



University of Tennessee, Knoxville TRACE: Tennessee Research and Creative **Exchange**

Doctoral Dissertations

Graduate School

12-2009

Signposts on the Path to Learning: A Phenomenological Case Study

Melba L. Roberts University of Tennessee - Knoxville

Follow this and additional works at: https://trace.tennessee.edu/utk_graddiss



Part of the Education Commons

Recommended Citation

Roberts, Melba L., "Signposts on the Path to Learning: A Phenomenological Case Study." PhD diss., University of Tennessee, 2009.

https://trace.tennessee.edu/utk_graddiss/633

This Dissertation is brought to you for free and open access by the Graduate School at TRACE: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Doctoral Dissertations by an authorized administrator of TRACE: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

To the Graduate Council:

I am submitting herewith a dissertation written by Melba L. Roberts entitled "Signposts on the Path to Learning: A Phenomenological Case Study." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Education.

Colleen Gilrane, Major Professor

We have read this dissertation and recommend its acceptance:

Stergios Botzakis, Ralph Brockett, Mary Ziegler

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

To the Graduate Council:	
Path to Learning: A Phenomenological Cas	ten by Melba Lee Roberts entitled "Signposts on the se Study." I have examined the final electronic copy I recommend that it be accepted in partial fulfillment of Philosophy, with a major in Education.
	Colleen Gilrane, Major Professor
We have read this dissertation and recommend its acceptance:	
Stergios Botzakis	
Ralph Brockett	
Mary Ziegler	
	Accepted for the Council:
	Carolyn R. Hodges
	Vice Provost and Dean of the Graduate School
Original signatures are on file with official s	student records.

SIGNPOSTS ON THE PATH TO TEACHER LEARNING: A PHENOMENOLOGICAL CASE STUDY

A Dissertation Presented for

The Doctor of Philosophy Degree

The University of Tennessee, Knoxville

Melba Lee Roberts

December 2009

Copyright© 2009 by Melba Roberts

All rights reserved.

ACKNOWLEDGEMENTS

•

First, I would like to thank my family for their unending support: my mother, who taught me to love writing, my father and son who were unceasing in their patience and held steadfast in their belief in my abilities. I appreciate my participant who opened her life to me so that I might learn from her experiences. I value the encouragement from friends who were quick to help when life threatened to overwhelm. And finally, I am grateful for my mentors who pointed me in the right direction when I faltered: Dr. Stergios Botzakis who demonstrated the value of technology in adult learning; Drs. Ralph Brocket and Mary Ziegler who first introduced me to theories of adult learning and then, by example, revealed to me the importance of teaching from the heart; and Dr. Colleen Gilrane, who has faithfully walked beside rather than in front of me on my path of development.

ABSTRACT

The purpose of this study was to describe the phenomenon of learning among high school educators engaged in an on-line learning community studying the application of reader response theory across the curriculum following a two-day professional development (PD) workshop. The theoretical framework both for the design and content of the workshop and for the design of the study was social constructivism. The specific research question to be answered with respect to the participant, Ariel, was, "what is the teacher's experience in an on-line learning community?" For this phenomenological case study, the methods for data collection included two semi-structured interviews and a series of on-line communications with the teacher. Interview and email transcripts were parsed into meaning units, followed by theme analysis uncovered by a "detailed reading approach" (van Manen, 1990, p. 3). Three themes were threaded together to provide an impression of the teacher's experience, lending itself to description. Following a hermeneutic process, I used these themes to weave an image of the teacher's experience, and then consulted my own experiences, research and theoretical literature, and a work of young-adult literature as sources for interpretation (van Manen, 1990). I worked to ensure trustworthiness through bracketing, prolonged engagement, triangulation of multiple data sources, member checking, peer debriefing, and thick description to support transferability.

Analysis of Ariel's experience led to a description of her as a teacher committed to professional growth, influenced by her analysis of opportunity, motivation to learn, and her response to conditions that supported her growth: time for talk, time for practice, freedom of choice, and appropriate challenge. Reflection on her experience in light of my experiences and the literature on adult learning and development led to two conclusions. First, there are critical actions that foster teacher development and learning. And second, individuals who influence continuing education for teachers have a responsibility to act through an ethic of care. Implications of this research for designers of PD are that they need to keep in mind that teachers have specific needs that must be met by their learning environment, including flexibility, activities designed for adult learning and development, sustained engagement, support for collaborative learning, and obvious benefit to students. Recommendations for research growing out of the present study include exploring the relationships among student learning and teacher participation in professional development of this type, further investigations in the possibilities of online learning communities, including teachers as co-researchers in such projects, and indepth discourse analysis of the transcripts and online communications to explore issues of power and hegemony.

TABLE OF CONTENTS

SIGNPOSTS ON THE PATH TO TEACHER LEARNING:	ii
ACKNOWLEDGEMENTS	iv
ABSTRACT	V
TABLE OF CONTENTS	vi
List of Tables and Figures	viii
CHAPTER I: INTRODUCTION	1
Introduction	1
Statement of the Problem	5
Purpose of the Study	8
Research Questions	8
Need for the Study	9
Theoretical Framework	10
Assumptions	10
Definitions of Terms	12
Organization of the Dissertation	16
CHAPTER II: REVIEW OF THE LITERATURE	17
Theory and Research on Reading Instruction	17
Theory and Research on Adult Learning	19
Narrowing the Topic	19
Setting the Tone	20
Arranging the Time	21
Facilitating Learner Engagement	21
CHAPTER III: METHODOLOGY	23
Selection of Phenomenology	23
Procedure	24
Overview	24
Description of the Case	27

	vii
Data Collection	
Data Analysis and Interpretation	
Establishing Trustworthiness	
CHAPTER IV: DESCRIPTION AND INTERPRETATION	
Description: A Teacher Committed to Professional Growth	
Description of Teacher as Learner	37
Analysis of Opportunity	37
Motivation to Learn	45
Conditions for Growth	54
Interpretation: Ariel's Experiences as Signposts	67
Analysis of Opportunity	68
Motivation to Learn	70
Conditions for Growth	74
CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS	83
Conclusions: Providing Professional Development That Supports Teacher Learners	83
Critical Actions That Foster Teacher Development and Learning	83
Offering Experiences Worthy of Teacher Time and Attention	83
Mining Sources that Motivate Teacher Growth	86
Adopting Conditions that Nurture Teacher Growth	88
Acting Through an Ethic of Care	100
Recommendations: Following the Signposts to Improved Professional Development	105
Recommendations for Practice	105
Recommendations for Research	108
LIST OF REFERENCES	113
APPENDICES	147
APPENDIX A: READER RESPONSE THEORY	148
APPENDIX B: PROFESSIONAL DEVELOPMENT AGENDA	151
APPENDIX C: RESEARCH LOG	
APPENDIX D: PARTICIPANT DESCRIPTION	
VITA	

List of Tables and Figures

Table	Page
Table 1. Timeline of research process	28
Figures	Page
Figure 1. The link between literature and research	33
Figure 2. Chinese character for "think"	70

CHAPTER I: INTRODUCTION

Introduction

The Congress hereby finds and declares that the security of the Nation requires the fullest development of the mental resources and technical skills of its young men and women.

--National Defense Education Act of 1958

Ushered onto our national landscape by Sputnik over fifty years ago, the declaration of the National Defense Education Act could have easily introduced our current reauthorization of the Elementary and Secondary Education Act titled No Child Left Behind. Statistics on the intellectual capital of our nation's youth are grim. Among all ninth graders, approximately 3 in 10 do not graduate on time. For African American and Hispanic students, that ratio increases to 5 in 10 (Greene & Winters, 2005). Against the backdrop of technological development, and an information technology explosion in particular, it is no surprise that approximately 90% of the fastest-growing jobs of the future will require some postsecondary education (Chao, 2006). While not preparing to face the threat of Cold War, we must nevertheless prepare to meet the challenge of graduating our nation's youth or suffer the consequences of wholesale outsourcing of jobs to other countries.

One key to success in a democratic society is to acquire reading skills needed for making responsible decisions. Unfortunately, the mountainous volume of information available today

makes decisions for consumers of print tougher than in previous periods of our nation's history. Library growth is one indicator that we have entered the Information Age. The Library of Congress (2007), for example, increased its holdings from the original 3,000 to the current 138 million holdings. In 2007 alone, it registered over 526,000 copyright claims. That same year, the Library provided reference services to over 682 thousand individuals, reported 1.4 million visitors, and hosted 614 million page-visits to the Library web site (Library of Congress, 2007). While the magnitude of print material available offers potential for an educated populace, individuals without the skills to comprehend, interpret, and evaluate text are left without tools for self-reliance and discernment that are required of a democratic citizenry.

