice and so I try not to pick some education kind of thing [as the topic]. I try to pick something so that everyone has to say something. I proceeded from there to give a sort of an outline of what I had—this bulleted list of things I thought we needed to accomplish [to meet district goals]. And, what I said was: “this is *my* view. How do we need to change this? This [is] not set in stone.” And, my gosh, by the time they finished it wasn’t my document anymore at all! It was [theirs]. They just [said] things like: “No, that’s not important. We need to do this, and this...” And, because they immediately started saying, “No, this is our priority” it just went well and they all had input. (Facilitator meeting, September 27, 2008)

Susan seemed genuinely and pleasantly surprised that this group described in her story had owned the charge she had been directed to bring to them, and that they used the time together to revise the draft plan she had provided. Susan’s expressed surprise indicated that felt that the group’s ownership of the document was unique—perhaps a rare occurrence in past practice as facilitator. The fact that she told this story to illustrate her “best” facilitating experience also may have highlighted her pride that a group of hers was so deeply engaged in shared work. The story, I wondered, might also have highlighted the system in which she had worked—one that had created a work culture where such collaboration was possibly considered an anomaly.

Most of the language Susan used while describing her past practice was devoid of Molly’s descriptors used earlier in that same discussion that helped us to imagine FACILITATING AS COMMUNITY BUILDER. For instance, Susan did not talk about collaboration, shared inquiry, or building trust as part of her image for facilitation. Instead, she evoked the idea of giving “voice” only when describing her desire to have everyone contribute his or her thoughts to a non-education topic selected for the introductory part of the meeting. Next, she explained outlining the “task” to edit a district document. She made sure all had “input” in determining what was important and

necessary, and what was not. Her language signaled to me that the groups she facilitated had an assigned task, and she imagined herself as responsible for ensuring it was completed. This particular story, however, was one she wanted to retell because, as she reflected:

When we left, I think we all felt that we knew why we were there and what our next steps were. And it just seemed to click with that particular meeting. I wasn't in charge. I was making it possible for everyone to talk but I was not in charge. I don't know why it clicked. It just did. (Facilitator meeting, September 27, 2008)

Her retelling highlighted a shift in association as, at the end of this story, she included herself with the teachers with “we” instead of with the staff development leadership team. The fact that “we” shifts in her story indicates to me that she imagined herself as a liaison between leaders and teachers; she is the go-between, middle manager, or messenger. She had remained open to the contributions of others, trusting in the expertise that they brought to the table, and the group had engaged in producing a final document that she could return to the leadership team as completed. She had “not dominat[ed] the session” and she had assured all voices were heard. Susan wanted to share a story of facilitation from a time she “wasn't in charge”—when the group had come together to revise her beginning ideas, producing a good result.

Early thoughts on possible metaphors. Because Susan described working with teachers from a hierarchal position of power, arranging meetings to accomplish charges initiated by district leadership, working through a curriculum plan she prepared as a draft document for group feedback, and watching as the participants engaged in the prepared task, her opening story elicited images in my mind of committee chairs I had worked with over the years in my roles as teacher, parent, community member, and

university faculty. As I analyzed the data above, the image of FACILITATOR AS COMMITTEE CHAIR emerged as a possibly appropriate starting point for naming Susan's overall conception for facilitation practice. I define this image using Susan's language:

- A committee chair works to include all voices, not dominate, outline the charge, value insights, and make changes to the charge, if appropriate. A committee chair reports to higher authorities in production-based systems.
- The committee chair is responsible for bringing information back to the main office so that the final decisions can be made.

At the same time, Susan's initial story from her prior practice also included details that brought forward images of project management, processes and products. Thus another possible metaphor of practice, FACILITATION AS PRODUCTION MANAGER, emerged in my initial analysis of Susan's narrative. This alternative image included systematicity of metaphorical concepts associated with production (e.g., "manage," "product," "committee charge," "timeline," "end result," "processes," and "report"). I wondered if Susan felt responsible for the end product her group might produce, similar to how I imagine a middle manager charged to oversee workers on an assembly line might feel. This notion of production was a recurring theme in Susan's facilitation of her CRISP group. Her persistent pursuit for details regarding the end product expected from her teachers and facilitators was unique to how she enacted her role as a facilitator in CRISP. Did she imagine quality control as her responsibility while facilitating in CRISP? I wasn't the only one curious to know more about what Susan imagined as essential to facilitating teachers. Molly chimed in her thoughts first

in that initial facilitator meeting. Matthew, perhaps seeking to a clearer understanding of facilitation, also engaged Susan in the further discussion about her story. In the next section, their conversation helps to elucidate Susan's key facilitation image.

Susan's principles for facilitation. After Susan shared the story I have retold above, the principal investigator joined in conversation to make explicit some of the features of Susan's experience. Molly and Matthew followed the principal investigator's lead and paraphrased Susan's words in ways that made her philosophy of practice as a facilitator clear:

Principal Investigator: Did anybody else hear anything in Susan's description that you would want to get on our list [of principles for facilitation]?

Molly: You created buy-in by doing [making the curriculum outline changeable] too so that people had some ownership and they probably bought into it as something that just you wanted to accomplish...

Susan: I really find that if you don't have the starting place outlined, that we tread water forever and ever, before we get anyplace. You've got to have a starting place, an outline, a something—but it needs to be changeable. And I think this was a group of people that wasn't an entirely new group. They knew my personality because these were leaders in the district in science [and they knew] I was the science curriculum facilitator so they already had some level of comfort with me. It would have been different maybe if it had been a whole new group.

Matthew: And you were creating some kind of product as well, right?

Susan: Yeah.

Matthew: So that's, I think, for me really powerful as you had a really solid starting place and you had some kind of ending place as well but [you] were open to how you got there, and what that end product might look like.

Susan: Yeah.

Principal Investigator: I also heard this certain clarity of purpose about the issue. That you recognized when they came in that they weren't really clear

about what [the Science Leadership Team] was all about? You worked as a facilitator to really bring clarity to that purpose.

Susan: I think that's really going to be true for [the CRISP] project. I mean, I've already emailed and talked about this project. I'm not really sure what I've gotten myself into [when I read] the kinds of things I am getting in the emails. So, I think that's going to be really important that we make it clear what it is that we're there for [as facilitators in CRISP].

Susan used an image of endlessly treading water to describe her feelings of frustration when not provided with an outline for the project. Did she imagine she would sink or swim as a facilitator if she didn't have a clear end goal in CRISP? I also found it interesting that although Susan framed her facilitation style as one where she sought to be open and flexible, her correspondence with me indicated that she needed specific details about what an action research project should look like. Why was she so worried about these final reports? What was it about her past facilitative work that had her so focused on the end of this project before we had even begun? I needed to know more about Susan in order to understand her past experiences, how they informed her image of the present and how she hoped to facilitate in the future.

Tensions in the Commonplaces

Temporality. I had been providing details to the facilitators about the project, including timelines, frameworks, and resources, yet Susan was not feeling that she had enough information to speak to the project with the teachers she would be working with that year. In her story of self, she made it clear to the group that her expectation as a seasoned facilitator was that she had a starting point, outline, and defined end product. However, Susan was strongly enacting metaphors lived in her past experience by continuing to seek details about what product her teachers were to create and when they

needed to have it completed. In order to engage in relational inquiry with Susan, I needed to find ways to understand her as an individual always in transition—in the commonplace of temporality—accessing her past practice while expanding her conceptions of alternative ways to approach facilitation during the CRISP project.

Sociality. Her hopes and desires for CRISP were evident in the initial story she told that suggested her desire to empower teachers by engaging them to complete important tasks. Perhaps, based on her experiences as a district employee directed to work toward specific outcomes in each assignment, Susan envisioned a facilitator as needing to oversee a process toward a common end goal like adopting a new curriculum or assessment plan? Susan assumed that understanding the end project and the teachers' action research process were her responsibility. If she centered her metaphor of practice on the concept of production, I understood her image and would work to meet her need for specificity. However, for teacher professional development, I was personally opposed to the metaphor FACILITATION AS PRODUCTION MANAGER as well as related metaphorical concepts (e.g. TEACHERS AS LINE WORKERS and PROFESSIONAL DEVELOPMENT AS EFFICIENCY TRAINING).

Related to this sociality component, I also recognized that I could not simply subtract myself from the relational inquiry with Susan. I felt tension between Susan's image of practice and my vision for the type of practitioner inquiry I imagined in CRISP. I likened her metaphorical approach to facilitating groups of teachers as a chair of a committee— working to include all voices, outlining the charge, valuing insights, and moving the group toward a common end goal. I valued excellent committee chairs, clear charges, and satisfying end products. However, I had served on many committees

as a teacher and did not feel our knowledge and experience were always valued. In 1994 and 1995 I served with a task group charged to integrate reading across the curriculum; a professional development initiative abandoned by the district two years later without comment. For my development as a professional, I agreed to engage with my several colleagues on hiring committees during the summer. Unfortunately, our decisions to not recommend for hire were overturned leaving me to wonder why the principal asked for our feedback in the first place.

My experiences like these on committees organized as “professional development” by the district or school principal had not been positive while I was a teacher. I knew professional development could be different as I was simultaneously engaged in a two-year Masters degree learning community cohort in a neighboring school district. For the first time I felt my knowledge, expertise, and leadership could impact the group’s decisions and development. I wanted all professional development for teachers to be what I experienced in the learning community. I personally no longer imagined FACILITATION AS ORGANIZING MEETINGS and had actually developed a dislike for district-organized committees whenever I felt that the teachers participating were not truly valued.

Place. In the interest of transparency, I had worked with many teachers from Susan’s school district (from which she had recently retired). Having worked for a decade as a teacher educator facilitating learning community cohorts based on the NBPT standards, I had heard stories that indicated the district’s administrative team had little interest in teacher autonomy or practitioner knowledge. Though I did not know Susan during that decade, nor did I know any of her teacher participants in CRISP, I

knew her past district's administrators were focused on collecting standardized test data. They used this data to decide whether to pursue (or not) curriculum for student learning as well as to drive teacher professional development decisions. As the achievement gap continued to widen in the district, the pace of new initiatives increased and the pressure on teachers to perform became overwhelming—as shared by many graduate students enrolled at the university where I worked at that time. As a higher education institution trying to work in partnership with the school district during that tumultuous decade, we struggled to keep up to date with the array of packaged curricula adoptions and changes initiated each year to improve P-12 student achievement.

Based on her story and pre-questionnaire response, Susan had the responsibility of reporting back to higher authorities after overseeing the work (teaching) of those closest to making products (students) for the customers (communities). She may have been responsible for bringing information back to higher-level administrators so that final decisions could be made regarding the next systematically applied professional development “package” intended to improve student test scores and teacher learning. I wondered if her story represented her desire to work collaboratively with teachers, not in a position of power where she “wasn't in charge.” Perhaps Susan's story also served as a window into how she lived within the systematicity of her employer's structural metaphor—EDUCATION AS PRODUCTION—and how she now enacted that metaphor by imagining schools as factories (Bullough, 1988; Schlechty, 1991), focusing her attention and effort on efficiency, process, and products in CRISP.

Lakoff and Johnson (1980) describe structural metaphors as allowing us “to use one highly structured and clearly delineated concept to structure another” and provide

the example “RATIONAL ARGUMENT IS WAR” (p. 61) to highlight how we not only conceive, but also carry out arguments grounded in our experience and knowledge of physical combat. They assert:

Even if you have never fought a fistfight in your life, much less a war, but have been arguing from the time you began to talk, you still conceive of arguments, and execute them, according to the ARGUMENT IS WAR metaphor because the metaphor is built into the conceptual system of the culture in which you live.

Similarly, if we metaphorically structure EDUCATION AS PRODUCTION, the conceptual system based in industry in which we live in would inform how we carry out education. However, though structural metaphors provide a rich source for elaboration, they highlight some aspects of the concept and hide others. By paying attention to the systematicity of metaphors in relationship with the structural metaphor—EDUCATION AS PRODUCTION—and noting what is conceptually highlighted and hiding, I broadened my inquiry into Susan’s lived experience in CRISP to include the district context.

Entering the Relational Inquiry

At the end of that first day, and after hearing her stories of self, I wrote some initial impressions of Susan in my field notes:

Susan seems to have had a lot of experience with very short term, product focused PD in her school district. Her experience with action research seems limited. I sense there is a lot more to Susan and her experiences, but her understanding of cultural relevancy or her feelings about the value of action research didn’t come through during this first meeting. My assumptions are that she has not operated in that manner with teachers while “doing” PD or has not been engaged in long-term, teacher driven research. Will have to check with her in later interviews.

I expected that Susan and I would engage often in the project, as she would need support facilitating in CRISP. I didn't, as stated in my field notes, have much information about her work in the past but I admired her concern for her participants and her sincerity with others. In the next section, I will re-story data from my field visits to Susan's regional group meetings, data that highlights her continued focus on the end product. Later, via Susan's exit interview, she reveals her deep feelings of desperation over her former district's development mission.

Along the way. Like Matthew, Susan had expressed her discomfort with facilitating a discussion with her local group on Cohen's (1998) *Culture, Not Race, Explains Human Diversity* at our first large group meeting at the Science Museum. In an effort to help both Matthew and Susan feel more confident facilitating their afternoon sessions on November 1st, we arranged the day to provide an opportunity for them to sit in either Rachel or Molly's group discussions during the morning. Susan observed Molly and reported:

I really appreciated being able to sit in on [Molly's] session. We have a different facilitation style but it was great to see how effectively she works with her group... I am used to dealing with facilitating more concrete topics such as curriculum, science content, etc. I was uncomfortable—feeling unqualified—for the more abstract topics we were attacking. [After watching Molly] I found that the facilitator's role isn't that much different in the two areas and that I can do this. (Susan's Moodle post, November 10, 2008)

It intrigued me that, even though we had discussed this article at our September facilitator meeting, both Susan and Matthew felt unprepared to facilitate this conversation with their local groups until they had an opportunity to watch another facilitator in action. Susan was our most senior facilitator yet her perception was that

our expectations for her in CRISP were different than what she had done in the past.

She noted that she had a different style from Molly, and added that she admired Molly's effectiveness.

Susan also spoke of science and curriculum as "concrete;" whereas culture and race seemed to fall into the category of "abstract." Our work in CRISP would certainly trouble her beliefs about science and curriculum as "concrete" since we were focused on drawing out the underlying assumptions about race and culture in both. Her concern that facilitation needed to be different for science pedagogy and cultural relevancy was again made explicit with her metaphor of separate spaces— "two areas" requiring different ways of understanding and existing in that space. This notion that, when facilitating, some topics were certain and others were not or that these topics were entirely separate was an early indication that CRISP's convergence of cultural relevancy and science pedagogy was difficult for Susan to imagine. Susan was entering new territory in professional development as a facilitator for teachers in CRISP.