Statistics on digital information only add to the challenge facing society. A paper by the Internet Data Corporation (IDC) (2008) elucidates the vastness of our digital universe. In 2007, for example, the internet carried 281 million gigabytes, a number equaling approximately "45 gigabytes per person on the planet" (IDC, 2008, p. 7). By 2011, there will be 2 billion internet travelers, all "interconnected ... creating and consuming" (IDC, 2008, p. 9). Of course, not all of the digital bits that are generated and travel the internet get stored, but IDC warns that within five years, "almost half of the digital universe will not have a permanent home" (2008, p. 2).

Given the exponential expansion of information increasingly available to all members of society, one goal of education is to teach students to consume large quantities of text. In a democracy it is imperative that all citizens learn to read, interpret, evaluate, and apply large quantities of information in order to make well-informed decisions. Fortunately, there are ways for educators to nurture comprehension skills. For instance, one proven path to success is to

teach students how to engage with text. Teachers from across the curriculum, with or without reading certification, employ specific strategies that increase student transaction with text.

Eva is one such teacher. A high school nursing teacher, Eva regularly relies on *Reader Response Theory* (Rosenblatt, 2005) to scaffold challenging reading assignments for her students taking Introduction to Anatomy. But this has not always been the case. In the past, her students struggled with the massive amounts of vocabulary required by the nursing curriculum and complained that so many new words hampered their understanding of reading assignments.

Today, however, things are different.

Having attended a two-day professional development (PD) workshop on reading across the curriculum, Eva leaves the workshop eager for more. Following advice from the workshop leader, Eva borrows books on educational theory (Dimitriadis & Kamberelis, 2006; Lee & Smagorinsky, 2000; Rosenblatt, 2005) and literacy instruction (Jetton & Dole, Eds., 2004; Pressley, 2006) from her local library. Against the constructivist framework, Eva understands the benefit of collaborating with students: by making multiple connections to text together, she and her students will co-construct stronger meanings from their readings.

Today Eva is introducing anatomy of the head and neck. From her workshop, she recalls that reading designed for aesthetic purposes (for pleasure), as opposed to efferent purposes (for information), triggers emotion centers of the brain resulting in stronger memories (Bolles, 1988; Damasio, 1994; Kagan, 1994; Pert, 1997; Rosenblatt, 2005). For this reason, Eva chooses an excerpt from *Stiff* (Roach, 2003), a journalist's humorous narrative of her investigation into the many uses for human cadavers today. Covering the book title, she begins by showing only the image from the cover—a pair of human feet with body tag. Together with her students, she

brainstorms possible topics for the book. Given that the class is situated in the nursing curriculum, many of the words volunteered relate to medicine and human anatomy. Terms are recorded, sorted, and labeled. To further extend thinking, Eva adds visuals relating to forensics. Immediately she and her students contribute words relating to criminal investigations and the Body Farm located at the nearby university. Another image of a casket and funeral director generates terms associated with embalming and assorted funeral practices. While on an emotional level, Eva enjoys her students delighted squeals of disgust, on a professional level, she is aware that students are using background knowledge and language to engage with text. Dewey would call this "intelligent inquiry" or learning that is "mediated by language" (Dimitriadis & Kamberelis, 2006, p. 10).

After sharing the title, Eva reads an excerpt from the book to her students. Her students respond with grins, grimaces, and laughter at the book's graphic content, but all give rapt attention as her voice carries the author's every word. Next, she asks her students to work in pairs as they read the piece a second time and select key words from the text for completing an expository pyramid (Boling & Evans, 2008, p. 63). Eva is pleased that all complete the assignment. While many of the author's words can be found in a nursing textbook, the context of the narrative will lend greater meaning to the students' vocabulary. Eva is cognizant that the activity bears witness to Bruner's "cultural socialization" as her students transact with peers and text to negotiate meaning (Dimitriadis & Kamberelis, 2006).

Finally, Eva asks that students select key terms from their pyramid to create a synthesis of the *Stiff* (2003) excerpt. Much to her surprise, her students make quick work of this assignment. In the past, such assignments were met with groans, gnashing of teeth, and pulling

of hair—hers and theirs. But the succession of constructivist strategies she now employs allows each student to operate within Vygotsky's zone of proximal development (Lee & Smagorinsky, 2000), or just beyond the student's comfort level for independent reading (Dimitriadis & Kamberelis, 2006), allowing each to make short work of what would once have been a tedious activity. Her students are happy. Eva is happy. There is only one problem; Eva is not real.

Statement of the Problem

Eva is a fictional example of an adult learner intent on developing a strong professional identity, with or without the support of her school system. As a career-technical teacher, Eva is aware that by supporting reading in her classroom, she is helping her students master the nursing curriculum. But Eva is an ideal. Given the added responsibilities of bus duty, coaching, keeping parents informed, and grading, many secondary teachers do not have the time or resources needed to pursue independent study following workshops. In addition, many high school teachers are uncomfortable with the idea of teaching reading to their students. With only six semester hours in reading instruction required by most states for secondary certification, many teachers complete their certification programs feeling ill-prepared to use reading strategies.

Instead, it is common to hear signs of resistance, such as "that's the English department's responsibility. I do well enough to teach my own curriculum." Teachers who lack Eva's courage often deny themselves and their students a chance to improve learning and sometimes take comfort in placing blame on others.

Nevertheless, in defense of such teachers, when PD is offered on reading instruction, it frequently follows the traditional delivery patterns, as in short-term, pedantic, stand-alone

workshops that offer little opportunity for active learning and or follow-up. Therefore, it is no wonder that teachers show signs of fear and anxiety when asked to deliver reading instruction for which they have little preparation or support.

Since the 1990's, researchers have voiced concern that the one-shot workshop strategy is ineffective (Little, 1994; Miles, 1995). In fact, more recent studies show that workshops without follow-up fail to provide teachers with what they need to improve instruction (Porter, Birman, & Garet, 2000; Smylie, Allensworth, Greenberg, Harris, & Luppescu, 2001; Wenglinsky, 2000; Western Regional Educational Laboratory, 2000).

Why are stand-alone workshops ineffective? In-service "training" is often planned, delivered, and evaluated by administrators rather than the teachers for whom the workshop is intended. The result is that teachers are denied three qualities that are vital for motivation—voice, choice, and agency—in designing their own self-improvement plans (Holland, Lachicotte, Skinner, Cain, 1998; Wlodkowski, 2004). In addition, systems frequently compact workshops into small time spans. Condensed learning episodes are problematic for PD because they afford little opportunity for teachers to engage with one another or with what they are learning. Experts agree that adult learners need activities that promote active involvement for ultimate transfer and retention to occur (Dean, 2002; Wlodkowski, 2004). And finally, because systems are concerned with financing PD, the workshops provided often have little connection to specific content-area instruction. Because teachers have difficulty linking garden-variety workshops to their own classroom practices, they also are challenged to draw connections with school improvement efforts. Not surprisingly, organizational concerns and funding issues are cited as

reasons for over-reliance on the workshop method (Darling-Hammond & McLaughlin, 1995; Little, 1994).

Despite evidence of its ineffectiveness, the stand-alone workshop model persists. A survey from the National Center for Education Statistics (2001) reveals that educators are afforded a day or less of PD each year on any single topic. Only 18% of those teachers surveyed saw connection between their workshops and overall school improvement efforts. Less than 15% felt they were given sufficient follow-up to implement ideas from their workshops and less than a third believed their workshops contributed to significant improvement in their teaching (NCES, 2001). Obviously, research and statistics suggest that some form of follow-up is needed. But in light of the current economic decline, systems may be hard-pressed to design PD that is both affordable and effective.

As a result, finding ways to deliver effective PD literacy instruction is needed. Experts suggest a wide variety of delivery structures for PD as being effective. Langer (2004), for instance, conducted a four-state, multi-case study of successful schools over a five-year period. Her research revealed that effective schools enact professionalism differently, including how they plan for PD. In one system, for example, all new teachers are assigned mentors for the first year. The system sponsors an intensive course that the mentor and new teacher experience together. Course components include shared journals on lesson planning, workshops, and materials that foster collaboration. In similar schools, Langer (2004) found self-study groups as well as university partnerships. Sessions with guest speakers were less geared toward information delivery and more aimed at collaborative problem-solving. Unfortunately, some of these options can be costly or labor-intensive. In an attempt to provide PD, many institutions

save funds by cutting the very support mechanism needed to make PD worthy of teacher time and effort. As a result, systems end up with a shot-gun effect that does little to change teacher beliefs or improve instruction.

Numerous sources show that interest exists in the use of computer technology by adult learning communities (Boyer, Maher, & Kirkman, 2006; Day, 2004; McLafferty, 2000; Pratt, 2008; Preece, 2000; Ziegler, Paulus, & Woodside, 2006). None of these authors, however, addressed use of web-based, asynchronous collaboration to support secondary teacher PD following a workshop experience.

Purpose of the Study

The purpose of this study was to describe the phenomenon of learning among high school educators engaged in an on-line learning community studying the application of reader response theory across the curriculum.

Research Questions

My research program asks the question, "How does an on-line learning community allow teachers in a suburban high school to grow professionally?"

Two sub-questions are:

- 1. What are the teachers' experiences in an on-line learning community?
- 2. How do these teachers discursively construct professional identity in an on-line learning community?

The first sub-question was the focus of this research study, in which there was one participant.

Need for the Study

This study contributes to the discussion on teacher professionalism because it illuminates the voice of an adult learner as she co-constructs identity while participating in a learning environment. In particular, high school teachers may vicariously experience an on-line learning community through the voice of the study's participant. Teachers may learn what it means to collaborate in this environment, how collaboration impacts classroom practice, and how the on-line experience supports identity construction. Because educators typically have little time to support one another in learning new strategies (Krajewski, 1995), teachers may be interested in reading about a structured experience where peer and mentor support are available. My rationale was to provide a space for a community of practice (Wenger, 1998) that nurtured teacher growth. For those teachers who rarely pause for self-reflection, reading about these experiences may demonstrate that reflective practice is critical for continued renewal (Steffy & Wolfe, 2001). And finally, by reading the personal story of one teacher as she learns how to support reading in her classrooms, other educators may be motivated to change.

This setting (on-line community) is also worthy of investigation for administrators who are often responsible for planning PD for their teachers. By reading the collaborative texts of the participant and the investigator/mentor, school principals and system directors may be more willing to trust the on-line learning community as a worthy form of PD.

Within the research community, this study will illuminate what it means to be a member of this on-line learning community. Perhaps most importantly, I expect to grow professionally as I participate in co-construction of an online environment while learning to apply reader response theory in the classroom.

Theoretical Framework

The methodological framework for my study was largely influenced by the forerunners of constructivism: Dewey, Vygotsky, and Bruner (Dimitriadis & Kamberelis, 2006). Within this paradigm, the epistemological assumption is that truth is what two or more people agree that it is. In my researcher role, for example, I was mutually engaged as researcher and participant, mentor and learner—a researcher role that was more actively engaged with participants than in positivist traditions (Hatch, 2002). During the hermeneutic cycle of analysis, reporting, and member checking, I again engaged equally with my participant to ensure that I had accurately captured the essence of her experiences.

In the substantive framework for my research, I again referred to constructivism as a guiding principle. Drawing from Gergen's Social Constructivism (2001), I believe that all of human knowledge is discursively constituted and is therefore socio-culturally and temporally situated. Thus, all human experiences are equally worthy of study. For this reason, I was not concerned with including large numbers of widely diverse adults in my study since generalizability is not a goal of phenomenological research. I anticipate that the data collected through the experiences of the teacher in my study will be transferable to teachers, administrators, and researchers interested in professional learning through on-line communities.

Assumptions

I believe that humans are basically good, and that each individual has limitless potential. I believe that education is a basic human right. The goal of education, I believe, is to empower people so that they may propel themselves toward their own greatest potential. As a learner,

educator, and researcher, I am a constructivist. I believe that truth is what we agree it is, and that teacher and learner (as well as researcher and participant) are joined in a process of coconstruction. I believe that learning is culturally and socially situated. I believe that language, whether written or spoken, supports learning and development. As a naturalist inquirer, I believe that one learns much from observing, listening, participating, describing, and reflecting. I believe that the essence or meaning of life cannot be reduced to a statistic but must be conveyed through rich, thick description. I believe that all children are precious. I believe that the greatest gift of adulthood is experience. The ability to learn from experience through self-reflection, collaboration with others, and activity is a sign of both past and future growth. These beliefs have influenced my personal growth, my professional choices, my learning paths, and this study.

Numerous life-experiences have propelled me toward this point in my life and to this study in particular. For example, twenty-three years as teacher, administrator, participant, and presenter in system-level workshops have provided motivation for this study. Sadly, the majority of my professional development experiences have been in garden-variety, one-shot, top-down workshops which neither inspired nor remained. Fortunately, while taking classes for my Masters and Education Specialist degrees, several professors exposed me to the benefits of collaborative learning. It was not until I entered my doctoral program, however, that I discovered the power of learning communities. One experience was especially transformative. I completed that course with a greater understanding of reflective practice, mentoring relationships, the power of on-line communication, and the importance of shared communication to learning. My experiences tell me there is a better way. As guardians of our future, educators deserve better.

Definitions of Terms

The terms I will use for my study will include but are not limited to the following.

Aesthetic: Rosenblatt's term for the response one gives to reading for pleasure (Rosenblatt, 2005).

Agency: inner control for one's behavior (Holland, Lachicotte, Skinner, Cain, 1998).

Androgogy: facilitation of learning in adults (Knowles in Hiemstra & Sisco, 1990).

Asynchronous Communication: on-line communication that does not have to occur at the same time (Preece, 2000).

Blended Environment: a setting that involves individuals in both a three-dimensional environment and an on-line environment (Boyer, Maher, Kirkman, 2006).

Bracketing: a state of suspended judgment where previous experiences and perceptions are set aside to allow the researcher to see with new eyes (Creswell, 2007). Same as Epoche (Moustakas, 1994).

Communities of Practice: a theory of learning stating that individuals learn through social participation. Identity, social practice, meaning, and community are key terms. "The formation of a community of practice is … the negotiation of identities" (Wenger, 1998, inside cover).

Confirmability: can the researcher corroborate his/her findings (Guba & Lincoln, 1981)?

Constructivism: no absolute truth exists; individual human perceptions of truth (or reality) are worthy of examination using naturalistic inquiry methods; hermeneutic principles assist researchers in interpretive work which ultimately results in descriptive narrative (Hatch, 2002).

Dialogic Relationships: relationships characterized by solidarity that arise through communicative exchange; considered to be critical for development of agency (Moore & Cunningham, 2006).

Efferent: Rosenblatt's distinction as the response one gives for reading text for information (Rosenblatt, 2005).

Generalizability: (naturalistic) "people look for patterns that explain their own experience as well as events in the world around them" (Merriam, 1998).

Hermaneutics: based on constructivism, this approach to phenomenology assumes that multiple realities exist and that the meanings one assigns to experience are worthy of study (Hatch, 2002); "describes how one interprets the 'texts' of life" (van Manen, 1990).

Identity: emotionally laden self-understanding (Holland, Lachicotte, Skinner, & Cain, 1998).

Lived Experiences: "a term used in phenomenological studies to emphasize the importance of individual experiences of people as conscious human beings" (Creswell, 2007, p. 236).

Member Checking: the researcher solicits feedback from participants on whether he/she has accurately captured their experience (Creswell, 2007). "The most critical technique for establishing credibility" (Lincoln & Guba, 1985, p. 314).

Naturalistic Inquiry: qualitative research; multiple, constructed realities can only be studied in their essence (as opposed to their deconstructed parts); the researcher and participant co-construct reality; the study of naturally occurring events in their usual settings (Hatch, 2002).

Phenomena: "The building blocks of human science and the basis for all knowledge" (Moustakas, 1994, p. 26).

Phenomenology: "describes how one orients to lived experience" (van Manen, 1990, p. 4).

Phenomenological Study: an approach to research that seeks to capture the essence or meaning of something through comprehensive description and structural analysis (Moustakas, 1994).

Peer Debriefing: review of analysis, interpretation, and/or findings by a colleague or mentor.

Qualitative Research: same as interpretive research or naturalistic research; "an umbrella concept covering several forms of inquiry that help us understand and explain the meaning of social phenomena with as little disruption of the natural setting as possible" (Merriam, 1998, p. 5).

Reader Response Theory: Rosenblatt's theory of reading indicating that the meaning one elicits from reading is a result of transaction or interaction between text and self (Graves, 2004). Postulates that the meaning gleaned from any given text varies from reader to reader, from purpose to purpose, and from situation to situation (Rosenblatt, 2005).

Reflective Practice: Schon's term for professional development that incorporates tools such as portfolios, journals, and critical learning groups to support professional growth (Ferraro, 2000).