Visit to the warehouse. After our large group meeting on November 1st, Susan asked if I might come to talk about more of the expectations in CRISP at their next local group meeting. She supplied an address and I made the trip, arriving about a half hour early at a warehouse in the industrial park of the city. I wasn't sure that I was at the right place. It didn't look like a school and had relatively few windows, but she had mentioned a blue door and I entered through one. I found her in a wide corridor of a pleasantly spacious area with glass-enclosed classrooms on each side. Groups of adults were meeting in a few rooms, listening to presentations or asking questions. Susan

walked with a small tray of vegetables that she had purchased to share with her group, noting aloud that teachers were often hungry at the end of the day.

Since we had some extra time, Susan offered to give me a tour of the district's professional development facility. She seemed pleased to show me the small kitchen, central office, and clean classrooms. Susan took me down a hallway and opened a heavy door. I stepped into an enormous room with shelves full of materials and equipment as far as I could see. Standing there in astonishment, I silently wondered: What were all of these classroom materials doing here and, why weren't these materials in the classrooms?

I listened as Susan explained that teachers who wanted to use resources like FOSS¹⁶ kits would need to reserve them in advance. I noticed a small metal desk in the space where I imagined a "resource librarian" once sat waiting for teachers to come pick up projectors, books, math manipulatives, or curriculum kits. I could not see any indication that anyone had sat there in some time. Dust hung in the air and unpleasant smells brought up images of my grandfather's "for now" storage room filled with items so fouled by mold that all had to be thrown away after he died.

I felt witness to a deeply lived structural metaphor—EDUCATION AS PRODUCTION—as enacted and lived in this space by the employees of this district. I was standing in a warehouse after all, and the professional development building was located in a commercial district. Was the idea to have teachers check out materials from a central location to be more efficient with district resources? I could understand that, but how many teachers in the city would take the time to come all the way out to this

¹⁶ Full Option Science System (FOSS) kits, <http://www.fossweb.com/>

industrial park to check out materials? How would they know what was available? And how long would it take before this resource room fell out of the institutional memory of the teachers in the district—if it hadn't already?

Facilitator focus: Ongoing concerns.

Susan felt confident as an organizer of meetings. She always prepared an agenda, materials, and space for her local group meetings. In her past work as a staff developer, she did a lot of arranging professional development for others, not presenting. She didn't know why the district called her out of retirement to facilitate for CRISP or why she thought she could do this. She doubted herself often but found ways to engage her group. After the teachers reported on the projects and started talking about the difficulties they were having, she usually bowed out of the conversation. Susan was grateful for the resources provided by CRISP and encouraged the teachers to use the materials to inform their practice. "I'm not a really active person in the facilitating world," she told the other facilitators at their last teleconference meeting on May 5th, adding that she didn't consider herself to be a creative problem solver either so the teachers "were on their own." She felt badly about that too.

In order to support Susan in her facilitation and alleviate her discomfort about speaking to her group about action research and cultural relevancy, I made the effort to visit her group early and often. Susan's group had specific and ongoing questions about action research, cultural relevance, the project goals, and CRISP's final expectations. Susan's approach to each local session I attended or reviewed on audiotape was essentially the same: she made the physical arrangements for the space, prepared the materials, opened with participant updates, planned time for discussion, collected a list of concerns, and closed the meeting. Susan did not engage in the conversations between participants as a colleague might, instead she arranged the space and time for the group interjecting only to move the group to the next item on the agenda. Most meetings were

quite similar to the December 10, 2008 that I attended as participant observer that I will describe in the next section to illustrate her approach to facilitation.

After a brief round of introductions, the teachers in her group enjoyed engaging in conversation about their past and present experiences. Susan didn't present herself as the expert in the group. Instead, Susan made sure people had a chance to vocalize their ideas and concerns. She was prepared to point the teachers to the materials provided by CRISP and spoke positively about them as generative. There were lengthy pauses when no one spoke, yet Susan was patient allowing someone else to restart the conversation. Near the end of the meeting she took a few minutes to talk through logistics (e.g., the next meeting time, expectations, requests for clarification). I believe Susan saw part of her role in CRISP as liaison between the CRISP project leads and the teachers in her district, likely quite similar to her former role as staff developer in the district between the district administration and the science faculty.

Since she was focused on relaying her group's concerns back to us, Susan often included requests for clarification in her correspondence on Moodle or reflected on her concerns during our facilitator meetings. Examples of concerns she brought to our attention included:

- Although we went over the examples that you included in their packets, they would like more information on the final product expectations. Is the reflection what they turn into you? What is the interview? What are the presentation expectations? ... They want more specifics. (Moodle, November 17th, 2008)
- That would be wonderful [providing a rubric and outline of presentation expectations at our January 24, 2009 meeting] because there was some angst from my group. [They are wondering] What am I going to have to do at the end? Stacy came to our meeting and made [the final report expectations] really easy for them to understand. It was not as complex [as they thought] and they were making a bigger deal of it than it really was. (Facilitator meeting, January 14, 2009)

- [One of my participants] is experiencing a lot of frustration... and another teacher seems to be struggling with the effect of grouping strategies and how that can involve education learners to a great extent. (February 24, 2009)
- A couple of my teachers mentioned that they wished they had somebody else in their building doing [CRISP]. I wish I had thought of that earlier. They needed to talk to other teachers about this work. (Facilitator meeting, May 5, 2009)
- One of the things that surprised me was that a couple of my teachers worked on [their action research project] and it just didn't work so they quit and shut down. They were not willing to put more effort in, or adjust things and try something else. I was really disappointed because one [who quit] was one of the better teachers. (Facilitator meeting, May 5, 2009)

As depicted in the above examples of concerns, Susan was highly attentive to the needs of her group, identifying, and reporting their frustrations in her reports and reflections. She was often thinking about how things might be better for teachers—feedback that was very much appreciated as we worked to meet the expressed and unexpressed needs of all teachers and facilitators in CRISP. Susan's frustrations, disappointment, and lack of self-confidence as a facilitator in CRISP, however, seemed to emanate from some deeper narrative.

Living a Counter-narrative

Susan felt frustrated. She had been part of a professional development team for the last five years of her career and, after she retired, was sometimes called back for special projects. This particular project—CRISP—wasn't at all what she expected. This project and its research component were very different from anything she had facilitated before. Most of the teachers she had facilitated in past committees looked at what curriculum they were using, compared data from state's standardized achievement tests, talked about where improvement was needed, set new goals for the science teachers using updated curriculum, and planned to report back about the improved scores. It wasn't her experience in this district to engage teachers in classroom-based research without having a prescribed program and a data plan to prove its effectiveness. This teacher-driven action research focus didn't seem to fit with the district's expectations for professional development.

Metaphors in the exit interview. For our exit interview I met Susan in a quiet restaurant on a sunny weekday afternoon. She was ready to talk about CRISP now that a

little time had passed and we had both been able to think about it retrospectively. Susan dove right into the discussion as I scrambled to start my digital recorder. She explained to me when doing research “science people tend to need to have the right answer” and added:

Well, all the facilitating I've done in science has been curriculum stuff when [District leaders said,] “We've got to get to here! We've got to straighten this out!” And it's not at all this sort of —*loose*—“let's just see where we're going stuff” [like I think action research is]. That's just *so* foreign to me as a science person. [I wanted to know] what do I really need to *do* to get there? So that was an uncomfortable place for me. I really expected there to be something [in CRISP] that we were walking into and then would carry off into our classrooms. So I was frustrated [and worried about my group's action research projects, wondering]: “Are we doing the right thing?” (Exit Interview, March 26, 2010)

The word “right” used twice within her opening remarks signaled conceptualizations of right and wrong, black and white, good and bad—all tending to be embodied as opposites with emotional connotations too. In this brief description, Susan began our conversation by juxtaposing her work in the past with the school district as quite structured, perhaps even rigid and direct. CRISP, on the other hand, is imagined as some “loose” thing moving in an indirect manner. Ontological metaphors were at play as Susan imagined CRISP as something packaged that she could walk in, pick up, and carry back to implement with teachers in classrooms. She also emphasizes the term “foreign” perhaps to highlight how far away she imagined the CRISP experience from her own. In this short description of her experience, she separates her past experience in professional development from her present experience in CRISP setting them up as polar opposites—not even grounded on the same landscape.

The word “right” also signals an underlying tension for curriculum developers and teachers in her former district. Susan explains that if she could participate in CRISP

again, she would make different choices about the right teachers to involve because the participants in her group:

Felt really confined by the structure of their classroom that they were frustrated with [trying to figure out] how do I fit this action research in? [They were worried] because they had to do something and I was trying to let them know [it was okay] and you'd say it was okay—but they too wanted more structure.”
(Exit Interview)

What intrigued me here was the concept that people felt “confined by structure.” Let’s assume that ontological metaphors are at play here. If EDUCATION AS PRODUCTION was the structural metaphor in this district then the systematicity of metaphorical concepts for teaching would have included TEACHER AS WORKER, CLASSROOM CURRICULUM AS ASSEMBLY LINES, CHILDREN AS PRODUCTS, and PROFESSIONAL DEVELOPMENT AS TRAINING TO INCREASE EFFICIENCY. Within the production metaphor, a worker (teacher) might not be encouraged to think (reflect) about his or her work routine (pedagogy) or observe the experience of the product (child) during production. Taking time to observe and reflect would slow the assembly line, drawing attention to the worker who is “inefficient.” Moreover, a new work routine that focused on the “experience” of the product during production might have seemed contradictory to the district’s focus on developing an efficient workforce and maintaining the system’s machinery.

If teachers perceived CRISP’s action research component as a new way of working on the assembly line, operationalizing new practice could be seen as problematic. Teachers living the metaphor of production may not feel prepared or supported to step outside of the procedural aspects of their jobs. How could new work routines (cultural relevant pedagogy and action research) be incorporated into an

efficient system already streamlined for the district's production parameters? How would a teacher know if she or he made the "right choice" to change their work routine in the assembly of their products? Would the additional effort, time, or expense ensure improved products (students) with higher ratings (test scores) that impressed the bosses (district administrators) and customers (parents, legislators) and kept the factories (schools) open?

The grounding of the structural metaphor of EDUCATION AS PRODUCTION created a concept so powerful that Susan's teachers were fearful to explore making changes to the "structure" of their pedagogy. The district's image for professional development is one that takes knowledge and provides it to teachers who are then responsible for producing results with kids. Administrators call together committees of teachers to inform district wide decisions about what knowledge to reproduce. But, as Susan pointed out, these committees make those decisions for the *whole* district. Teachers in this district know there are expectations with specific outcomes and formal reporting structures for the initiatives proposed by committees, outside experts, and district administrators. Products must be improved; test scores must be raised. Teachers likely do not want to "waste" time reflecting on their practice or risk taking action with improvements that might be seen by the district as nonstandard.

Risks and revelations. During exit interviews with teachers who participated in CRISP action research groups, two participants¹⁷ in Susan's local group specifically mentioned that they were concerned in CRISP about "getting it right." I had also noted

¹⁷ Three participants were interviewed in Susan's regional group and two of the three specifically raised their concerns about "getting it right" in CRISP.

similar concerns expressed by teachers in Susan's local meetings, in her post meeting reports, and during our facilitator meetings, suggesting that significant pressure existed in the district's work culture to not make mistakes or to take risks. Susan concurred and explained:

There's not a whole lot of academic freedom in this district. You have this [unit] to do. You have to get this [required curriculum] done. There may be a little sliver of time when you can work in a project you like, but don't you dare do that before you get the [required curriculum] accomplished!

Susan concurred that there was a culture clash between what we were trying to accomplish in CRISP by focusing teachers on incorporating action research into their practice to engage learners in science pedagogy through culturally relevant approaches. Asking her teachers in CRISP to take time out from the district's required curriculum to enact a cultural relevant pedagogy added to their anxiety about meeting district expectations for raising science achievement on standardized tests. Enacting a cultural relevant pedagogy may have been imagined as inefficient—interrupting the student's flow through the well-oiled machinery of the production line.

Susan felt that teachers in CRISP appreciated the diversity in the schools but were not convinced that “adding in” culturally relevant approaches would increase student test scores. She disclosed further:

I've had teachers—*not* in CRISP—tell me: ‘They [students of color] are going to drop out. Why are we spending all this effort on these kids?’ and I want to cry when I hear that but that is part of the culture in this city though there are a lot of people working against that in the district. I heard that from math and science [teachers] a lot. So, I think somebody from outside science would've been better as facilitator. I just think it would've been better, with a different group of younger teachers and different [facilitative) approach. [Facilitators like] Molly or Rachel would have gotten us further.

The teachers in Susan's local group were nervous about focusing on action research using CRISP's framework because they saw it, like their peers as told in Susan's words above, as taking time away from mandated curriculum in the district's continuous improvement plan. Susan explained that the belief still existed in the professional development culture of this district that in order to raise test scores, teachers must focus on academics only—not on children's culture or curriculum's relevance. "And yet, [test scores] have *not* come up" she said, puzzling over why the district didn't make different choices to address the achievement gap. Susan reflected:

Well, there *were* concerns about diversity. We'd had Ruby Payne there but depending on their teaching situation, [cultural relevance] was not their primary responsibility. [Teaching] academic science was more important [than cultural relevance]. Administration wanted to know; did our students show up well on those tests? [If not], there were consequences for our school. And frankly, that was one of the reasons I left after five years—I couldn't take that—although that's the kind of facilitator I was [mandating curriculum to improve test scores]. There wasn't a whole lot of joy in that job. Not a lot. I heard all the complaints about the process and about the curriculum. And after five years, I decided that's not where I wanted to be. I wanted to be back in the classroom.

Susan brought up Ruby Payne's visit to make a point that "diversity," in the district where she worked, was strongly associated with "poverty." In January, midway through CRISP, Susan listened intently as we described Sato and Lensmire's (2009) article "Poverty and Payne: Supporting Teachers to Work with Children of Poverty." The authors asserted that Payne's framework labels children "with deficit-laden characteristics that put them at risk of being viewed as less capable, less cultured, and less worthy as learners" (2009, p. 365). Susan actively pursued a copy of this article to share with her local group. Immediately after receiving the article from me, she sent it to her group with directions to read it before their next local meeting. I didn't

understand her urgency for the article then, but at this moment in her exit interview, I did. Susan understood the implications of the district adopting Payne's view of diversity based in deficit thinking. Providing the divergent viewpoint to the teachers had been a clear step in countering the district's narrative of production that poor ingredients make poor products.

Susan felt relieved to know that Stacy understood the ongoing tensions she felt while serving as a facilitator in CRISP. EDUCATION AS PRODUCTION as a structural metaphor made sense to her as a way to describe the work culture in which she lived for the last five years before retiring to run science labs in the community college near her hometown. She felt a weight removed from her with the knowledge that her frustration (and likely her local teachers' too) stemmed from living the experience of CRISP as a counter-narrative to the district's narrative of production. She could examine the production metaphor lived by her former district, recognize the tension it caused in her life, and choose another image of practice.