Rosenblatt's Definition of Reading: "a transaction, a two-way process, involving a reader and a text at a particular time under particular circumstance" (Rosenblatt, 1982, p. 268).

Situated Learning: learning that occurs in an environment equal to the one in which it is naturally applied (Wenger, 1998).

Social Constructionism: reality is based on social processes; language is the vehicle for the transference of knowledge (Gergen, 2001).

Socially Situated Identities: while identity is the internal, stable state of self-belief, socially situated identity is the self-belief that is in a constant state of negotiation based on external, social interaction (Lewis & Ketter, 2004).

Thick Description: facilitates decision regarding transfer of study findings to other settings; characterized as highly detailed (Creswell, 2007).

Transferability: degree to which findings from a study can be generalized to similar settings (Lincoln & Guba, 1985); typically less of a concern in naturalistic inquiry.

Triangulation: Use of multiple sources of data and peer debriefers to validate data analysis and interpretation (Merriam, 1998).

Trustworthiness: has the researcher faithfully captured the phenomenon? (Kincheloe & McLaren, 1998).

Zone of Proximal Development: Vygotsky's idea of the optimal level of direct instruction; the level of functioning just beyond successful independent functioning that is met with success with the support of another (Holland, Lachicotte, Skinner, & Cain, 1998).

Organization of the Dissertation

This dissertation is organized into the traditional five chapters, beginning with the introduction and statement of the problem. The first chapter includes the statement of the problem, the purpose for my study, the research question, the significance of the study, the theoretical framework, assumptions, definition of terms, and organization of the study. In the second chapter I discuss existent research on adult learning theories and online learning communities as well as the research supporting the reading in the content area workshop that was the prelude to this study. In the third chapter I detail my research methodologies. The fourth chapter offers my research findings in a narrative revealing the essence of the phenomenon and includes sufficient samples of my participant's voice to insure confirmability. The findings inform my final chapter which draws conclusions and outlines implications for future research and practice.

CHAPTER II: REVIEW OF THE LITERATURE

This project stemmed from a dual interest in helping adolescents improve their reading skills and supporting teachers through PD. The PD workshop I offered was influenced by theory and research in the area of literacy instruction. The PD plan was based on theory and research in adult learning and development. Each of these areas is detailed below, with further discussion in the adult education section on how this literature affected the design of the workshop and the research project.

Theory and Research on Reading Instruction

Due to its connections to social constructivism and creation of meaning through written and spoken language, *Reader Response Theory* (Rosenblatt, 2005) became the central concept as I planned PD that would benefit students and teachers in their quest for development (see expanded discussion of Reader Response Theory in Appendix A). Rosenblatt explained that reading is "a transaction, a two-way process, involving a reader and a text at a particular time under particular circumstances" (p. 268). One transaction is an efferent response, or a cognitive reaction to text, like that which occurs "when the reader is actively searching for something that needs to be taken from the text" (Baer, 2005, p. 215), such as the beginning and end dates for the Spanish Armada. A second transaction is an aesthetic response, or an emotional reaction to text, like that which occurs "when the reader is focusing on creating something during reading" (Baer, p. 215), such as a visual image or emotion from a poem. Both reactions are present while reading, although efferent responses may be more present while reading expository text while

aesthetic responses may be more present while reading narrative text. Since reader response varies, Rosenblatt postulated that the meaning gleaned from any given text varies from reader to reader, from purpose to purpose, and from situation to situation. The implication for teachers is that student readers are not empty vessels waiting to be filled by text; readers must engage with text in order to make their own meaning. Meaning is generated in the transaction.

The strategies that teachers use to scaffold student reading have potential for influencing student transactions with text; thus, I wanted to nurture teaching approaches that support students in understanding that "meaning is made, not found" (Alvermann, Swafford & Montero, 2004, p. 153). Such approaches actively engage readers (Cambourne, 2002) and build upon student interaction, both written and spoken, for garnering meaning from text (Hansen, 2001; Newell, 1984; Rubin, 1990; Wooten, 2000).

Exceptionally skilled readers are actively engaged with reading, beginning prior to reading and continuing on after reading has ended (Pressley & Afflerbach, 1995) and monitor their thinking while working toward a goal (Brown & DeLoache, 1978; Flavell, 1977; Flavell & Wellman, 1977). Furthermore, explicit instruction in metacognition during the use of these strategies can help students transfer strategy use to other reading situations (Wooten, 2000). Studies of explicit instruction in text strategies demonstrate support for increased comprehension through metacognition before, during, and after reading (Anderson & Pearson, 2006; Amer, 1992; Beck, McKeown, Hamilton, & Kucan, 1997; Bean, Potter & Clark, 1980; Borkowsi, Levers, & Gruenenfelder, 1976; Cain & Oakhill, 2004; Carrell, 1984; Cavenaugh & Borkowski, 1979; Chinn & Anderson, 1998; Davey & McBride, 1986; Duke & Pearson, 2002; Graves, 2004; Hansen, 2001; Jenkins, Johnson & Hileman, 2004; Langer, 1987; Levin & Pressley, 1981;

Manzo, 2002; Meyer & Rice, 1984; Pressley, 2006; Stahl & Shanahan, 2004; Vacca, 2002; van Dijk & Kintsch, 1983; Wooten, 2000).

Numerous sources from brain research indicate that emotion drives attention and memory (Bolles, 1988; Damasio, 1994; Kagan, 1994; Ledoux, 1993; Pert, 1997) and that emotion-laden text has potential for motivating learning (Sylwester, 2000). Literacy researchers agree that motivation for and comprehension of content area reading are enhanced when texts elicit aesthetic responses (Baer, 2005; Cox & Many, 1992; Pressley, 2006).

All of these contributed to my planning of professional development for this study, as demonstrated in the agenda in Appendix B.

Theory and Research on Adult Learning

In preparing a plan for teacher PD, I consulted theory and research on adult learning to assist me in the following design tasks: narrowing the topic, setting the tone, arranging the time, and facilitating learner engagement. What follows is a discussion of the literature and how it influenced the PD plan.

Narrowing the Topic

Dean (2002) recommends using your own experiences and consulting current literature as excellent sources for initial design for adult learning. In developing a letter of introduction to the school system, I examined my professional experience in attending a literacy PD workshop (Gilrane, Roberts, & Russell, 2008). In this case, one of the first actions of district administrators and university collaborators in designing their project was to agree on goals. Following their lead, I prepared my letters of contact for system gatekeepers (Hatch, 2002),

including the system director, school principal, and curriculum coordinator. A follow-up phone conversation with the curriculum coordinator revealed system-level concern for meeting ACT Benchmarks (ACT, Inc., 2005a) and for preparing students for success with college-level reading assignments. A follow-up survey further narrowed my focus on teacher needs. Adult motivation for learning is strongly linked with "personal relevance and choice" (Włodkowski, 2004, p. 147). Since adults feel included when they know their opinions influence decisions (Samovar & Porter, 1997), it was important to reflect teacher need and choice in the PD plan (Lieberman & Wilkins, 2006). Knowles (1990) characterized adult learners as being self-directed. It was equally important, therefore, that PD participation be voluntary. I informed prospective participants of research goals, participant involvement, and participant benefits. Sharing project parameters served two purposes: promoting feelings of safety (Sisco, 1991) and establishing a basis for trust (Brookfield, 1990; Taylor, 1998). Pratt (1984) advises using the PERC model. He indicates that "problems arise due to ambiguity or misunderstanding. Such problems usually relate to purpose, expectations, roles, or content (PERC) and can be avoided or reduced if these elements are clarified at the outset" (p. 7). To fully inform prospective participants is an act of courtesy and respect for them as professionals. Wlodkowski writes, "For most adults learning begins with ...respectful relationships" (p. 146). He continues, "Intrinsic motivation is more likely to emerge because...their well-being is more assured. They can develop trust. Relevant learning is possible" (pp. 146-147).

Setting the Tone

Next I devoted attention to creating an environment for the workshop that was both safe and engaging (Brookfield, 1990; Hiemstra & Sisco, 1990; Knowles, 1980; Knox; 1986; Sisco, 1991). An introduction that provided overview of the workshop schedule, sharing a few of my

interests, explaining the purpose of the workshop, and learning a bit about participants would establish an environment for open communication (Brookfield, 1990) and address the affective needs of learners (Galbraith, 1989).

Arranging the Time

Santa (2006) advised against having large numbers of participants in an adult learning environment. Therefore, I limited the number of participants in order to maintain an intimate learning environment and to ensure ample time to engage with each adult learner. I arranged for rest breaks in order to meet learners' physical needs (Knox, 1977) and to break up learning segments, lessening the likelihood of learner fatigue (Long, 2004) and increasing participants' capacity for retention (Walker, Brakefield, Hobson, & Strickgold, 2003).

Facilitating Learner Engagement

Cambourne's "Principles of Engagement" listed deep engagement as important to the adult learning process (2002, p. 28). I planned for teacher involvement in simulations (Cambourne, 2002) evoking *Reader Response Theory* (Rosenblatt, 1982), beginning with a reader response assignment to be completed prior to the workshop and with the workshop extending and expanding on this experience. Experiential learning is vital to adult learning (Knowles, 1970; Little, 1981; Long, 1983a; Marienau & Chickering, 1982), although high-level involvement early in the learning process may intimidate some participants (Dean, 2002). Social roles have a significant impact on adult learning (Long, 2004). For these reasons, I planned for the experience to be completed as summer reading, in privacy of the learner's own home and at the learner's own pace. This decision was supportive of learners' affective needs and recognized that adult learners have added responsibilities that compete for time (Weasmer, Woods, & Coburn, 2008). Because adult learners have increasingly diverse needs as they age (Long,

1983b; Long, 1971), I planned for a variety of strategies to activate multiple learning modalities (James & Maher, 2004). Apps (1991), for example, recommended using metaphor to clarify thinking in adult learners; therefore, a silk rose and toy car, both tactile objects, became metaphors for efferent and aesthetic responses to reading (Rosenblatt, 1982). Dean (2002) wrote that active learning results in greater retention and improved transfer of learning to new situations, reinforcing my determination to deliver content through strategies that are learner-centered.

According to Krajewski (1995), teachers have few opportunities for follow-up of professional development and limited support for learning new strategies. Therefore, by corresponding with workshop participants over the course of the school year, I could offer the support that experts find lacking in typical PD experiences. Wenger (1998) suggests that communities of practice are structures that support adult learning. With enough participants, online communication can be an environment that fosters a community of practice (Day, 2004) and reflective thinking (Steffy & Wolfe, 2001). Asynchronous environments offer opportunities for connecting with others and for expressing oneself in written form, a method of self-expression that can require greater reflexivity than the spoken word. Email also has potential to facilitate mentoring, another means of providing continued support. Daloz (1990) describes the role of mentor as having three facets: supporting, challenging, and providing vision. He also says the mentor serves as guide for a journey at the end of which the adult learner "is a different and more accomplished person" (p. 469).

CHAPTER III: METHODOLOGY

Sometimes a researcher or theorist is likened to a traveler from mythical times who sails off to strange and exotic places to eventually return to the common people in order to tell them fascinating stories about the way the world 'really' is (Van Manen, 1990, p. 18 paraphrasing Jager, 1975).

Selection of Phenomenology

I chose to do a phenomenological case study because the methods used fit my theoretical framework of constructivist assumptions about learning, teaching, and research. Because I believe that learning is situated, phenomenology, with its sustained engagement in the field and its reliance on ethnographic methods (van Manen, 1990), supported a thorough examination of the case in context which allowed me to ethically engage with the learner as facilitator of professional development. Through my twelve-month role as professional development provider, I was given extended access to the participant's perspective (Purcell-Gates, 2004) of professional learning. Through interviews (more conversational than formal), emails, and telephone conversations, the participant and I were aptly positioned as co-constructors of description and interpretation (Hatch, 2002).

My constructivist assumption that learning is socially situated supported the phenomenologist's view that individual perspectives of lived experience (Husserl, 1970) evolve over time as people interact with their environment and social contexts (Purcell-Gates, 2004). Since environments and contexts are constantly changing within a given "lifeworld" (Husserl, 1970), then an individual's interpretation of experience is entirely unique. Because I was asking about the nature of this teacher-learner's experience, it was imperative that I approach the

context of this study with some prior understanding. Given my twenty-four years of experience in education, much of it spent teaching in a high school classroom, I was fortunate to approach the context of this study with some understanding of the cultural practices (Dyson & Genishi, 2005) that are typical of public education in this region of the country. My experiences also supported awareness of the current "extrasituational context" (Goodwin & Duranti, 1992, p.8) of public education, e.g. local funding woes, increasing state standards, and NCLB. That said, I took steps to bracket (Bogdan & Biklen, 2007) my personal experiences of professional development. These experiences were recorded in my researcher's journal and are reflected in the introduction of this study in order that I may assure the reader that I have accurately captured the essence (Merriam, 1998) of my participant's experiences. I approached the data with fresh eyes, relying on the transcripts of my participant's words to reveal repetitive themes that informed my description of her experience. Passages that did not fit were revisited to determine if these were "counterevidence" (Hatch, 2002, p. 56), leading to alternative descriptions. For purposes of interpretation, I compared my participant's impressions of her experience with my own experience, as well as literature from research, theory, and the arts, to capture my participant's experiences as hermeneutically experienced (Moustakas, 1994; van Manen, 1990). By comparing my participant's experience of professional development with the "universe of integrated understandings" (Stake, 1995, p. 101), I arrived at a more sophisticated understanding of this reality.

Procedure

Overview

In accordance with my constructivist theoretical framework, I used naturalistic inquiry methods as described by van Manen (1990) to capture a teacher's professional learning as lived

experience. For this phenomenological case study, the methods for data collection included two semi-structured interviews, following the examples of other phenomenological studies (Ladson-Billings, 1994; Mishler, 1986; Seidman, 2006; Spradley, 1979), and a series of on-line communications with the teacher. Phenomenological analysis and interpretation of the case were designed to distill the essence of a teacher's experience of professional learning. Interview and email transcripts were parsed into meaning units, followed by theme analysis uncovered by "detailed reading approach" (van Manen, p. 3). Three themes were threaded together to provide an impression of the teacher's experience, lending itself to description. Following a hermeneutic process, I used these themes to weave an image of the teacher's experience, and then consulted my own experiences, research and theoretical literature, and a work of young-adult literature as sources for interpretation (van Manen, 1990).

I began keeping a researcher's journal in the initial stages of my research. What follows has been verified by journal notations and researcher's log.

Context of the Case. In case study research, it is important to fully situate the case (Creswell, 2007; Stake, 1995). After securing permission from the school system director and school principal in the spring of 2008, I began my research process by inquiring into the nature of the system and school. The public school system for this "within-site case" (Creswell, 2007) was situated in a city with a population of 23,120 that lies twenty miles outside of a metropolitan area. The city had lower-than-average poverty rates at 7.8% (U.S. Census Bureau, 2000), almost a third of the average statewide (U.S. Census Bureau, 2006) and lower than the national percentage (U.S. Census, 2006). Moreover, the percentage of city dwellers, age twenty-five and older, who had attained a Bachelor's degree or higher was greater than in the surrounding county

by 20%, state by 12%, and nation by 3% (U.S. Census Bureau, 2000, 2006). Not surprising, then, was the fact that the system's per pupil expenditure surpassed the mean state expenditure by \$1,185 (State Department of Education, 2007). The extra investment in individual students was a reflection of the system's push for excellence in education. The system graduated 99% of the Class of 2007 (State Department of Education). Ethnicity of the school's student population reflected the city's homogeneity at 91.55% Caucasian.

In the spring of 2008, I asked that the school principal distribute a survey to all faculty members regarding what topics they found best matched their professional development needs in reading. At the principal's invitation, I attended a faculty meeting to give a five-minute overview of the content and intention of my research. I explained that my intent was two-fold: to provide support for teacher learning about reading instruction and to learn more about teachers' experience of professional development. The surveys were distributed and collected. I evaluated responses to interest surveys and found that teachers expressed interest in learning more about paths to higher order thinking through reader response and increasing comprehension in content-area reading. In July I presented an informal workshop, self-titled "Reader Response: Improving Reading in the Content Areas," to three high school teacher-volunteers (See Appendix A). I was informed that more teachers had expressed interest in participating but were told they were required to attend meetings in preparation for the opening of a new Freshman Academy. During the workshop, two of the participants were pulled to attend other meetings that were required by the system. At the close of the workshop, one teacher named Ariel (pseudonym applied) who had attended the entirety of the two-day professional development agreed to join me as research participant. I had no relationship with Ariel prior to this investigation.

Description of the Case

I presented a two-day, face-to-face workshop followed by interviews and asynchronous, on-line communication designed to support teacher growth through facilitation and written reflection (See Appendix C). My work in the field extended over a period of twelve months (as shown in Table 1). Ariel, a middle-aged female of Amerindian/Caucasian descent, was a fifteen-year veteran of the teaching profession, grades K-12, who specialized in working with severely mentally and physically handicapped teens in a self-contained classroom (See Appendix D).