Chapter 9: Metaphor and Narrative in Teacher Development

In this final chapter, I will: (1) review what metaphors are lived (embodied and enacted) in the practice of professional developers when working toward cultural relevance in science pedagogy; (2) revisit Lakoff and Johnson's (1980) kinds of metaphors—both examined and unexamined in CRISP—that influence educational researchers' academic discourses and facilitators' conceptions of teacher professional development; (3) return to the commonplaces (Connelly & Clandinin, 2006) to identify how collaborative work with facilitators to identify metaphor in their practice contribute to a) facilitator professional learning and b) teacher professional development research; and (4) summarize how metaphors lived in predominant academic discourses shape facilitators' thoughts and actions.

Framing Facilitator Narratives and Metaphors in Teacher Professional Development

As many researchers strive to do when re-storying field texts to highlight explanatory interpretations, I organized the presentation of the facilitators' narratives to widen readers' perspectives of metaphors lived in our practice, schools, and professional development partnerships. Each narrative highlights and hides different aspects of their lived metaphors and contexts when facilitating teachers for CRISP. However, when the stories are examined as a set of lived experiences highlighting metaphors, we might more fully appreciate the individuals and contexts as part of a grand narrative for facilitation in professional development.

In the following section, I'll review each facilitator's narrative and highlight the purpose in providing portraits of developers' experiences from the larger montage in CRISP. While revisiting how the four narratives were intended to work together, it is important to imagine my approach to each inquiry—as I did—as a photographer would use a camera lens to frame unique photographs taken from several vantage points on the same landscape. I selected for each facilitator a particular point of focus, recreating each story from a different perspective—capturing each facilitator's image in either a close-up, medium-frame, full-frame or wide-angle panorama shot. The preceding analysis chapters and my re-framing in this section are primarily focused to respond to the following two research questions:

- How are conventional metaphors lived (embodied and enacted) in the practice of facilitators when working with teachers toward cultural relevance in science pedagogy?
- How do metaphors lived in predominant academic discourses shape developers' thoughts and actions?

The remaining research questions will be addressed later in this chapter.

Close-up. Matthew sought opportunities and experiences to build confidence to address the inequities that existed in his community and the local schools. CRISP offered an opportunity for him to engage with other facilitators and teachers to explore culturally relevant pedagogy. He was relatively new to facilitation but felt his expertise in science, and the resources provided in CRISP, would inform his practice as facilitator with his local group. Matthew was reflective, engaging quickly and deeply with metaphor to uncover his shifting images of practice. During CRISP, he sought knowledge in books, engaged Rachel for her opinion, addressed a racist comment in a public space, and completed an action research project grounded in community

stereotypes with his middle school students. Matthew's story reminds readers of the experiences while transitioning as a professional when adopting new images of practice. My focus with Matthew was intentionally close, highlighting his reflections on practice as he adopted new metaphors to live by while facilitating teachers.

Since I framed Matthew's story so narrowly, the inquiry hides the experiences of his local CRISP members, the systemic metaphors lived by teachers in the local school contexts, the interplay between *ontological* metaphors of EXPERT and GUIDE, and other images lived in practice. However, Matthew's story highlights how Lakoff and Johnson's (1980) ontological metaphors can be identified in the practice of facilitation in teacher development. For example, Matthew initially lives the ontological metaphors that Lakoff and Johnson subcategorize as a state of being (e.g., EXPERTISE), as substances (e.g., KNOWLEDGE), and as containers of knowledge (e.g., BOOKS). Later in CRISP, Matthew shifts to a new ontological metaphor (e.g., PROFESSIONAL DEVELOPMENT AS JOURNEY) with the related ontological metaphor FACILITATOR AS WILDERNESS GUIDE. Matthew also adopts a new state of being as an ANTI-RACIST ACTIVIST. Both WILDERNESS GUIDE and ANTI-RACIST ACTIVIST are ontological metaphors in that they represent actions and states of being within a contained event (e.g., CRISP).

Medium shot. Rachel worked on multiple levels to challenge racism and White privilege with teachers in schools. As demonstrated in the narrative, she addressed these topics directly in her conversations with others throughout CRISP. She called out institutional racism across systems (e.g., school districts, private sector businesses, criminal justice, non-profit organizations). She vacillated between hopefulness and

frustration; teachers she worked with in schools either inspired her or disappointed her. She sought and enjoyed concentrating her effort on reflective people who wanted to understand White privilege and racism, how it impacted their students, and how they could learn to be culturally responsive. Rachel was dedicated to those who demonstrated openness to moving on the continuum to being culturally relevant—to taking action for equity. Her story as re-told brings to life the experiences of an individual practicing as a cultural competency coach for teachers in a large metropolitan school district. Again, my analysis of Rachel's narrative to identify metaphors she lived by that oriented her in relationship with the people with which she worked, requiring a slightly wider framing of her experience. Because of my responsibility as a White woman restoring a Black woman's experience and my desire to *not* be a "well-intentioned yet fraudulent" (Cross, 2005 as cited in Grosland, 2010) White teacher researcher, I stay firmly in the frame with Rachel explaining my struggle to the reader as I write.

Rachel's story hides the experiences of her local group of teachers in CRISP, the systemic metaphors in her school district, and the conceptual metaphors at play between the academic discourses of adult learning theory and critical pedagogy. Rachel's story as retold highlights Lakoff and Johnson's (1980) orientational metaphors, which are based in our physical and cultural experiences. Rachel oriented people on a continuum, moving from one point to another as they became more culturally relevant. Rachel also oriented change in people as happening from the "inside out." She lived metaphors that depicted movement, or points at which people may move forward or backward in their

understanding of racism. Because of her orientational metaphors and focus on change, FACILITATOR AS CHANGE AGENT emerged in her re-storied narrative as the explanatory metaphor. However, my focus on the Rachel's orientational metaphor hid her ontological metaphor for practice, where I believed she lived in the borderlands between the academic discourses of transformational learning theory and critical pedagogy. FACILITATOR AS CHANGE AGENT does not reflect a complete image of Rachel in practice unless it includes metaphors from critical pedagogy lived in her practice as FACILITATOR AS COURAGEOUS COUNSELOR, ANTI-RACIST ACTIVIST, a FORCE, and WARRIOR FOR EQUITY.

Full shot. Molly's narrative re-storied how she had served as facilitator for a group of teachers who eventually combined their efforts to integrate Tier II and Tier III vocabulary for English Language (EL) learners and published a resource book for the K-8 science educators in CRISP and their school district. Molly was instrumental in that she brought EL learner and teacher educator expertise to her group of science teachers. She asked guiding questions, supported their ideas, provided examples, and listened carefully, all in an effort to deepen trust and shared knowledge in their community of practice. Though it appeared to other facilitators and myself that Molly may have orchestrated or engineered her group toward shared inquiry in her area of expertise, the data did not support our assumptions. Molly's story, as retold, provides readers with a narrative explicating how a *systemic* metaphor of practice, lived fully in practice and aligned with the purpose of the professional development model might be embodied and enacted.

Molly's story hides deeper exploration of orientational metaphors that may be a part of her lived experience as a practitioner. Similarly, ontological metaphors present in her practice were not highlighted for close examination in her practice as a facilitator of a teacher learning community. And, though some aspects of her teachers' experience may be assumed from the analysis, the stories of the teachers in her group were not the focus of the re-storied narrative. Instead, Molly's narrative highlights the *systematicity* of her lived metaphors. By exploring the relationships between multiple ontological metaphors we can see the connections creating systematicity in her practice. For example, Molly enacted FACILITATOR AS SOCIO-CULTURAL ARCHITECT in relationship with other images of practice, such as: FACILITATOR AS COMMUNITY BUILDER, LEARNING AS COMMUNITY, TEACHERS AS CULTURAL CONTRIBUTORS, TEACHERS AS PARTS OF THE WHOLE, and COMMUNITY AS SHARED PRACTICE. These metaphors were highlighted in the narrative re-storied to illuminate Lakoff and Johnson's (1980) theory of systematicity. Similarly, the final facilitator's narrative was my attempt to broaden the scope of the analysis further to include the systemic influence of an external metaphor, lived as a counter-narrative to CRISP's approach to teacher professional development.

Panorama. Susan's facilitation metaphors lived in CRISP required the widest angle of my inquiry lens. She worked within a *structural* metaphor with *systematic* characteristics lived by the teachers and administrators in the school district. In order to understand the tensions CRISP created for her group and Susan's frustration with her perceived inability to engage teachers to effect change, it was important to highlight the systematicity of metaphor in which she lived, but did not live by. Susan was unhappy in

her previous work within the district’s structural metaphor of EDUCATION AS PRODUCTION but had not been able to name it or explain her frustration as a facilitator expected to work within it.

By drawing attention to Lakoff and Johnson’s (1980) systematicity within structural metaphorical concepts through Susan’s narrative, we might examine how we use structural concepts from one domain (e.g., building, foundations) “to talk about corresponding concepts in the metaphorically defined domain (theories)” (p. 52) so that theories are imagined as buildings¹⁸. In Susan’s case, EDUCATION IS PRODUCTION structured her work and community contexts, creating conflict and tension with other images of practice (e.g., PROFESSIONAL LEARNING AS INQUIRY, TEACHING AS ANTI-RACIST ACTIVISM). Highlighting the structural metaphor of EDUCATION AS PRODUCTION demonstrated how other metaphors are structured in a systematic way, as in Susan’s narrative: FACILITATION AS PRODUCTION MANAGER, TEACHERS AS LINE WORKERS, CLASSROOM CURRICULA AS ASSEMBLY LINES, PROFESSIONAL DEVELOPMENT AS EFFICIENCY TRAINING, TEACHER AS WORKER, and CHILDREN AS PRODUCTS. However, I regret that by not examining Susan’s ontological and orientational metaphors as she

¹⁸ Lakoff and Johnson (1980) offer the examples of English expressions and idioms that fit into the conversations we have everyday about theories and arguments. For example, for the structural metaphors—THEORIES (and ARGUMENTS) ARE BUILDINGS—the author’s identify the following:

Is that the *foundation* of your theory? The theory needs more *support*. The argument is *shaky*. We need some more facts or the argument will *fall apart*. We need to *construct a strong* argument for that. I haven’t figured out yet what *form* of the argument will be. Here are some more facts to *shore up* the theory.... The argument *collapsed*. They *exploded* his latest theory. We will show that theory to be without *foundation*. So far we have put together only the *framework* of that theory. (p. 46)

might practice outside of the structural metaphor of EDUCATION AS PRODUCTION, her image of practice and metaphor for facilitation remains hidden.

The next section of my concluding chapter returns to the subject of metaphor and the third research question “What other kinds of metaphors influence educational researchers’ academic discourses and facilitators’ conceptions of teacher professional development?” After reviewing the kinds of metaphors Lakoff and Johnson (1980) discuss, I provide a description of two more kinds not examined in CRISP and produce examples to inform other narrative researchers.

Kinds of Metaphors Analyzed in CRISP

Lakoff and Johnson (2008) categorized and explained the three kinds of conventional metaphor as ontological, orientational, and structural and are defined¹⁹ as follows:

Ontological. A metaphor in which an abstract concept (e.g., emotion, idea, activity) is represented as a concrete object (e.g., substance, container, or person).

Orientalional. A metaphor in which concepts are spatially related to each other, as in the following ways (e.g., up or down, in or out, front or back, on or off, deep or shallow, central or peripheral).

Structural. A metaphor in which one concept is understood and expressed in terms of another structured, sharply defined concept (e.g., argument as war, ideas as products, time as money).

Examples of these three kinds of metaphors exist in everyday language, giving structure to some part of that language culture’s conceptual system, as demonstrated in the narratives of the four CRISP facilitators. As part of the analysis, I also explored the

¹⁹ Glossary of Linguistic Terms, accessed on March, 5, 2009 at <http://www.sil.org/linguistics/GlossaryOfLinguisticTerms/contents.htm>

systematicity of metaphorical concepts within the storied lives of the participants in CRISP.

Systematicity. Lakoff and Johnson (1980) contend that people use all three kinds of metaphorical concepts (e.g., orientational, ontological, and structural) in systematic ways. As human beings, we often act and talk about concepts as if they (and we) are part of a system. To demonstrate the systematicity of the metaphor—TIME IS MONEY—in Western language and culture the authors explain, “some refer specifically to money (*spend, invest, budget, probably cost*), others to limited resources (*use, use up, have enough of, run out of*), and still others to valuable commodities (*have, give, lose, thank you for*)” (1980, p. 9).

Kinds of Metaphors Not Analyzed in CRISP

During the inquiry, I found and described examples of most kinds of metaphors in the narratives of the four participants. However, there are two particular types of metaphors that Lakoff and Johnson (1980) describe that I did not include for analysis with Matthew, Rachel, Molly, or Susan. As an exercise, I want to consider them now both hypothetically as related to the facilitators’ narratives in professional development, to expand the possibilities in future research. First, I consider a particular type of ontological metaphor—personification. Then, I will define and expound on another type—the impermissible mixed metaphor.

Personification. Considered one of the most noticeable of the ontological metaphors, it is interesting in retrospect that personification did not attract my attention during analysis of the participants’ language. Perhaps personification is so common that

it is truly like the water in which we swim, unremarkable to the fish. Personification, defined by Lakoff and Johnson (1980), is when a thing or abstract concept is represented as a person. They explain:

Personification is a general category that covers a very wide range of metaphors, each picking out different aspects of a person or ways of looking at a person... they are extensions of ontological metaphors and... allow us to make sense of phenomena in the world in human terms—terms that we can understand on the basis of our own motivations, goals, actions, and characteristics. (1980, p. 34)

During their local group meetings, facilitators and teachers often personified the Science Museum, university, and school district. If listening in, comments similar to these may have been overheard:

- The district *laid off* eighty teachers.
- The Science Museum *will reimburse* you for staying in the hotel.
- The university needs to *talk to* us about that.
- The university was *attacked* in the news last week.
- That district *cheated* teachers out of their personal days.
- Will the district *support* you with that idea?
- The Science Museum *explained* that concept so well.
- CRISP is *eating up* my time.

Personification helps listeners to identify quickly in the language used how the speaker feels about the physical object or entity that is specified as being a person [allowing] others to comprehend a wide variety of experiences in just a few words. If a district is described as *cheating* its teachers, a listener can imagine situations when they were cheated, understand how the speaker feels, and engage in further conversation about the district as if it was a human being.