Data Collection

In September, 2008, I conducted a one-hour, semi-structured interview with Ariel to learn more about her experiences with professional development. My role in this interview was as researcher. The interview occurred at Ariel's convenience during her planning period. We were seated across from one another at a "kitchen" table. Due to the nature of Ariel's position as care-giver to handicapped students, several student interruptions occurred during the course of the interview. I digitally taped the interview and then used *Transana* software to assist in my transcription on my Gateway NV52 computer. To protect the identity of my participant, proper names were assigned pseudonyms. Interviews were coded as "I" and on-line communication was coded as "OC" to distinguish the two contexts of communication.

As the year progressed, Ariel selected strategies from our Reader Response workshop to try with her students. She was completely free to employ the strategies in whatever content area she felt best met her students' needs. We communicated twice by phone and predominantly by

Table 1

Timeline of Research Process																				
Task	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September
Gain site access and receive consent																				
Presentation to faculty																				
Survey of faculty PD needs																				
Design training based on teacher needs Distribute materials for																				
summer reading to volunteer workshop participants																				
Participant reading																				
Receive IRB approval																				
Receive participant consent & conduct workshop																				
Conduct initial semi- structured interview Transcribe initial interview																				
Facilitate mini-lessons through online communication																				
Conduct final semi- structured interview Transcribe follow-up																				
interview Member Checking of																				
Transcripts Thematic Analysis																				
Peer Review																				
Member Checking of Data Analysis																				
Data Interpretation																				

email regarding two of these mini-lessons, before, after, and in-between each of these experiences, for a total of 37 emails (See Appendix B) over the course of nine months, from September 29, 2008 to May 18, 2009. I participated in these on-line conversations as facilitator and co-learner.

In June, 2009, I engaged Ariel in a one-hour, follow-up interview, again guided by informal protocol, in an effort to learn more about her experience of learning in our blended environment. This interview occurred at her request between morning and afternoon summer school sessions. For convenience and privacy, this interview took place in a science classroom storage closet. As in the initial interview, I digitally audio taped the interview for ease in later transcription using *Transana* software and my Gateway NV52 computer. My participation in the second interview was as researcher. Once the second interview was transcribed, I sent Ariel a copy of both transcripts to confirm that these accurately represented our interviews. Ariel verified that the transcripts were trustworthy.

Data Analysis and Interpretation

In late June, 2009, I began the process of thematic analysis using the methods outlined by van Manen (1990). I conducted initial iterative readings of the interview transcripts and emails to get an overall impression of the data as a whole. During a second series of readings, I highlighted salient passages into significant meaning units. Recursive passes through the text assured that all salient passages were accounted for. Next, I again reviewed the data, this time asking what each passage tells the reader about this experience. Then, I grouped salient passages according to the kind of information they revealed about Ariel's experience. And finally, in a series of re-readings of the grouped passages, I isolated three significant themes that recur throughout the transcripts and emails: analysis of learning opportunity, motivation to learn, and

conditions for growth. I then wrote a description of Ariel's experience of teacher-as-learner using the three themes for structure and Ariel's words as support for the recurrence of the three themes. In September, 2009, I mailed Ariel a copy of the data analysis for the purpose of member-checking. In a follow-up telephone conversation, Ariel agreed that the thematic description accurately depicted her experience.

As sources for interpretation, I turned to works on theory and research by van Manen (1990), Goldberger, Tarule, Clinchy and Belenky (1996), Apps (1996), and Freire (1998). To further ground my interpretation, I relied on the wisdom of van Manen (1990) who recommended the use of literary works in phenomenological interpretation. Nussbaum (1995) and Weinstein (2003) reinforced my belief that one learns much from lived experience by studying the art of others. Van Manen describes such literature as "a fountain of experiences to which the phenomenologist may turn to increase practical insights" (p. 70). Admittedly, this statement was not enough to make me leap to my bookcase in search of a novel, but I had already made a connection between my study and Saint-Exupery's The Little Prince (1943/2000). Van Manen describes research as "a caring act: we want to know that which is most essential to being. To care is to serve and to share our being with the one we love" (p. 5). His equating of research to caring reminded me of how very much I care for Ariel, the coparticipant in my research, and for teachers in general who dedicate their lives to improving the lives of others. This in turn made me think of Saint-Exupery's little prince who tamed a fox and thus experienced the relationship of love to learning.

I had not thought of this story since I first read it as a twelve year old. Nevertheless, I knew I had a copy on my shelf and ran to collect it to see if my memory were true. I confess that

I had concerns about using a novel for young readers as a source of interpretation on adult learning. Nevertheless, I dared to hope that an interesting parallel existed between these two seemingly disparate sources. Consultation of the author's first page revealed that Saint-Exupery (2000) had begun his dedication to *The Little Prince* by asking "children to forgive me for dedicating this book to a grown up." With that, I forged ahead in re-reading the tiny novel, determined to see if there were other ways that the book's message would inform my study. Indeed, the novel resembled my research in several ways. What follows is a small synopsis of the novel.

In Saint-Exupery's *The Little Prince* (2000), a pilot was repairing his downed plane in the Sahara when he was startled by a tiny voice asking him to draw a sheep. With pilot as both narrator and illustrator, we discovered that the voice belonged to a prince, a child-astronaut of sorts who had himself fallen from the sky. A tentative relationship was struck between adult and child as both negotiated particulars of drawing a sheep. Through ensuing conversations, we hear from our pilot-narrator about the prince's journey from home on Asteroid B-612, about the characters met along the way, and about the lessons learned from each visit. We hear of conversations with a businessman, for example, who was so busy with counting that he had no time to experience life. The little prince tried to help him understand the error of his ways:

If I own a flower, I can pick it and take it away. But you can't pick the stars! No, but I can put them in the bank.

What does that mean?

That means that I write the number of the stars on a slip of paper. And then I lock the slip of paper in a drawer.

And that's all?

That's enough! (p. 39)

Sadly, the little prince failed to convince the businessman of the emptiness of his actions. A similar outcome resulted from an encounter with a geographer "who wrote enormous books" (p. 44) but "never [left] his study" (p. 45). Our little traveler fortunately met a fox—a character worthy of his insight. By taming the fox, the prince earned the fox's love and in so doing was rewarded with a secret:

"Goodbye," said the fox. "Here is my secret. It's quite simple: One sees clearly only with the heart. Anything essential is invisible to the eyes" (p. 63)

With one modest sentence, the fox revealed a way to learn about important things in life.

Through conversation, the prince related his journey and in so doing mentored both pilot and reader. Together we dialogically construct the message that to engage with life is to understand and to care for life is to grow. In one tiny novel, Saint-Exupery artfully conveys constructivist epistemology, the basis for this study as well as the work of many others (Apps, 1996, Belenky, et. al., 1997, Freire, 1998, van Manen, 1990) as illustrated in Figure 1 below.

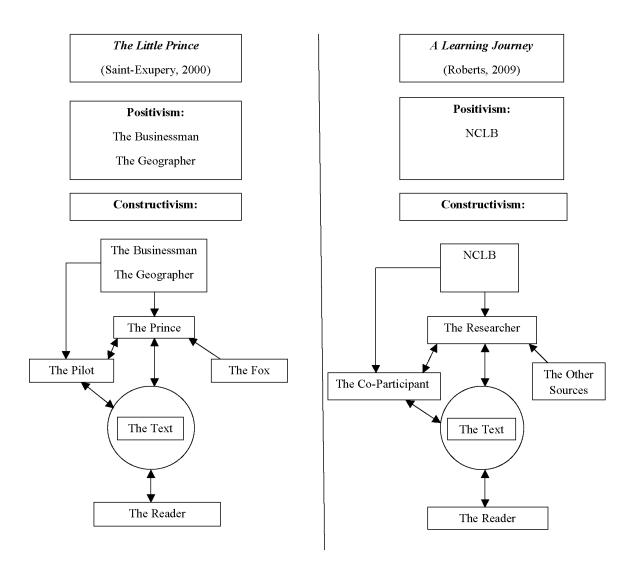


Figure 1: The Link Between Literature and Research

Establishing Trustworthiness

Observing of the traditions for establishing trustworthiness in phenomenology and case study research, I made several critical decisions in design and execution of my research. I began my study by recording the source of my passion for the subject of teachers as learners. These were documented as researcher biases in my researcher journal and were kept close for selfmonitoring during data collection and analysis (Merriam, 1998). I was committed to providing my participant with a quality learning experience, with full realization that prolonged engagement in the field would also facilitate a better study (Bowen, 2005; Creswell, 2007; Dressman & McCarthey, 2004; Hatch, 2002; LeCompte & Preissle, 1993, Merriam, 1998). Furthermore, by choosing to remain engaged with Ariel for the full year, I was able to sample her thinking from the beginning, middle, and end of the school year (Bogdan & Biklen, 2007), check her responses for "internal consistency" (Seidman, 2006, p. 24), while supporting her development at a pace that was authentic for her as adult learner. In essence, the pace of activity and the passing of time became significant pieces of the story. Researcher journal, interviews, and on-line communication served as multiple sources of data, allowing for triangulation and adding to the overall confirmability of the study (Merriam, 1998). As in Reading Families: The Literate Lives of Urban Children by Compton-Lilly (2002), I used multiple sources of data, allowing me to uncover a "converging line of inquiry" (Yin, 1994, p. 92). Data analysis was recursive, beginning with the initial interview, and inductive, allowing repetitive themes from the transcripts to guide production of rich, thick description (Stake, 1995, p. 39). Member checking (Bowen, 2005; Creswell, 2007; Merriam, 1998; Stake, 1995) performed twice during the study confirmed that the description resonated with Ariel's experience, lending to the study's credibility (Denzin & Lincoln, 1994). Peer debriefing (Creswell, 2007; Merriam, 1998),

performed by a faculty member of the university with many years experience in qualitative research, contributed to the honesty of the research process. At several points during data analysis and interpretation she urged me to return to the data to verify patterns before making an assertion. On at least one instance, I changed the wording of an interpretation to more accurately capture the essence of Ariel's experience. In a final effort to ensure trustworthiness, I endeavored in writing this report to provide a thick description of the case, the context, and my processes in order to allow readers to determine how transferable my findings are to their situations.

CHAPTER IV: DESCRIPTION AND INTERPRETATION

Description: A Teacher Committed to Professional Growth

Ariel, the teacher in this study, taught the core subjects to special education students in a public high school. I interviewed Ariel to get her thoughts on PD after engaging with her in a two-day workshop on literacy in the content areas. In the first interview I asked her to tell me about professional learning opportunities that she felt were beneficial and then to describe one that she felt was a waste of time. This interview gave me an overview of Ariel's experiences with PD to date, leaving me with an impression of which opportunities she found worthwhile in the past. As the school year progressed, Ariel tried strategies with her students from our two-day literacy workshop. We had structured email conversation before and after two of her lessons so that I might provide support and hear her impressions of each lesson; in addition, we had many informal email and telephone conversations throughout the year which further informed her work. In a final interview at the end of the school year, I asked Ariel about our joint-learning venture (e.g., a two-day workshop, mini-lessons with students, and online conversations). Collectively, these dialogs provided a picture of Ariel's experience of learning through jobrelated PD. Threads of three themes consistently recurred throughout the transcripts: her analysis of opportunity, her motivation to learn, and her conditions for growth. Like harmonic motifs in a work of classical music, Ariel threaded consistent themes through our conversations to reveal the final image of our tapestry—a teacher committed to growth.

Description of Teacher as Learner

Analysis of Opportunity

In the first theme, analysis of opportunity, Ariel shared her gold standard for evaluating PD, her students. Repeatedly, she artfully deflected questions away from herself with answers featuring descriptions of her students. Over the course of the year, we became aware that her feelings were an extension of what her students were feeling. In fact, when asked to describe her view of an ideal PD experience, she responded that "professional development should be set up...with the students in mind." Having recognized the consistency in these statements, I returned to our transcribed conversations to further understand the significance of similarly coded passages.

By orienting her judgments to students' reactions, Ariel grounded all professional learning experiences in what she perceived was best for her students. She routinely evaluated PD on the basis of student needs, student happiness, and student success. During the first interview, for example, I asked Ariel to describe her version of an ideal professional learning opportunity.

Melba: So, if you could envision a perfect professional development environment for an imaginary school system,...how would you set it up for your needs or for the needs of the teachers and students that you serve?

Ariel: That professional development should be set up, to me, with the students in mind. Primarily for them, like with the nonverbal students. It should be set up to help the teacher be able to tap in to the knowledge that those students have, however small or however large that information might be, and give teachers an opportunity to take something back that is going to be positive for both the student and the teacher. (I1: 396-405)

In this passage, Ariel oriented to what was best for students as the basis for analyzing the worth of a PD opportunity. "Something...positive for both the student and the teacher" was her measuring stick for whether she will give attention, time, and energy to a PD opportunity.

In interpreting the above snippet of conversation, I am reminded of the idiom, "If Mama ain't happy, ain't nobody happy"—only in this case the students are "Mama." Seasoned teachers are aware that the discontent of just one student can make or break a lesson, and it is our job as educators to make sure that students feel the success of learning. Curious about what made Ariel happy, I later asked about what pleased her "the most about [her] students this year." She responded with an anecdote about a specific student.

I have one girl in particular that was new... in March....She is a behavior problem; she's emotionally disturbed But she has gained so much self-confidence, so much self-esteem....her [inappropriate] behaviors have really diminishedWe had a special banquet here in April....We always present awards to our different students for various things....The parents are here, administration is here, faculty's here, family members....They had to come get me because mom couldn't control her....I sat with her during the rest of the banquet....She was fine.... Just the smallest milestone means a lot. But with her,... that was a major milestone. (I2: 231-246)

In this example, the student's triumph was Ariel's triumph. That which was most meaningful to Ariel about her year was represented by the achievement of this child.

On further reflection, I am reminded of a second idiom, "success breeds success," to use in understanding why it is important that Ariel be attuned to her students' needs. Assignments, strategies, and tools must be carefully chosen to match student readiness. If a student's level of understanding is not ready for a task, then any attempt at success will be met with failure, an outcome that will surely **not** be positive—either emotionally or cognitively—for the student or the teacher. Thus, for Ariel, if the professional learning opportunity failed to feature something

useful for her students, she did not attend to the message as being worth her time. Student needs dictate teacher needs, much like customer needs influence consumer business. Whether from benevolence or pragmatics, Ariel's propensity to consider her students first in all things work-related primed her mind-set to strive for excellence in education.

Near the end of our second interview, I asked Ariel what suggestions for PD she might make if working on a school improvement plan. Again, she oriented her response to what was best for her students. Apparently, she believes that is reading. She indicated that improving reading in the content areas is useful not only for her students who are working on getting beyond "just reading the words" but for all students.

I think that it opens a lot of doors for studentsReading is the underlying basis for all academics Even math because ... somewhere, even if it's a word problem, you are going to have to read And if the reading skills aren't there, then it diminishes the other academic areas, too Today, kids don't want to read. The majority of the students would rather be at home in front of a video game, or be out hanging out with their friends, good or bad. And, you know, reading is an excellent choice. And reading opens your mind to a lot of vast information that's out there. And the students don't appreciate it. (I2: 870-883)

Ariel chose reading because of the doors it opens for students, not because it is what she likes to teach or is more comfortable teaching. Consistently, her choice of words and her orientation to my questions revealed a teacher with altruistic motives for wanting to advance in her profession.

Thus far, my questions to Ariel regarding PD were in very general terms, to which she responded with increasing specificity. First she indicated that professional learning should be based on one's students, and in particular those students' needs. Next she revealed that she measures her own success by the success of her students. Even the memory of success for one student engendered her own feelings of accomplishment. Finally, she delineated reading as the optimum focus for educator learning on the grounds that literacy "opens a lot of doors for

students" and "is the underlying basis for all academics." In the following conversations, Ariel and I turned from envisioning idealized versions of PD to exploring her most recent experiences.

One of the first things I asked Ariel in our initial interview was to "tell me about a time when [she] experienced growth as a teacher professional." She shared a time where she received PD on a computer program called *Board Maker* for use in "communicating with children who are non-verbal." Ariel rated this opportunity highly because of what it allowed her to do for her students.

Ariel: The information that I gained from this session I brought back to the school system, and it allowed me to communicate with some of my non-verbal students. ... It gives students access to be more involved in the curriculum and in their world environment as it is.... They were able to make choices. You know, "Do you want to do this? Do you want to do that? It is time for?" We were able to work on time. We worked on money. It just opened up a whole new avenue for the students.

Melba: What has that meant for you professionally in terms of the way you see your effectiveness in the classroom?