Mixed metaphor. Another type of metaphor that I did not address in this inquiry is the impermissible mixed metaphor as defined by Lakoff and Johnson (1980). Impermissible mixed metaphors are a kind of mixed metaphors that conflict because

they serve different purposes. For example, the authors demonstrate that the metaphors ARGUMENT AS JOURNEY and ARGUMENT AS CONTAINER do not serve the same purpose. JOURNEY addressed the direction of the argument (e.g., I can't follow his point, She's off track) where as CONTAINER addressed the content of the argument (e.g., his point has no substance, she hasn't gotten to the core). As Lakoff and Johnson (1980) posit, "we can speak of the *direction* of the argument and of the *content* of the argument but not of the *direction of the content* of the argument nor of the *content of the direction* of the argument (p. 95)." The incongruity of these ideas within the same sentence makes them semantically impermissible. The authors assert that a person would not usually say, "We can now follow the *path* of the *core* of the argument (p. 95)." Using an example from my analysis of Rachel (chapter 5) may illustrate some of the complexities of sorting out mixed metaphors.

Sometimes Rachel's language in CRISP confounded me and I do think, in retrospect, that she mixed metaphors at times while making jumps to new metaphors midstream in conversation. For example, Rachel closed her November 1st group meeting by saying:

Being organic in what it is that you are doing, being natural, and knowing that sometimes natural and nature looks harmful. When you see animals killing animals [you wonder,] "What's the rationale behind that?" Survival. Our kids are in survival mode and I think a lot of our teachers are in survival mode and now we have to figure out how we can live together, amongst each other, understanding the cycle of life. (Rachel's November 1st meeting transcript)

I analyzed this particular quote early in CRISP with a mixture of fascination and bewilderment. Trying to make sense of Rachel's series of metaphors in this instance left me with more questions than answers. Analysis indicated she evoked different states of

being in —“being organic,” “being natural,” and “being a survivor in nature” in the first sentence. I was particularly hung up on the word “organic” because she had referenced the term earlier in the meeting, relating it to food. The word organic, used this second time, had a different meaning. Did she mean “authentic” instead of organic? I was confused by the jump from organic to being natural to nature to survival in the cycle of life. When I approached Rachel with the first sentence in this particular quote later in CRISP, she read it and laughed saying “I have NO idea what I was talking about!” (Field notes, January 24, 2009). Yet, instances like these seem important to understand as they help readers (and researchers) follow the metaphorical linking of concepts that, perhaps, create coherence between concepts in new ways.

Before closing this section on narratives and metaphor in teacher education, I wish to broadly apply Lakoff and Johnson’s (1980) conception of impermissible mixed metaphors using Susan’s (chapter 7) experience living within a structural metaphor of EDUCATION AS PRODUCTION. The concept of impermissible gives me pause as I recollect times when I have been involved in professional development that conflicts with my own lived metaphor for teaching. Or, as in Susan’s story, asked to facilitate teachers working within a systemic structural metaphor of PRODUCTION that did not serve the same purpose for teacher development as CRISP’s.

Though Lakoff and Johnson (1980) define this type as two incongruent metaphors used within the same sentence, I imagine the concept of an impermissible metaphor as also representing the tension an individual experiences when living by one metaphor but asked to embody and enact another. Cook-Slather (2003) offers metaphors that illustrate potential incompatibilities, for example: “learning is acquisition” vs.

“learning is participation” (p. 966). As she asserts: if living by the metaphor learning is acquisition, then the focus is on the accumulating, constructing, and transmitting knowledge as goods. Acquisition is a competitive enterprise, one that does not value the idea of sharing. If the lived metaphor is instead, learning is participation, Cook-Slather (2003) posits that the focus is on contributing to the community’s knowledge and shared identity by following group norms.

When we live in systemic metaphors that are incongruent with our lived metaphors of practice, we live in disequilibrium and may seek change to alleviate the tensions we feel. As happened in Susan’s story, she left to teach in a new setting because she felt tension between with the way she was being directed to work with teachers and her own image of practice. As discovered in Rachel’s story, she is pursuing a career in a different field, tired of the frustrations when working with teachers who do not understand their White privilege. As with Matthew, he sought CRISP as a context in which he could safely explore his emerging image as anti-racist activist. Molly seemed to be living confidently within commonplaces that aligned with her metaphors for practice.

As shared in my opening story, I left the job I loved to deepen my knowledge and support the emerging conceptual metaphor for teachers as learners participating in shared inquiry within learning communities. I sought the academic discourses that would align with and support my lived experience that LEARNING AS COMMUNITY was the metaphor that resonated as a core concept for me. It seems alignment of one’s lived metaphor of practice with one’s commonplaces—social, temporal, and place—is essential. I wonder if it is those moments in our lives when we achieve congruency

between our lived metaphors and our commonplaces in which we imagine practice that we feel the most content.

In the final section of this concluding chapter, I respond to my fourth research question “How does collaborative work with facilitators to identify metaphor in the practice contribute to a) developer professional learning and b) teacher professional development research?” by revisiting the commonplaces. Through sociality, temporality, and place, we imagine how a focus on metaphor may develop professional developers as well as inform teacher professional development research.

Metaphors in Narrative’s Commonplaces: Implications for Professional Developers

Careful attention to each facilitator’s commonplaces using narrative and metaphor highlights elements of his or her movement and practice within temporality, sociality, and place (Connelly & Clandinin, 2006). Likewise, careful attention to facilitator’s images of practice highlights metaphors lived by each individual that may be aligned with the initiative’s purpose, or not. Identifying metaphors lived by facilitators early (or better yet, in relational inquiry prior to hiring) may result in better alignment with the professional development initiative. Additionally, using metaphor and narrative in ongoing development for professional developers as Clandinin (1985, 1986, 2006) completed with teachers should be a part of plans when working with facilitators in initiatives, program, and curricula redesign with teachers. Ongoing professional development of the facilitators during the program for teachers is often overlooked and is much needed in teacher development initiatives (Stein, Silver, &

Smith, 1999), especially when new metaphors of practice are proposed. When we do not pay attention to the lived experiences in the commonplaces of the facilitators hired to lead professional development, we risk setting up our facilitators and their participants to experience unexplained tension between the initiatives, work settings, and personal images of practice.

Sociality. In this commonplace, it is essential to examine how facilitators (and teachers) conceptualize groups with which they will work, and the ways that they will work with them. I turn to the facilitator narratives to illustrate:

- If, as with Matthew's initial perception in CRISP, a group of teachers is considered ontologically to be an audience, then interactions with that group may be enacted as a performance by an expert speaker and, congruently, the expert may imagine teachers as passive recipients of new knowledge. A conception of TEACHERS AS AUDIENCE may hide the participants' potential in knowledge creation, as active contributors to group learning.
- Molly's structural metaphor—LEARNING AS COMMUNITY—highlights shared inquiry, active engagement, collective knowledge, apprenticeships, yet potentially hides individual autonomy and personal transformative experiences.
- Rachel's FACILITATING AS COUNSELING may structurally highlight her image of practice with teachers in relational work enacted as group therapy sessions, reflective journaling, self-help books, and one-on-one meetings all with the goal of curing their illness.
- Finally, Susan's FACILITATING AS ORGANIZING highlights her role in setting meeting times, preparing materials, communicating between meetings,

and playing a minuscule role in discussions and possibly hides other ways of working together in groups, as in other structural metaphors in teacher development.

Professional development design and related proposals should include specific and systematic language to define for participants the structural metaphors imagined for their group work. Additionally, care should be taken to identify the underlying assumptions of the structural metaphor(s) of practice and facilitators with approaches systematically should be sought. Relational inquiry with participants (teachers, facilitators, and researchers) to make transparent the structural, orientational, and ontological metaphors would attend to the personal conditions of the participant (e.g., Connelly & Clandinin's (2006) "feelings, hopes, desires, aesthetic reactions, and moral dispositions of the person" (p. 480) as well as the social conditions (e.g., environment, factors surrounding the individual, forces that form contexts) and more fully address the relational work that is often an essential part of teacher professional development. For the four facilitators, reading about our relational experiences in the completed narratives provided another chance two years later to reflect and respond regarding the metaphors identified to highlight their practice as facilitators (see Appendix O).

Temporality. Connelly and Clandinin (2006) assert that we are all in transition between the past, present and future. In order to understand the temporal history, we must be able to speak to the participants' past, present and future choices for the setting of interest. Professional development designers, as with narrative inquiry, would benefit from attending to participants' and facilitators' history, present behaviors, and future actions. Understanding metaphors lived by participants and within school districts along

a temporal timeline is important. Equally so, how participants and facilitators metaphorically perceive change happening along the timeline is essential.

Several facilitator narratives identify metaphors for imaging how change happens along a temporal timeline as also noted in the literature review on professional development. For example, Rachel imagined her facilitation as a CHANGE AGENT supporting teachers in becoming more culturally relevant (Ladson-Billings, 2006) as educators. She imagined that change happening internally with an orientational metaphor—inside-out—as well as externally—on a continuum (Singleton & Linton, 2006).

Susan, on the other hand, imagined change as adopting a new practice in the classroom or accumulating new technical skills. She expected change to be supplied by an outside agency (the CRISP project) to transform the practice of the teachers. If we had understood the temporal history as experienced by Susan in this district previously, and recruited teachers making explicit our expectations that they would work toward adopting culturally relevant pedagogy without a pre-packaged science curriculum, we may have avoided some of the frustration both she and her group experienced. However, as Connelly & Clandinin (2006) assert, attention to temporal timelines is essential for understanding the lived stories of participants. Since narrative and metaphors are intertwined, listening and analyzing the stories of teachers and facilitators' uncovers important conceptual metaphors and the underlying assumptions about how the professional development fits temporally and how participants imagine change happening during the timeframe of the project.

Place. Identifying place "...the specific, concrete, physical, and topological

boundaries...where the inquiry and events take place” (Connelly & Clandinin, 2006, p. 481) is critical not only to narrative inquiry, but also for the design and implementation of professional development. Place can be influenced by temporality and sociality and does not always exist in a physical space. Place may be interpreted as how people fit in or are located within a system.

For Susan, place was a powerful construct that located her in a role within the district and in relationship with the teachers—not with her co-facilitators and others involved in planning CRISP. She knew her place in the district as a curriculum leader and enacted her role mostly within the structural metaphor and systematicity of EDUCATION AS PRODUCTION. She found it very difficult to see herself living and practicing as a facilitator utilizing a different metaphorical structure for education.

Molly’s sense of place expanded across multiple systems. As a CULTURAL WORKER, she effortlessly crossed boundaries between institutions (e.g., schools, universities, districts), roles (e.g., facilitator, teacher educator, colleague, friend, researcher) and communities (e.g., teachers, EL learners, professors, scientists, facilitators). Her sense of place was expansive and she felt confident, it seemed, wherever she was and in whatever she was asked to do.

Rachel placed herself in her district’s local group as a bi-racial African American woman and a resource for those who wished to do the hard work to become culturally relevant. She did not consider teachers to be her colleagues, but instead as people often blind to the inequities experienced by students in schools and communities. She saw her place in the system as one who had the charge of enlightening White people through professional development, helping them to come to

understand their privilege and wake up to the institutional racism in the system. Her place in the project, she seemed to feel, was not necessarily to use our recommended readings and meeting expectations but to do what she knew and have courageous conversations about race. CRISP was a place for her to build relationships with teachers, encourage reflection, and counsel individuals as they sought to become culturally relevant in science pedagogy.

Matthew's sense of place was impacted by his temporal shifts as he reflected on his own development as a facilitator. He originally saw his place in CRISP as one that required expert knowledge, but eventually adopted a new place as colleague and friend of his local group members and co-facilitators. Matthew's place also shifted beyond his classroom walls, the restaurant where he met his local group, and the Science Museum to include other schools and communities. CRISP's focus and culturally relevant pedagogy supported, perhaps, his shifts and broadening sense of institutionalized racism and his responsibility in society to confront it.

Professional development designers, facilitators, and participants might examine more closely through the commonplaces in narrative how all imagine their practice metaphorically. Metaphor as an analytical framework compliments narrative inquiry (e.g., Clandinin, 1986; Connelly & Clandinin, 1999; Craig, 2003). However, it is difficult to talk with people about metaphors and to help them see the metaphorical "water" in which they swim. Making metaphors once invisible visible takes time, self-examination, humility, empathy, and persistence. As demonstrated by other narrative inquirers, the hard work to focus on metaphor through narrative helps individuals shape

their professional identities (Connelly & Clandinin, 1999) and collaboratively storied lives (Craig, 2003).

Reasons for Examining Metaphor in Academic Discourses

Considering professional developers' images (e.g., *spiritual leaders, reform managers, teaching experts, caretakers, cultural workers, consumers, role models*, etc.) will inform scholarship and practitioners by bringing to the surface, the underlying structural and ontological metaphors. Such future scholarship on images should include the voices and narratives of the professional developers. A close examination through collaborative work and member checking with participants will capture how each developer enacts practice within a system of coherent metaphors. Each facilitator's unique image of practice likely is informed by underlying structural, orientational, and ontological metaphors shaped by personal experience and aligned with specific academic discourses. Understanding metaphors' influence on thought and action by sharing examples of how others imagine their practice will serve a large audience of professionals in education.

Since research specific to images of developers has not been pursued, scholarship using narrative inquiry as methodology will identify images of practice with those in facilitative roles with teacher collaborative groups. I posit that developers collaboratively engaged in examination of metaphor (Clandinin, 1985) deepen their understanding of the variety of approaches to practice and may adopt new metaphors to live by in practice. Research and activities that encourage facilitators of teacher collaborative groups to examine lived metaphors with teachers, uncover hidden

assumptions in academic discourses, and engage in critical reflective dialogue will make explicit the conceptual frameworks pervasive in everyday life.

Scholars and practitioners immersed in analysis of metaphors within an academic discourse may begin to see beyond structural, orientational, and ontological frameworks to re-imagine teacher professional learning. Learning to be aware, striving to be transparent, and honoring the metaphors lived by others will build bridges between discourses. By drawing on awareness of all three discourses selected for this dissertation as well others, scholars and practitioners may begin to identify more comprehensive approaches and stand ready to collaborate with teachers to design programs that meet the needs at individual sites, improving professional learning for all involved.

In sum, I posit that taking time to uncover and make explicit metaphors lived in the narratives of facilitators and teacher professional development contexts is time well spent. By working to identify facilitators' images and align those images with the purpose of specific professional development programs, goals for the program may be more easily met, counter-narratives may be uncovered for reflection, and new understandings about practice explored. Understanding and appreciating the metaphors we live by in practice and teacher development makes us aware, as Bruner would suggest, of the water in a sea of possibilities.

References

- Akerson, V. & Hanuscin, D. (2007). Teaching nature of science through inquiry: Results of a 3-year professional development program. *Journal of Research in Science Teaching*. 44(5), 653–680.
- Anzaldúa, G. (1987). *Borderlands/La frontera: the new mestiza*. San Francisco: Aunt Lute.
- Atkinson, P. & Silverman, D. (1997) Kundera's *Immortality*: The interview society and the invention of the self. *Qualitative Inquiry*, 3, 304-325.
- Bakhtin, M. M. (1975/1981). *The dialogic imagination: Four essays* (C. Emerson, M. Holquist, Trans.) Austin, TX: University of Texas Press. (Original work published 1930s).
- Bakhtin, M. M. (1984). *Problems of Dostoevsky's Poetics*. (C. Emerson, Trans.) Minneapolis, MN: University of Minnesota Press.
- Ball, D. L. & Cohen, D. K. (1999). Developing practice, developing practitioners: toward a practice-based theory of professional development. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning professional: handbook of policy and practice* pp. 3-32). San Francisco, CA: Jossey-Bass.
- Banilower, E. & Shimkus, E. (2004). *Professional Development Observation Study*. Chapel Hill, NC: Horizon Research.
- Banilower, E., Boyd, S., Pasley, J., & Weiss, I. (2006). *Lessons from a decade of mathematics and science reform. A capstone report for the local systemic change through teacher enhancement initiative*. Chapel Hill, NC: Horizon Research.
- Banilower, E., Heck, D., Weiss, I. (2007). Can professional development make the vision of the standards a reality? The impact of the National Science Foundation's local systemic change through teacher enhancement initiative. *Journal of Research in Science Teaching*. 44(3), 375–395.
- Banks, J. (1993). Approaches to multicultural curriculum reform. In J. Banks and C. Banks (Eds.), *Multicultural education: Issues and perspectives*. Boston: Allyn & Bacon.
- Barone, T. (2001). *Touching Eternity: The enduring outcomes of teaching*. New York: Teachers College Press.

- Barone, T. (2007). A return to the gold standard? Questioning the future of narrative construction as educational research. *Qualitative Inquiry*, 13:4, 454-470.
- Borko, H. (2004). Professional development and teacher learning: mapping the terrain. *Educational Researcher*. 33(8), 3-15.
- Bradley, P., Casey, R., Franklin, K., Krech, E., Medin, C., Meyer, N., Sandbo, H., Torkelson, C. (2009) *Cultural relevance in science pedagogy: An Action Research Project*. Retrieved from <http://www.lulu.com/product/file-download/cultural-relevance-in-science-pedagogy/4869931>
- Brooks, P. (1984). *Reading for the Plot: Design and Intention in Narrative*. New York: Random House.
- Bullough, R.V. (1988). *The forgotten dream of American public education*. Ames, Iowa: Iowa State University Press.
- Bullough, R.V. (1991). Exploring personal teaching metaphors in preservice teacher education. *Journal of Teacher Education*. 42(1), 43-51.
- Burroughs, R., Schwartz, T., & Hendricks-Lee, M. (2000). Communities of practice and discourse communities: Negotiating boundaries in NBPTS certification. *Teachers College Record*. 102(2), 344-374.
- Brockbank, A. & McGill, I. (1998). *Facilitating reflective learning in higher education*. Philadelphia, PA: SRHE and Open University Press.
- Brooks, J. G. & Brooks, M. G. (2000). *In search of understanding: the case for constructivist teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.
- Bruner, J. (1987). Life as narrative. *Social Research*, 54:11-32
- Bruner, J. (1996). *The Culture of Education*. Cambridge, MA: Harvard University Press.
- Bryk, A., Camburn, E. & Louis, K. (1999). Professional community in Chicago elementary schools: facilitating factors and organizational consequences. *Educational Administration Quarterly*. 35(5), 751-781.

- Chase, S. E. (1995). Taking narrative seriously: Consequences for method and theory in interview studies. In R. Josselson & A. Lieblich (Eds.), *Interpreting experience: The narrative study of lives*. (pp. 1-26). Thousand Oaks, CA: Sage Publications.
- Chase, S. E. (2005). Narrative Inquiry. In N. Denzin & Y. Lincoln (Eds.), *Handbook of Qualitative Research*. (3rd Edition, pp. 651-679). Thousand Oaks, CA: Sage Publications.
- Clandinin, D. J. (1985). Personal practical knowledge: a study of teachers' classroom images. *Curriculum Inquiry*, 15(4), 361-385.
- Clandinin, D. J. (1986). Classroom practice: Teacher images in action. Philadelphia: Falmer.
- Clandinin, D. J. (2006). Narrative inquiry: a methodology for studying lived experience. *Research Studies in Music Education*. 27, 44-54.
- Clandinin, D. J., & Connelly, F. M. (1992). Teacher as curriculum maker. In P. Jackson (Ed.), *Handbook of Research on Curriculum* (pp. 363 - 401). New York: Macmillan.
- Clandinin, D. J., & Connelly, F. M. (1995). *Teachers' professional knowledge landscapes*. New York: Teachers College Press.
- Clandinin, D. J., & Connelly, F. M. (1998). Stories to live by: Narrative understandings of school reform. *Curriculum Inquiry*, 28(2), 149 - 164.
- Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research*. San Francisco: Jossey-Bass.
- Clandinin, D. J., Huber, J., Huber, M, Murphy, S., Murray Orr, A., Pearce, M., et al. (2006). *Composing diverse identities: Narrative inquiries into the interwoven lives of children and teachers*. New York: Routledge.
- Clandinin, D. J., Pushor, D., & Orr, A. (2007). Navigating sites for narrative inquiry. *Journal of Teacher Education*. (58) 1: 21-35.
- Clandinin, D. J., & Rosiek, (2006). Mapping a landscape of narrative inquiry: Borderland spaces and tensions. In D. J. Clandinin (Ed.), *Handbook of narrative inquiry: Mapping a methodology* (pp. 35–75). Thousand Oaks, CA: Sage Publications.
- Cochran-Smith, M. (2002). The research base for teacher education: Metaphors we live (and die) by. *Journal of Teacher Education*, 53(4), 283-285.

- Cochran-Smith, M., & Lytle, S. L. (1990). Research on teaching and teacher research: The issues that divide. *Educational Researcher*, 19(2), 2-11.
- Cochran-Smith, M., & Lytle, S. L. (1999). The teacher research movement: A decade later. *Educational Researcher*, 28(7), 15-25.
- Cochran-Smith, M., & Lytle, S. L. (1999). Chapter 8: Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education*, 24(1), pp. 249-305.
- Cochran-Smith, M., & Lytle, S. L. (2001). Beyond certainty: Taking an inquiry stance on practice. In A. Lieberman & L. Miller (Eds.), *Teachers caught in the action: Professional development that matters* (pp. 45-58). New York: Teachers College Press.
- Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance: practitioner research for the next generation*. New York: Teachers College Press.
- Connelly, F. M., & Clandinin, D. J. (1987). On narrative method, biography and narrative unities in the study of teaching. *Journal of Educational Thought*. 21, 130-139.
- Connelly, F. M., & Clandinin, D. J. (1988). *Teachers as curriculum planners: Narratives of experience*. New York: Teachers College Press.
- Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, 19(5), 2 - 14.
- Connelly, F. M., & Clandinin, D. J. (2006). Narrative inquiry. In J. L. Green, G. Camilli, P. Elmore (Eds.), *Handbook of complementary methods in education research* (3rd ed., pp. 477 - 487). Mahwah, NJ: Lawrence Erlbaum.
- Cook-Sather, A. (2003). Movement of Mind: "The Matrix," metaphors, and re-imagining education. *Teachers College Record*, 105 (6), 946-977.
- Cortazzi, M. (1993). *Narrative analysis*. London: Falmer Press.
- Cortazzi, M. (2002). Analysing narratives and documents. In M. Coleman and A. Briggs (Eds) *Research Methods in Educational Leadership and Management*. London: Paul Chapman. pp. 196-212.
- Craig, C. J. (2003). *Narrative Inquiries of School Reform: Storied Lives, Storied Landscapes, Storied Metaphors*. Greenwich, CT: Information Age Publishing.

- Cranston, P. (1994). *Understanding and promoting transformative learning: a guide for educators of adults*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L. (1999). *Teacher quality and student achievement: A review of state policy*. Seattle, WA: Center for the Study of Teaching and Policy, University of Washington.
- Darling-Hammond, L., Wei, R., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. San Francisco, CA: National Staff Development Council and The School Redesign Network.
- Derrida, J. (1978) *Writing and difference*. Chicago: University of Chicago Press.
- Dewey, J. (1938). *Experience and education*. New York: Simon & Schuster.
- Denzin, N. K. (1989). *Interpretative biography*. Newbury Park, CA: Sage Publications.
- DuFour, R. and Eaker, R. (1998). *Professional Learning Communities at Work: Best Practices for Enhancing Student Achievement*. Bloomington, Indiana: National Educational Service.
- Eaker, D. J., Noblit, G. W., & Rogers, D. L. (1992). Reconsidering effective staff development: Reflective practice and elaborated culture as desirable outcomes. In W. T. Pink and A. A. Hyde (eds.), *Effective staff development for school change*. Norwood, NJ: Ablex
- Elbaz-Luwisch, F. (1997). Narrative research: Political issues and implications. *Teaching and Teacher Education*, 13(1), 75-83.
- Ertmer, P., Richardson, J., Cramer, J., Hanson, L., Huange, W., Lee, Y., O'Connor, D., Ulmer, J., & Um, E. (2003). *Critical characteristics of professional development coaches: content expertise or interpersonal skills?* US Department of Education: Office of Educational Research and Improvement.
- Feiman-Nemser, S. & Parker, M. B. (1992). *Mentoring in context: a comparison of Two U.S. programs for beginning teachers*. East Lansing: National Center for Research on Teacher learning, Michigan State University.
- Freire, P. (2006/1976). *Pedagogy of the oppressed*. (M. Ramose, Trans.) New York: Continuum.
- Gardner, H. (1983; 1993) *Frames of Mind: The theory of multiple intelligences*. New York: Basic Books.

- Garet, M., Birman, B., Porter, A., Desimone, L., & Herman, R. (1999). Designing effective professional development: Lessons from the Eisenhower Program. Washington, DC: U.S. Department of Education.
- Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K. (2001). What makes professional development effective? Analysis of a national sample of teachers. *American Education Research Journal*, 38(4), 915-945.
- Garmston, R. & Wellman, B. (1999). *The adaptive school: A sourcebook for developing collaborative groups*. Norwood, MA: Christopher-Gordon Publishers.
- Geertz, C. (1973) *The interpretation of cultures*. New York: Basic Books.
- Giles, C., & Hargreaves, A. (2006). The sustainability of innovative schools as learning organizations and professional learning communities during standardized reform. *Educational Administration Quarterly*, 42(1), 124-156.
- Grosland, T. (2011). "We better learn something"---*Antiracist pedagogy in graduate school*. (Doctoral dissertation) Retrieved from Proquest. (AAT 3443269)
- Grossman, P., Wineburg, S. W., & Woolworth, S. (2001). Toward a theory of teacher community. *Teachers College Record*, 103(6), 942-1012.
- Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the postmodern age*. New York: Teachers College Press.
- Helms, J. E. (Ed.) (1990) *Black and White racial identity: Theory, research and practice*. Westport, CT: Greenwood Press.
- Hill-Collins, P. (1990/2000). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. New York: Routledge.
- Huber, J., & Clandinin, D. J. (2002). Ethical dilemmas in relational narrative inquiry with children. *Qualitative Inquiry*, 8(6), 785 - 803.
- Huberman, M. (1993). The model of the independent artisan in teachers' professional relations. In J. Little and M. McLaughlin (Eds.), *Teachers' Work: Individuals, Colleagues, and Contexts*. New York: Teachers College Press.
- Impel, S. (1998). Transforming learning in adulthood. ERIC Clearinghouse on Adult Career and Vocational Education. Columbus, OH.
- Jeanpierre, B., Oberhauser, K. & Freeman, C. (2005). Characteristics of professional development that effect change in secondary science teachers' classroom practices. *Journal of Research in Science Teaching* 42(6), 668-690.

- Josselson, R. (2007). The ethical attitude in narrative research: Principles and practicalities. In J. Clandinnin (Ed.), *The handbook of narrative inquiry* (pp. 537-567). Thousand Oaks, CA: Sage Publications.
- Kövecses, Z. (2005). *Metaphor in culture: Universality and variation*. Cambridge: Cambridge University Press.
- Kruse, S. D., Louis, K. S. & Bryk, A. S. (1995). An emerging framework for analyzing school-based professional community. In K. S. Louis & S. D. Kruse (Eds.), *Professionalism and community: Perspectives on reforming urban schools* (pp. 2342). Thousand Oaks, CA: Corwin Press.
- Labov, W., & Waletzky, J. (1997). Narrative analysis: Oral version of personal experience. *Journal of Narrative and Life History*, 7:3-38. (Original work published in 1967).
- Ladson-Billings, G. (1994; 2009). *Dreamkeepers: Successful teachers of African American children*. San Francisco, CA: Jossey-Bass.
- Ladson-Billings, G. (1995). "Toward a theory of Culturally Relevant Pedagogy" *American Educational Research Journal*, Vo. 32. No. 3 (Autumn, 1995), pp. 465-491.
- Ladson-Billings, G. (2006). Yes, but how can we do it? In C. W. Lewis and J. Landsman (Eds.), *White Teacher/Diverse Classrooms*. Sterling, VA: Stylus Publishing.
- Lacity, M. C., & Janson, M. A., (1994). *Understanding qualitative data: a framework of text analysis methods*. *Journal of Management Information Systems* 11(2).
- Lakoff, G. & Johnson, M. (1980). *Metaphors we live by*. Chicago and London: Chicago University Press.
- Langellier, K.M. (2001). Personal narrative. In M. Jolly (Ed.), *Encyclopedia of life writing: Autobiographical and biographical forms*. London: Fitzroy Dearborn.
- Lave J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lavié, J. M. (2006). Academic discourses on school-based teacher collaboration: Revisiting the arguments. *Educational Administration Quarterly*, 42(5), 773-805.
- Lee, O., Deaktor, R., Enders, C., & Lambert, J. (2008). Impact of a multiyear professional development intervention on science achievement of culturally and

- linguistically diverse elementary students. *Journal of Research in Science Teaching* 45(6), 726–747.
- Lee, O., Hart, J., Cuevas, P., & Enders, C. (2004). Professional development in inquiry-based science for elementary teachers of diverse student groups. *Journal of Research in Science Teaching* 41(10), 1021–1043.
- Lieblich, A., Tuval-Mashiach, R., & Zilber, T., (1998). *Narrative Research: reading, analysis, and interpretation* (47). Thousand Oaks, CA: Sage Publications.
- Lensmire, T. (2008). How I became white while punching de tar baby. *Curriculum Inquiry*, 38(3), 299-322.
- Lensmire, T. (2000). *Powerful writing, responsible teaching*. New York, NY: Teachers College Press.
- Lewin, K. (1945). The research center for group dynamics at Massachusetts Institute of Technology. *Sociometry*, 8, 126-136.
- Little, J. W. (2001). Professional development in pursuit of school reform. In A. Lieberman & L. Miller, (Eds.), *Teachers Caught in the Action: Professional Development That Matters*, pp. 23-58. Teachers' College: Columbia University.
- Little, J. W. (2003a). Inside teacher community: representations of classroom practice. *Teachers College Record* 105(6),913-945.
- Little, J. W. (2003b). Constructions of teacher leadership in three periods of policy and reform activism. *School Leadership and Management* 23(4),401-419.
- Lofland, J., & Lofland. L.H., (1984). *Analyzing social settings: A guide to qualitative observation and analysis*. Belmont, CA: Wadsworth.
- Loos, E. Anderson, S., Day Jr., D., Jordan, P. & Wingate, J., “Definitions of metaphor” (HTML). *Glossary of linguistic terms*. Summer institute of Linguistics (SIL) International. Retrieved March 5, 2009 from <http://www.sil.org/linguistics/GlossaryOfLinguisticTerms/contents.htm>
- Lortie, D. C. (1975). *Schoolteacher: A sociological study*. Chicago: The University of Chicago Press.
- Louis, K., Marks, H., & Kruse, S. (1995). *Professionalism and community: Perspectives on reforming urban schools*. Thousand Oaks, CA: Corwin.

- Loucks-Horsely, S., Love, N., Stiles, K., Mundry, S., & Hewson, P. (2003). *Designing professional development for teachers of science and mathematics* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- McIntosh, P. (2000). Interactive phases of personal and curricular re-vision with regard to race. In G. Shin and P. Gorski (Eds.), Multicultural resource series: Professional development for educators. Washington, D.C.: National Education Association.
- Mezirow, J. (1978). Perspective transformation. *Adult Education* 28, 100-110.
- Mezirow, J. (1996). Contemporary Paradigms of Learning. *Adult Education Quarterly* 46:158-173.
- Mezirow, J. (1997). Transformative learning: Theory to practice." In P. Cranton, (Ed.), *Transformative learning in action: insights from practice. new directions for adult and continuing education* 74, 5-12. San Francisco, CA: Jossey-Bass.
- Mezirow, J. (2000) *Learning as transformation: critical perspectives on a theory in progress*. San Francisco, CA: Jossey-Bass.
- Michaels, S., Shouse, A.W., and Schweingruber, H. A. (2008). *Ready, Set, Science! Putting Research to Work in K-8 Science Classrooms*. Board of Science Education, Center for Education, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.
- Mishler, E.G. (1984) *The Discourse of Medicine: Dialectics of Medical Interviews*. Norwood, NJ: Ablex Pub. Corp.
- Mishler, E.G. (1986). *Research Interviewing: Context and Narrative*. Cambridge, MA: Harvard University Press.
- Moore, F. (2008) Positional identity and science teacher professional development. *Journal of research in science teaching* 45(6), 684–710.
- Munby, H. (1986) Metaphor in the thinking of teachers: An exploratory study. *Journal of curriculum studies*. 18(2), 197-209.
- Munby, H. & Russell, T. (1990) Metaphor in the study of teachers' professional knowledge. *Theory into practice*, 29(2), 116-121.
- Mundry, S. (2005) M. Boethel (ed.) What experience has taught us about professional development: facilitating mathematics and science reform: Lessons learned. The Eisenhower Mathematics and Science Consortia and Clearinghouse Network.

- Mundry, S., & Loucks-Horsley, S. (1999) Designing professional development for teachers of science and mathematics: Decision points and dilemmas. National Institute for Science Education Brief 3(1).
- Mundry, S., Spector, B., Stiles, K., & Loucks-Horsley, S. (1999) Working toward a continuum of professional learning: experiences for teachers of science and mathematics. National Institute for Science Education Brief: Research Monograph 17.
- National Commission on Teaching and America's Future (NCTAF) (1996) *What Matters Most: Teaching for America's future*. New York: Columbia University, Teachers College.
- Nerlich, B., Clarke, D. D., and Dingwall, R. (1999) The influence of popular cultural imagery on public attitudes towards cloning. *Sociological Research Online*, 4(3). Website accessed April 21, 2009 from <http://www.socresonline.org.uk/socresonline/4/3/nerlich.html>
- Obama, B. (April 15th, 2009). Presidential Address at Georgetown University. Retrieved April 15, 2009 from http://www.youtube.com/view_play_list?p=CEA0F2A52B144180
- Ollerenshaw, J. A., & Creswell, J.W. (2002). Narrative research: A comparison of two restorying data analysis approaches. *Qualitative Inquiry*. (8)329-347.
- Osadetz, S. (2004) Telling a Teacher's Story. [Electronic Version]. *Express News*. March 23, 2004. Retrieved February 11, 2009 from <http://www.uofaweb.ualberta.ca/education/news.cfm?story=25067>
- O'Sullivan, E. (2003). Bringing a perspective of transformative learning to globalized consumption. *International Journal of Consumer Studies*, 27(4), 326–330.
- Palmer, P. (1998). *The Courage to Teach. Exploring the inner landscape of a teacher's life*. New York, NY: Jossey Bass.
- Personal Narratives Group. (Eds.). (1989). *Interpreting women's lives: Feminist theory and personal narratives*. Bloomington, IN: Indiana University Press.
- Pinnegar & Daynes (2007). Locating Narrative Inquiry Historically: Thematics in the Turn to Narrative. In J. Clandinin (Ed.), *Handbook of Narrative Inquiry Methodologies*. Thousand Oaks, CA: Sage Publications.
- Polkinghorne, D. E. (1988). *Narrative knowing and the human sciences*. Albany, NY: State University of New York Press.

- Polkinghorne, D. E. (1995). Narrative configuration in qualitative analysis. In J. A. Hatach & R. Wisniewski (Eds.), *Life history and narrative*. (pp. 5-23). London: Falmer.
- Polkinghorne, D. E. (2007). Validity issues in narrative research. *Qualitative Inquiry*, 13: 471-486.
- Radford-Hill, Sheila. (2000). *Further to Fly: Black women and the politics of empowerment*. Minneapolis, MN: University of Minnesota Press.
- Reinharz, S. (1992). *Feminist methods in social research*. New York: Oxford University Press.
- Riessman, C. K. (1990). *Divorce-talk: Women and men make sense of personal relationships*. New Brunswick, NJ: Rutgers University Press.
- Riessman, C. K. (1993). *Narrative Analysis*. Newbury Park, CA: Sage Publications.
- Riessman, C. K. (2008) *Narrative methods for the human sciences*. Thousand Oaks, CA: Sage Publications.
- Rosaen, C. & Florio-Ruane, S. (2008). The metaphors by which we teach: Experience, metaphor and culture in teacher education. M. Cochran-Smith, S. Feiman-Nemser & J. McIntyer (Eds.), *Handbook of Research on Teacher Education: Enduring Issues in Changing Contexts, Third Edition* 706-731. Association of Teacher Educators.
- Rosenholtz, S. (1989). Workplace conditions that affect teacher quality and commitment: implications for teacher induction programs. *The Elementary School Journal*, 89(4), 421-439.
- Sato, M. (2008). Coping with uncertainty in teacher mentoring: Cases of ethical tensions. *The New Educator*, 4(3), 237–251.
- Sato, M., & Ernst, S. (January, 2010a). Cultural Relevance in Science Pedagogy (CRISP): An Action Research Network. Minneapolis, MN: University of Minnesota.
- Sato, M., & Ernst, S. (2010b, May). *Cultural Relevance in Science Pedagogy (CRISP): Results of an Action Research Network*. Paper presented at the meeting of the American Educational Research Association, Denver, CO.
- Sato, M., & Ernst, S. (2010c, March). *Cultural Relevance in Science Pedagogy (CRISP): Results of an Action Research Network*. Paper presented at the meeting of the National Association of Research in Science Teaching, Philadelphia, PA.

- Sato, M., Ernst, S., & Gabler, M. (2010, March). *Cultural Relevance in Science Pedagogy (CRISP): Inside an Action Research Network*. Paper presented at the meeting of the National Science Teachers Association, Philadelphia, PA.
- Sato, M. & Lensmire, T. (2009). Poverty and Payne: Supporting teachers to work with children of poverty. *Phi Delta Kappan*, 90(5), 365-370.
- Schlechty, P. (1991). *Schools for the Twenty-First Century: Leadership Imperatives for Educational Reform*. San Francisco, CA: Jossey-Bass
- Schön, D. (1983). *A reflective practitioner: How professionals think in action*. New York: Basic Books.
- Shulman, J. & Sato, M. (2006) *Mentoring Teachers Toward Excellence: Supporting and Developing Highly Qualified Teachers*. San Francisco, CA: Jossey-Bass.
- Singleton, G., and Linton, C. (2006). *Courageous Conversations About Race: A field guide for achieving equity in schools*. Thousand Oaks, CA: Corwin Press
- Smylie, M.A., Allensworth, E., Greenberg, R.C., Harris, R., Luppescu, S. (2001). *Teacher professional development in Chicago: Supporting effective practice*. Report of the Chicago Annenberg Research Project. Chicago, IL: Consortium on Chicago School Research.
- Sparks, D. (1995). A paradigm shift in staff development. *ERIC Review*. 3(3), 24.
- Sparks, D. (2002). *Designing powerful professional development for teachers and principals*. National Staff Development Council. Oxford, OH.
- Sparks, D. & Loucks-Horsley, S. (1990). Models of staff development. In W.R. Houston (ed.), *Handbook of research on teacher education*. New York: Macmillan.
- Springer, K. (2005). *Living for the revolution: Black feminist organizations, 1968-1980*. Durham, NC: Duke University Press.
- Stein, M. K., Smith, M. S., & Silver, E. A. (1999). The development of professional developers: Learning to assist teachers in new ways. *Harvard Educational Review* 69 (3), 237-269.
- Strauss A., (1987). *Qualitative Analysis for Social Scientists*. Cambridge: Cambridge University Press.
- Strauss, A., & Corbin, J., (1990). *Basics of Qualitative Research: Grounded Theory, Procedures and Techniques*. Newbury Park, CA: Sage Publications.

- Stringer, E. T. (2007). *Action Research*. Thousand Oaks, CA: Sage Publications.
- Sykes, G. (1999). Teacher and student learning: Strengthening their connection. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook for policy and practice* (pp. 151-179). San Francisco: Jossey-Bass.
- Tatum, B. (1992) Talking About Race, Learning About Racism: The Application of Racial Identity. *Harvard Educational Review*; (62)1, 1-24
- Taylor, E. (1998). The theory and practice of transformative learning: A critical review. Information Series No. 374. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, Center on Education and Training for Employment, College of Education, the Ohio State University.
- Thompson, C. L. & Zeuli, J. S. (1999). The frame and the tapestry: Standards-based reform and professional development. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook for policy and practice* (pp. 341-375). San Francisco: Jossey-Bass.
- Vygotsky, L. S. (1987). Thinking and speech. In *L. S. Vygotsky, Collected works* (vol. 1, pp. 39-285) (R. Rieber & A. Carton, Eds; N. Minick, Trans.). NY: Plenum.
- Walker, A. (2003). *In search of our mother's gardens: Womanist prose*. Boston, MA: Houghton Mifflin Harcourt.
- Webster, L., & Mertova, P. (2007) *Using narrative inquiry as a research method: An introduction to using narrative analysis in learning and teaching*. UK: Routledge Falmer.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.
- Whorf, B. (1956). *Language, thought, and reality*. New York: John Wiley & Sons, and The Technology Press of M.I.T.
- Williams, R. (1997). *Twelve roles for facilitators of school change*. Thousand Oaks, CA: Corwin.
- Williams, R. J. (2006). Why are all the black teachers sitting together? In J. Shulman and M. Sato (Eds.), *Mentoring Teachers Towards Excellence: Supporting and Developing Highly Qualified Teachers*. (pp. 149-152) San Francisco, CA: Jossey-Bass

- Wilson, S. M., & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education, 24*, 173-209.
- Yinger, R. J., & Hendricks-Lee, M.S. (1993). Working knowledge in teaching. In C. Day, P. Calderhead, & P. Delco (Eds.), *Research on teacher thinking: Understanding professional development* (pp. 100-123). London: Falmer Press.
- Yussen, S.R., & Ozcan, N.M. (1997). The development of knowledge about narratives. *Issues in Educational Psychology: Contributions from Educational Psychology, 2*(1), 1-68.
- Zeichner, K. & Liston, D. (1996). *Reflective teaching: An Introduction*. New Jersey: Lawrence Erlbaum Associates.
- Zeichner, K. & Noffke, S. (1998). Practitioner research. In V. Richardson (Ed.). *Handbook of Research on Teaching*. AERA: Washington, D.C.

Appendices

Appendix A: Table 3. Loucks-Horsely, Love, Stiles, Mundry, & Hewson's (2003)

Eighteen Strategies for Professional Learning (Table 5.1, p. 113)

Aligning and implementing curriculum

- Curriculum alignment and instructional materials selection

- Curriculum implementation

- Curriculum replacement units

Collaborative structures

- Partnerships with scientists and mathematicians in business, industry, and

 - Universities

- Professional networks

- Study groups

Examining teaching and learning

- Action research

- Case discussions

- Examining student work and thinking and scoring assessments

- Lesson study

Immersion experiences

- Immersion in inquiry in science and problem solving in mathematics

- Immersion into the world of scientists and mathematicians

Practicing teaching

- Coaching

- Demonstration lessons

- Mentoring

Vehicles and mechanisms

- Developing professional developers

- Technology for professional development

- Workshops, institutes, courses, and seminars

Appendix B: Empirical Literature Summary Review on Discourses

In the empirical literature selected for review from multiple discourses, I found research on images helpful in demonstrating change in pre-service teachers understanding their practice (Bullough, 1991; Munby, 1986; Rosaen & Florio-Ruane, 2008) and in-service teachers' use of image to inform personal practical knowledge (Clandinin, 1985). Scholars analyzing image as embodied and enacted in practice studied metaphors with teachers in a variety of settings: teachers' classrooms (Clandinin, 1985; Clandinin & Connelly, 2000); development workshops (Palmer, 2007); and in teacher education programs (Rosaen & Florio-Ruane, 2008). The purpose identified by each researcher for capturing metaphors in the study was different in each context. For example, focus on image was one way to gather data to examine teachers' personal practical knowledge and professional identities (Clandinin & Connelly, 2000); encouraging teachers to re-member their passion for teaching (Palmer, 2007); and comparing images between pre-service and in-service teachers (Rosaen & Florio-Ruane, 2008).

Appendix C: Resource Book Summary Review

This review also included resourcebooks for facilitators utilizing metaphor to inform practice (e.g., Brockbank & McGill, 1998; Garmston & Wellman, 1999; Williams, 1997). As part of my initial inquiry, I completed a specific review of these texts in order to highlight the metaphorical coherence with the discourse from which they were developed. Again, I've included some of the metaphorical language in the above review, however each text incorporated metaphor in unique ways to help readers imagine the role and function of the facilitator in school change. In an effort to illustrate how the literature was analyzed for metaphors, I include a few examples next.

The most comprehensive sourcebook, Garmston and Wellman' (1999) *The Adaptive School: A Sourcebook for Developing Collaborative Groups*, uses the ontological metaphor of school *reform as adaptivity* based on evolutionary biology. When discussing the role of the facilitator the authors describe the role in cartography terms suggesting developers read maps to navigate the territory. Garmston and Wellman's (1999) *facilitators as map readers* metaphor is further enhanced by references in the text to maps as "lenses for locating order within chaotic systems" (p. 91), as representing meeting territory (goals, structures, energy, and principles), and as "approximations of reality...reveal[ing] as much about the cartographer's perceptions as the territory being described" (p. 91). The complexity of their metaphor represents the comprehensive work in this text to pull from multiple discourses while still working to inform readers within the framework of school reform.

Another sourcebook for facilitators by Williams (1997) grouped twelve roles for facilitators into four separate metaphorical structures as follows:

- The process leader (*facilitating as architect, carpenter, contractor*. Described within the structural metaphor of construction).
- The skills trainer (*facilitating as coach, quarterback, and sportscaster*. Metaphorically grounded in sports).
- The resource consultant (*facilitating as producer, director, and promoter*). Metaphorically grounded in the film business.
- The group energizer (*facilitating as conductor, concertmaster, and critic*). Depicted from music performance as metaphor.

Williams (1997) work is firmly located in school reform and the school is seen as a modern organization that is dynamic, changing and complex. The book is meant to serve as a resource guide for facilitators working with teachers to implement organizational reform. Her metaphorical structures are coherent with the school reform discourse described in more detail early in this paper.

Brockbank and McGill's (1998) text, *Facilitating Reflective Learning in Higher Education*, served as multiple purposes as the authors not only engaged in deep analysis of the theoretical base for transformative learning and reflective practice, but they also argued for a facilitative approach to teaching adults in higher education. Their goal is to encourage higher education instructors to move away from traditional roles of teaching (e.g., "teacher, researcher, manager, mentor, course leader" (p. 224)) to modeling *teaching as reflective practitioner* instead.

Appendix D: A Word on Teacher Learning Communities in Professional Development

Teacher learning communities, professional learning communities, and communities of practice are terms used in most of the literature selected for this review. The structural metaphor of community has captured the imagination of authors in all three of the discourses selected for this review. I attempt to localize the use of the word community within the socio-cultural discourse and choose ‘teacher groups’ or ‘collaborative structures’ to describe the activity of teachers working together within a school setting.

Communities have been a part of school-based work as teachers often strive to deliberately build cohesion through relationships with students, peers and administrators (Grossman, Wineburg, & Woolworth, 2001). Developing communities where trust is built through face-to-face interactions and dialogue is, in the observations of researchers (Grossman, et al.) “not quickly or easily formed” (2000, p. 946). This is due, in part, to competing professional development discourses (Lavié, 2006). Lavié explores several discourses on collaboration in schools where community is being reformulated and used with very different goals and purposes. Lavié (2006) posits that the various academic discourses informing school communities of practice are as follows: school change, effectiveness, improvement, restructuring, or teacher professionalization. However, Lavié’s (2006) work is grounded in school reform discourse and I broaden my scope to include in this review social-cultural and transformational/critical reflection discourses as well.

By stepping back to these larger discourses, we may see with more clarity the metaphors underlying thoughts and actions in the practice of professional developers. For example, developers grounded in the traditions of sociology and situative knowledge may imagine their work as a cultural activity in community where teachers share knowledge, values, norms, beliefs and habits (Hargreaves, 1994). Or, if interested in practical knowledge, professional developers may focus the work of a teacher groups on inquiry (Cochran-Smith & Lytle, 1999) and collaboration with reflective practitioners in action research (Zeichner & Liston, 1996). It is these perspectives, and more, that shape the thinking and practice of individuals enacting in roles as facilitators, mentors, coaches, and experts in professional development with teacher learning communities and group structures.

Appendix E: Table 4. Academic Contributions Informing Narrative Research across Fields in the 1990s

Fields	Commonly Selected 1990+ Authors and Texts in NI Reviews
Anthropology	Bateson (1994) <i>With a Daughter's Eye: A Memoir of Margaret Mead and Gregory Bateson</i> Denzin (1997) <i>Interpretive Ethnography</i> Geertz (1995) <i>After the Fact: Two Countries, Four Decades, One Anthropologist</i>
Feminism	Reinharz (1992) <i>Feminist Methods in Social Research</i>
Philosophy	Bruner (1991) The Narrative Construction of Reality, In <i>Critical Inquiry</i> , 18:1, 1-21 Johnson (1990) <i>The Body in the Mind</i>
Psychiatry	Coles (1989) <i>The Call of Stories: Teaching and the Moral Imagination</i>
Qualitative Methodology	Atkinson & Silverman (1997) Kundera's Immortality: The interview society and the invention of the self, In <i>Qualitative Inquiry</i> , 3:3, 304-325 Chase (1995) <i>Ambiguous Empowerment: The Work Narratives of Women School Superintendents</i> Polkinghorne (1995) Narrative configuration in qualitative analysis, In <i>International Journal of Qualitative Studies in Education</i> , 8:1, 12-28 Riessman (1990) <i>Divorce talk: Women and men make sense of personal relationships</i>

Appendix F: CRISP project overview as submitted by Misty Sato, updated 12/1/08



Cultural Relevance in Science Pedagogy (CRISP): An Action Research Network

*Supported by the Science Museum
Facilitated by the University of Minnesota*

This action research network comprises 4 regionally based groups in our state. Each site will comprise a local facilitator, a group of approximately 8 teachers responsible for teaching science at the grades K- 8 levels from either a single school or a group of schools within a district. The University of Minnesota and Science Museum of Minnesota staff will support each regional group of teachers and facilitator.

The action research network will have five objectives:

1. Engage science teachers in a critical analysis of their own science teaching practices as they relate to cultural relevance for their students as learners.
2. Facilitate the questioning, reflection, and research processes that would allow the teachers to begin improving their classroom practice toward more culturally relevant pedagogies.
3. Provide professional learning communities in which teachers can collaborate and learn about and from practice.
4. Generate knowledge from practice that can be cycled back into schools as levers of change and catalysts for conversations about culture and pedagogy.
5. Generate new knowledge from practice for dissemination through research and practitioner articles and conference presentations.

Roles and responsibilities

Science Museum: CRISP is supported by the Materials and Understanding for STEM Education (MUSE) in Minnesota effort at the Science Museum of Minnesota (SMM). The SMM staff will regularly participate in gatherings of the network and make some field visits. The University of Minnesota staff will provide regular updates to the SMM staff.

CRISP Teachers: A group of approximately 8 teachers of science in grades K – 8 at each regional site will engage in collaborative action research focused on how cultural relevance can play a part in science teaching and learning in the classroom. These groups will meet monthly at the local site and at the SMM 3 times in 2008-09. Each CRISP teacher will receive a \$400 stipend for their participation from Sept 2008 – June 2009.

Site Facilitators: One local facilitator will be identified for each of the five participating sites. The facilitator will recruit participants, organize regular monthly meetings, and facilitate the action research group. Outside of the monthly meetings, facilitators will assist teachers in their classroom inquiries, possibly conduct classroom observations, and collaborate in CRISP data collection and analysis. Facilitators will be supported by the University of Minnesota CRISP staff and receive a stipend of \$4000 for their work.

University of Minnesota: Professor Misty Sato will coordinate the CRISP network and keep the SMM team apprised of the ongoing development of the network. She will work with the site facilitators to develop the strategies of action research at the local sites; design and coordinate data collection procedures for research purposes; oversee the research related to the CRISP initiative; provide intellectual resources such as reading material, cases, and guidance about

action research to the facilitation team. A University of Minnesota doctoral student, Stacy Ernst, will assist with data collection and organization for CRISP.

Prospective Research Questions

The research associated with this action research network will explore the following questions.

1. What do science teachers identify as culturally relevant in teaching science?
2. How do science teachers integrate culturally relevant instruction into daily pedagogical repertoires?
3. What is the role of facilitation in supporting teachers in their instructional development and how are those facilitators prepared for that role?
4. What implications for the school and the district are raised in the effort to integrate culturally relevant pedagogies in science classrooms?

Data collection includes:

- pre- and post-survey of CRISP teachers
- audio recordings of all action research meetings at each site
- periodic written or oral reflections by CRISP teachers
- classroom observations
- written reports by teachers
- interviews with CRISP teachers
- audio recordings of facilitator meetings
- written or oral reflections by facilitators
- electronic communication among facilitators (on facilitator web-site)
- interviews with facilitators
- interviews with district or school-based administration

Activities of the CRISP Action Research Network

Summer 2008: recruit schools / teachers to participate; create facilitator web support; order materials for action research groups

August 15, 2008: 1 day facilitation session for facilitators at SMM

Sept 27, 2008: Convene opening session of all participants (CRISP teachers, site facilitators, UMN staff, SMM staff) at the SMM; administer pre-survey; reflective writing prompt

Oct, Nov, Dec. 2008: Monthly facilitated meetings of teacher research groups at local sites. UMN and SMM staff conduct field visits. Ongoing data collection.

Jan 2009: Mid-year meeting held at SMM

Feb, Mar, Apr, May 2009: Monthly facilitated meetings of teacher research groups at local sites. UMN and SMM staff conduct field visits. Ongoing data collection.

June 2009: Taking stock meeting of all participants at SMM. Teachers present summaries of what they learned from their action research and their next steps.

Aug 2009: Technical report and compilation of teacher research completed

Ongoing: Electronic communication system established for facilitation team to debrief and share resources.

Appendix G: Facilitator Pre-Questionnaire (Online survey)

1. Do you have prior experience facilitating conversations or professional development experiences among groups of teachers?
 - a. No prior experience
 - b. 1-6 sessions
 - c. 6-10 sessions
 - d. 11-20 sessions
 - e. 21+ sessions
2. If you answered "yes" to question 1: What part of your facilitation practice would you like to further develop through CRISP?
3. CRISP is about cultural relevance in science pedagogy. Give your own definition of what “culturally relevant pedagogy” means to you.
4. We all have our own understanding of what science is and how science is conducted. Briefly tell us about what you think science should look like in K-8 classrooms.
5. Please state your preferred first name:
6. Please state your preferred last name:
7. Mailing address:

Appendix H: Questions in Facilitator Correspondence on Moodle and Co-facilitator online planning for November 1st "Culture, not Race"

Hello all!

We're quite excited to be closing in on our first statewide CRISP session at the Science Museum. I'm attaching the latest version of the agenda for your review.

Note on the attached agenda that we've set aside time for each facilitator to meet with his/her local groups to discuss the article "Culture, not Race, Explains Human Diversity." We realize this is a difficult conversation to start with your groups, especially if it is your first time facilitating a group discussion on culture and race. So, we've the following plan of attack: 1) We'd like to put our heads together and generate ideas before Friday online. 2) On Saturday morning, at 9 AM, all facilitators are asked to arrive to room 5 on the 2nd floor of the Science Museum to finalize our pooled ideas for the local group discussions on "Culture, not Race." 3) Misty and Stacy will be available to each of you as a supporting facilitator in your local group discussions. 4) Additionally, CRISP facilitators wanting to sit in on the "Culture, not Race" session in the AM with another local group on November 1st are welcome to do so.

The full "Culture, not Race" article was posted on Moodle a couple weeks ago in the resource section with an additional link to the race exhibit website at: <http://www.understandingrace.org/>. Additionally, we sent a PDF copy of the article and link to you last week via email. By Friday, review both resources and post on Moodle your thoughts/approach for starting the conversation with your groups.

For your posting on Moodle: Think about your philosophy/principles of facilitation. Share with the group your thoughts/approach on a few of the following:

- how you will organize the space,
- how you might initiate the discussion,
- what questions you might ask,
- what will be focus/goal,
- what difficulties you anticipate,
- what hopes you have,
- what you have in mind as important to attend to during this discussion,
- other thoughts? Ideas?

We know your time is limited so don't fret over writing a beautiful response. We're generating ideas here... write in lists, partial sentences, brief notes, etc... I'll collect it all and bring it to you on Saturday AM for our wrap up session.

We look forward to your thoughts posted on Moodle by Friday! And, if you have any trouble with Moodle just send me an email with your thinking. We'll post it for you.

- Stacy Ernst - Tuesday, October 28, 2008, 02:41 PM

Appendix I: Questions in Facilitator Correspondence (Email)

May 5th, 2009

Hello there! We're looking forward to meeting with you on Tuesday evening via phone. Here are the instructions for dialing at 7:30 PM:

1. Call the following number (toll free) just before 7:30 PM: (866) 200-5786
2. When prompted, be sure to enter our conference room number as follows:
8460758
3. You will hear a little beep and then you will be linked in with the rest of us. Just say hi and your name after the beep and let us know you are there. Once we're all in, we'll get started.

Again, you can call from anywhere, just be sure to have the number and conference room number on hand. :-) If you have any difficulty calling in, phone Stacy at 651-69-8949 for assistance.

Misty and I have listed some initial ideas for our conversation (based on work with you in the field and email correspondence in between visits). We ask for your additions and suggestions to the list of topics identified below:

- Local group updates: What burning issues/concern/questions (if any) do you have for this group to chew on with you today? What's going well in your group? What's puzzling? What's next?
- CRISP research focuses: Interview process with teachers and facilitators. Research approach revisited.
- Reflecting on practice: (NOTE: Misty and Stacy are interested in how facilitators-and we include ourselves here- develop their practices of facilitation. Reflection on practice is an opportunity for each of us to stop and take a look at our own facilitative practice and ask how our practice is developing)
 - Close your eyes and place yourself with your local group. Think about how you have prepared yourself to facilitate each session. What image do you have in mind when you think of yourself in the role of facilitator?
 - Tell us what you saw in your mind's eye. How do the teachers in your group fit into your image for facilitation? What is their relationship to you in the image you have for your practice?
 - How would you name your particular style/approach/persona/image in three words or less?
- Planning for final SMM meeting. Review end of journey presentation info (see attached). Collaborate to generate facilitation ideas for specific issues/questions in local groups.
- Set last group teleconference meeting date: Mid-June

If you have questions or additions to topics of conversation, please chime in! We look forward to connecting with you! Our best, Misty and Stace

Appendix J: Teacher Interview Questions

CRISP teacher interview protocol (approximately 30-45 minutes)

Misty Sato, Draft 7-16-08. Stacy Ernst, added facilitator questions in italics 4/26/09

1. Tell me about the students in your classroom this year.
2. Thinking specifically about the issues of culturally relevant pedagogy, what has been most rewarding for you in your work on these issues this year?
3. Thinking specifically about the issues of culturally relevant pedagogy, what has been most challenging for you in your work on these issues this year?
4. How do you think your views about the role of culture in your science instruction have changed this year?
5. What do you think are some of the challenges of merging ideas of culturally relevant pedagogy specifically with science instruction are?
6. What else would you like to continue to explore or examine in your practice related to cultural relevance?
7. *Tell me a bit about the experience of working with a facilitator in your local group. What did you imagine it would be like when you signed up?*
8. *How would you describe your facilitator's approach to his/her work with your group? What kind of facilitator were they (how did they act, what did they see as their job with you?)*
9. *What recommendations do you have for us if we were to host another program like CRISP for area school districts?*
10. *Do you have any further questions about our work together?*

Appendix K: Stacy Ernst, Question Bank for Facilitator Conversations- May 16, 2009

1. How are you? What have you been up to since we last met?
2. I've been working with the transcripts, audio recordings, your reflections, and my field notes to complete some initial narrative analysis to identify metaphors and images in practice. We've been talking about images this past year. Remember our conversations about _____? I'm interested, as you know, in metaphor and images we have for our practice as facilitators. For example, (tell my own narrative- spiritual leader).
3. I want to collaborate with you on making similar connections between your expressed image for facilitation as _____ and the data I have collected. I'm interested in learning more about your professional history. I know from our early conversations that _____, but I'd appreciate hearing more from you about:
 - a. Your educational path to where you are today.
 - b. What first attracted you to facilitating teachers.
 - c. Describe a time you felt you were successful as a facilitator (in the past)?
 - d. Describe a time you felt you were struggling as a facilitator (in the past)?
 - e. What part of your facilitation practice do you want to further develop?
 - f. What has been most surprising to you about your role as a facilitator (in the past)?
 - g. Similar work you have done in the past that reminds you of facilitation.
 - h. What attracted you to specifically the role as facilitator in CRISP.
 - i. What metaphors would you use to describe your practice as a facilitator in the past?
4. Let's talk about your experience as a facilitator in the CRISP program.
 - a. What were you envisioning as your role when we began?
 - a. Describe a time in your facilitation experience in CRISP when you felt successful as a facilitator.
 - b. Describe a time in your facilitation experience in CRISP when you felt you were struggling as a facilitator.
 - c. Thinking specifically about the issues of culturally relevant pedagogy, what has been most rewarding for you in your work with the teachers in your group?
 - d. Thinking specifically about the issues of culturally relevant pedagogy, what has been most challenging for you in your work with the teachers in your group?
 - e. What metaphors would you use to describe your practice as a facilitator in the CRISP program?
 - f. What has been most surprising to you about your role as a facilitator?
 - g. If you were coaching a new facilitator for the CRISP program, what advice would you give to them?
5. Let's project a bit into the future.

- a. What's next for you professionally? Personally?
 - b. If you do facilitate a group of teachers again, what will you take from CRISP experience into future practice?
 - c. Do you think your image/metaphor of practice has evolved or changed based on your CRISP experience? If so, how?
6. We've been working together for some time now. We've all learned from this experience and we want to share our findings with others. This is a collaborative effort not only to understand cultural relevance in science pedagogy, but also to understand our experiences and images as facilitators.
- a. Had you thought about image/metaphors before in relation to thinking about practice as a teacher or facilitator? If so, please tell me about that time.
 - b. Did you find it helpful to you professionally to reflect on metaphor/image as related to practice? If so, how?

Example Member Check Interview with Participants (<1 hour)

1. Here is a sample (or the full analysis) that I have written up as a narrative. I sent this to you a couple weeks ago. Thank you for reviewing it. Let's walk through it now so I can get your feedback.
 - a. Do you see yourself in this narrative? If so, how? If not, how?
 - b. What do you feel is the most important aspect of this narrative to highlight for readers (other facilitators)?
 - c. What will others need to know further about it to understand your thinking/practice?
 - d. What's missing? What instances have I not documented that you feel are essential/important to complete this story?
 - e. What questions do you have for me about next steps in data analysis and reporting?
 - f. Do you have questions/advice/comments for me?

Appendix L: Table 5. Rachel's First Facilitated Session on Culture and Race for CRISP

Personal (Embodied)

Self Image

African American

Biracial

Mother

Not Science

Spiritual

Long-time Local

Student

Cultural Experience

Negotiating categories as a biracial African American woman

Being seen as "The Voice"

Being the "Other"

Image of Good Classroom/Teaching

Caring teacher

Open culture/community

Brings out students' experiences

Focus on kids first, content second

Expressed Beliefs

"Culture is what we create"

Institutional Racism

"Education is not broken, it is doing what it was created to do"

"Poverty created for a reason...for haves and have nots"

"We teach what we love [and know]"

Practiced (Enacted)

Considered physical needs/space

Created physical talking circle/space

Supplied additional multi-cultural resources

Checked with participants about needs (e.g., break)

Connected to affective needs

Brought out participant experiences

Read Native American poem

Told stories of changed people

Encouraged/Advised participants

You can make a difference

We/you are the change

Richness in group

Search for answers

Inside out process

Scary/hard work

Worthwhile journey

Appendix M: Table 6. Molly's Facilitated Session on 11/1/2008

Personal (Embodied)

Self Image

Not expert in science

Discussion guide/lead

Image of Teacher as Professional

“Don't we feel compelled as human beings to categorize, to classify, and science probably evolves out of that but...any thoughts on this? You're the experts in science here.”

Expressed Beliefs

“race is socially constructed”

“we unconsciously convey our attitudes toward our students and they perceive those attitudes in just milliseconds”

“we can't control our body language... it is subconscious, so it's important to examine our own beliefs and to think about what we think about race and racism”

It's okay to be outside of your comfort zone

Science is a neutral subject matter and can be used to talk about culture and race (9:07)

We [this group] are the meeting ground. We're the place where these conversations [about race and culture] are going to happen.

There are no easy answers. “My answer is often ‘it depends’”

We can effect change. “You now that seashore, or that starfish story? The little boy walking along the beach throwing starfish back in the water and somebody thinks it futile and says it makes no difference, but, well, it makes a difference to that starfish. So, just echoing what you're saying, that I think especially when you think about that eight people in your district [in CRISP] —that's a critical mass. That is a critical mass in [the school district] to start turning things really upside down. It really is.”

Practiced (Enacted)

Opening Questions

Are you all clear about what's going on today, pretty much?

Did everybody get a chance to read the article?

What's interesting about this as a scientific article? As cultural?

Was there anything new to you? Anything unknown?

Was there anything that confirmed something you knew already?

Affirming/Shaping/Paraphrasing/Messaging

You've observed something here... what have you uncovered?

Here are some of the things I'm hearing you say...

Okay, so keep bringing up these ideas and we'll try to say what it is we're really saying here...excellent, wonderful!

And so, what I would identify from what you're saying is...

"So, I hear you saying that you're setting a tone with your students..."

"Because that's definitely a part of culturally responsive teaching..."

"So, I'm going to point out a couple other things that you're saying, really"

"I think you're bringing out a really important point here..."

"And, again, I'm hearing a number of things that people are saying. I'm hearing Adrienne questioning...'is it okay to be in your comfort zone?'"

Including/Redirecting

"And from this side of the room?"

"Anything else, either in response to what someone else said or on your own?"

"And do the rest of you do that as well?"

"Now let's try to deconstruct this. What's going on with us, with families, with other teachers?"

"What do the rest of you think, and where do you think [kid's focus on differences] comes from?"

"What kind of implications does it have for students... *all* students?"

"So can we talk about that a little bit, too?"

"Does that make sense to you?"

"OK, and we've really identified that fear... it's important and we've been talking about it a lot. [Let's go] back to the article..."

"Anybody else? What are you thinking about?"

Digging Deeper/Focusing

"What do you know about opening up a discussion [on race and culture] with people that's difficult?"

What about science "allows up to talk about [race and culture] that's really emotionally charged?"

[Reads a short passage] How do you react to that... what's below the surface?

"Let's think about how that's been affecting your teaching or maybe just how the school operates..."

"Let's just talk about that and about the challenges and opportunities that we have..."

"How can we really make our teaching effective, and how can we help kids learn together?"

Connected to local experiences

Knew all participants' names and roles

Recognized members are "dealing with" Latino populations

Recognized that personal backgrounds and beliefs [as whites] are okay too in discussions on race and culture

"So, thinking about [your community] and thinking about that you've kind of had this coexistence for, I mean it's been 20 years, and you've made some good changes. You've made some good

progress, but it's still kind of a light coexistence. It's still fairly separate."

"I think you're in a really unique position in this grouping here, because you're a really small community [asks who lives in the community, all do] So you're affected by it not only in your classroom but you're affected in the grocery store, and in church, and on the streets when you walking. So it's even got a larger stake for you because it's your community..."

Transparency in facilitation goals

Model cultural responsive strategies and make them explicit

Give voice to unconscious beliefs (underlying assumptions)

Thinking about our own thinking (metacognition)

"We're kind of coming to the point where we should wrap up our final thoughts but maybe can we go around, we don't have to go in order, but let everybody kind of have a last say on something that they're either going to go think about or that they're still questioning or that it can be whatever you want, but just kind of where's your brain at right now?"

"OK, well, we do need to end, and this was a great conversation and I'm just really enjoying being with you so far!"

Appendix N: Table 7. Molly's Working Session with small groups 1/22/2009

Opening Update

Update on earlier meeting with 4-6th grade teachers' projects
 Review Tier II and Tier II language
 Description of action research data collection (pre/post)
 Identification of key concepts in chapters (7-8 grade science)
 EL learner strategies and structured approach to assure they are using the framework

Research Questions

"What we'll do together"- serving as an EL learner expert in developing the action research plan for the science teachers.

Tying Projects Together- "I think that Cindy and Nicole are doing something pretty similar, but at a different level, which is kind of neat"

Sharing Expertise

"That's why *you're* the science coordinator [laughter]"

"You could probably publish something like that" (about the new science standards and EL learner Tiered II vocabulary)

Used role as EL learner expert to encourage focus on Tier II vocabulary

Community Needs

Discussion of new science teaching standards effective in one month*

Discussion of job changes next year (affecting those involved as they will not be teaching the same grade level)*

Idea Generation w/ 7-8th grade teachers

Looking into learning styles as an action research project (13:20)

Asking questions, digging into how to assess

Related to research on EL learner learning styles (not multiple intelligences)

"Keep it simple"- We know top 3: visual, auditory, kinesthetic

"I don't want to tell you what to do but they would be the easiest to focus on..." (15:40)

"I can try to send you something [to assess multiple intelligences]"

Paraphrased project and then began discussion of potential Questions (used example from another group that is working on a Tier II language with EL learners.

Walked through Action Research Steps (*enacted as an advisor would with a student*)

Writing a Question: "So, what do you think your question would be?" [No response]

"So I would say 'How does using all three modalities- visual, auditory, and kinesthetic- in my teaching impact

student learning?” (no evidence that she is encouraging participants to write EL learner emphasis into questions)

People get better at it over time.”

Very encouraging to group (writing questions is the hardest)

Identifying Participants/Data Sources

Ideas and Pitfalls in data collection in classrooms

“Are you feeling more comfortable [with this idea and plan]?”

Timeline for project

Idea Generation w/ K-3rd grade teachers- *small group discussion*

Update on what others are doing in the group - *sharing*

Repeated info on Tier II and III

Shared what AR ideas are so far in other grades

“What they decided is- and I kind of pushed them in this direction—is to focus on visual, auditory, and kinesthetic learners” (1:18)

Clarification of ideas sent via email from K-3 teachers

Identified a Problem to Study

Idea involves EL learners (Identifies as Differentiated Instruction)

Makes recommendations and offers assistance

Listens quite a bit to Cindy as she tries to come up with ideas

Helps frustrated group member develop several new questions (not EL learner) around the ideas—“focusing on socio-emotional needs in the classroom, making learning fun” and then offers ways to collect data on this (observation, student interviews, assessments)

Appendix O: Facilitators' Feedback after Final Review of Narratives

Hi Stacy. I finally got through Chapter 8. Did I say "yeah" that many times? My first reaction was...is Susan really me? But the more I read and recalled my feelings through that project (remember[ing] the frustration, the teachers' anxiety and my disappointment in the presentation phase when one of the teachers didn't even show up)...[the more I thought] you've captured me pretty well! Certainly I was used to facilitating logistics and end products that satisfied the "district" leaders. I'm so glad I got out when I did. I remember telling you that you should have gotten a person who was a "real" facilitator rather than a content person such as me. Feel free to use anything that is helpful to you. Thanks for the opportunity to read reflectively about myself and the CRISP project.

-Susan, September 19, 2011

Hi Stacy. I finally was able to read your narrative and was enthralled. I definitely will need to read some of the references you cited as they sound intriguing. Your writing is engaging and you've definitely probed deep within our conversations to extract underlying meaning. I would say I was surprised by some of what you wrote, but not in a critical way. It's just so interesting to think of you pondering the meaning behind our words and actions. I wouldn't change anything. I wish you well with your defense. You can be confident—you've been scrupulous in your details. I hope we'll have the opportunity to talk again! Best wishes.

-Molly, September 20, 2011

Hey Stacy. Sorry I haven't gotten back to you sooner, but the weekend was crazy. This was fascinating and I would love to talk to you again. I think you did a wonderful job capturing the essence of the CRISP project and my participation as a facilitator. It was so weird reading it and trying to understand it from your lens. It was also very interesting to read how you interpreted my not recording meetings and some of the other things that I didn't do. Really I'm not nearly as intellectual as you made me appear.... LOL! I'm pretty unorganized and tend to think that some things just aren't important. I guess I really didn't think the goals of the project would actually be accomplished in the end, so maybe unconsciously I didn't think that what I was doing with the team would really matter. Know that I'm honored that you chose me to be part of your dissertation. I'm finished working at 2 most days, so if you want to meet for coffee I'd be game.

-Rachel, September 13, 2011

Wow. I've never been had a chapter in a book dedicated to me!... I'm absolutely impressed with your ability to take a year's worth of qualitative data and summarize it so articulately and accurately. You've done fine work. But the only real qualms I have with this document is that I didn't find anything about ruggedly handsome... I'll look for that phrase on the chapter title page in your next draft. Thanks for your excellent work. I look forward to seeing your completed thesis!

-Matthew, September 12, 2011