Ariel: I don't generally think of myself. I always think of my students. But it gave others an insight into what the students were capable of doing...other than just seeing them as non-verbal students who are basically not teachable....They are teachable, and they are very smart. It gave students a voice, and it helped others ... to understand that, yes, there are things that these students can do. (I1: 13-57)

So in this instance, Ariel not only oriented to what this program did for her students, but also what it did for others who interacted with these students, whether they were family members, teachers, or administrators. She valued the *Board Maker* PD for the tool it provided, a tool that enhanced the lives of students and those who cared for them.

Once the school year began, Ariel and I emailed one another about her choice of strategies to try from the workshop. Though her students were in grades 9-12, they ranged in ability from letter recognition to 5th grade reading level. She typically relied on the *Edmark*

Series, a commercial sight word curriculum, for her students who were working on reading. This year, instead of relying on the series, she decided to try presenting *The Cay* (Taylor, 1969), a work of teen fiction, using "read-alouds" as a method of scaffolding student understanding. She chose this method because she remembered loving to be read to as a child, and she anticipated that her students would enjoy it too. Nevertheless, she remained concerned that some students would get lost in a cloud of confusion. In the follow-up email, I asked Ariel how her lesson went. She seemed content with the outcome, even indicating that she planned to "incorporate this strategy into all [her] lessons." When I asked her to tell me about her feelings, she answered by describing her students.

Melba: How are you feeling about trying another strategy? (OC: 110)

Ariel: My feelings are an extension of what my students are feeling. I know this by the enthusiasm I see in each face, each response, and the participation during the lesson. (OC: 149-150)

Melba: How do your feelings relate to student progress in your class? (OC: 111)

Ariel: When students are actively engaged in a lesson, they are absorbing knowledge that was not present in the beginning and gaining a new appreciation for reading as a whole. By increasing their interest in reading, this opens opportunities for school, home, and community. This "spark" in my students is the most wonderful thing I could have ever hoped for. (OC: 150-154)

Even when specifically asked about her feelings, Ariel deferred to those of her students. This passage is further proof that she rarely considered herself in making decisions that would affect her students. In the following passage, she continues her description of student behavior with this lesson, further demonstrating her reliance on student behavior as her primary source for decision-making.

I used *QtA* [*Questioning the Author*] to some degree. I had the students think about what they would like to know from the author. It was not as successful as I had hoped because the students were more interested in what was going on in the

book and what would happen next. I think that as I use this approach more and more the students will have a better understanding of where the information is coming from and how to project their thinking into what the author was thinking and thus pose questions. (OC: 588-592)

By reflecting on student responses to the lesson, Ariel was able to judge whether to try the strategy again or mark it from her list of options as currently ill-matched to her students' needs. On further reflection she decided that her students would have increased success with additional practice. Ariel considered what she did in introducing *The Cay* (Taylor, 1969) that ignited such intense and lasting interest in her students. She wrote,

The spark came from the "gift approach." [Ariel initially presents the book to her students by covering the book, leading her students to slowly develop ideas for the book's contents as each element, i.e. title, cover art, etc., is revealed.] Students were intrigued by the not knowing and their developing the images and ideas that were owned by them....The students are very interested in the content of the book and finishing the story. (OC: 593-596)

From facial expressions, student comments, and body language, Ariel collected student data to evaluate her experience. The data indicated that the "gift approach" for introducing a reading assignment was an effective tool for increasing student motivation. After harnessing her students' excitement, Ariel used *QtA* to scaffold comprehension. Her email continued with the following explanation.

The students made connections and were able to incorporate this [*The Cay*] into their own lives and even into their future, once they graduate. Life is not easy nor a bowl of cherries for anyone, much less students with special needs. May God speed each one (OC: 601-603).

Ariel and her students constructed rich, personal meanings from the text. By helping her students understand how this story speaks to their own lives, Ariel demonstrated that the act of reading is not unidirectional, from text to reader, but is instead bidirectional, engaging both the text and the reader's thoughts. The result was that each student felt empowered to let the text speak to them

in dialog with the author. In the final interview, she once again reflected on student reaction as a source of data to analyze the lesson.

I did "the gift" with *The Cay*. I don't know if that gave them more ownership of what they were reading. But they really couldn't wait to get to the next chapter. (I2: 344-346) They were more open, they were more expressive in what they were trying.... [That] made me feel great. (I2: 375-377) There's a new excitement for reading....When the kids come in and say, "Ms. Ariel, can we read again, can we go to the next chapter. I want to know what happened, Ms. Ariel." Just to see their excitement! It's in their faces. It's in their voices...It's in their body expression. Because so many times when you mention reading to students, it's like, "Oh well, again." (I2: 893-909)

Once students realized that they bring their own ideas and experiences to the text, they learned that they have control over half of the equation. For students who were challenged by text, this realization was invigorating. Ariel's students moved from loathing to read to asking to read. She was able to collect data from experiences with her own students to determine if new methods were worth pursuing.

Later in the school year, Ariel tried another strategy from our fall workshop, this time in a geography lesson. The students read from their geography textbook as they normally did. But this time, instead of giving students independent reading time, as is her usual practice for geography, she began by asking students what they knew about the places being studied. Most were able to make connections to the topic by recalling local places they had visited with their families. In the following exchange, Ariel describes her impression of the lesson.

Ariel: Once again, the students were proud of their input....They were very positive and supportive of each other....Some of the students brought more to the table than others, but each student knew something about part of the subject.

Melba: What is your overall assessment of the lesson?

Ariel: I am very proud of each student and his/her accomplishment. Each student gained information that was not known prior to this lesson.

Melba: Did you have fun?

Ariel: I always have fun when interacting with the students, especially when I see them making progress and learning/retaining new information.

Melba: Did the kids?

Ariel: The students really enjoy learning and being part of the group.

Melba: Do you feel it was a success in terms of engaging students with the standards?

Ariel: I think it is a success when you can get at least 75-80% of the students involved and participating in the lesson. There was 100% involvement and participation in the lesson. (OC: 730-751)

Through collaboration with one another as they engaged with the text, Ariel and her students relied on prior knowledge and past experiences to enhance learning of the geography lesson. By noting mutual student support and joy in participation, Ariel collected clues that her students benefitted from this approach. She used this knowledge in decisions regarding future planning, including whether to try more mini-lessons from our fall workshop.

In our final interview, Ariel and I spent a few minutes reflecting on our year's journey. We began in the fall with the two-day workshop, a format that is common for PD in many public schools. We continued our investigation over the course of the school year with Ariel trying strategies from the workshop and then chatting with me about these online. We ended the year by talking about what lessons we had learned from this experience. Here is Ariel's analysis of this experience:

In the fall, when they give you the one-shot, garden-variety, one-size-fits-all [workshop]....Special education is not a one-size-fits-all....When they do the garden variety, they're gone. They're in, they're out....because they're here for money. They don't come in and do these big, elaborate presentations for nothing. And nine times out of ten, they have something to sell. This is something that you're doing because you love kids just as much as I do. You want students to succeed just as much as I do. So therefore we're both gaining something. Not

financial or anything like that, but we're gaining from this process. So, if I'm going to do a...professional development, this is what I would want. (I2: 719-745)

In these lines, Ariel revealed two lessons learned, both tied to how they benefitted her students. First, she suggested that many times the PD does not offer enough flexibility to be immediately adaptable to her students' needs. Therefore, if she elected to try strategies from the workshop, she was left to muddle through modifications on her own without assistance from presenters. The second lesson was trust. Ariel suspected that the motivation of many outside consultants was nefarious, or at the very least did not match her focus on students. In order for her to be open to new learning, Ariel must first trust that the presenter's goals are congruent with her own; Ariel tried the strategies from our workshop because she sensed that my concern for students mirrored hers.

In discussing her PD experiences with *Triad* and *Board Maker* as well as our PD on reading instruction, I learned that Ariel decided which sessions were worth her attention by thinking of her students' needs, happiness, and success. In the following section, I revisited these dialogs through the lens of motivation to learn more about what gave her incentive to continue seeking growth.

Motivation to Learn

In the second theme, motivation to learn, Ariel voiced a deep commitment to continued growth. Early on, she informed me that "just about every day... [she] learns something new from [her] students." To teach reading to students, Ariel said that she "usually use[s] a program called *Edmark Series*, flash cards, and various computer software." She added that she has "read to [her] students before and they love it" but confided that she was "afraid that some of the freshmen will not appreciate and value what is being read to them." Prior to using the first of the

constructivist strategies from our workshop, Ariel expressed concern that she "will not retain [student] attention, and their comprehension ability will be clouded by their actions." Following her mini-lesson, however, she noted that her students were "more interactive with the scaffolding approach rather than just the *Edmark Series*." Ariel explained how the students were more engaged in the following passage:

This approach is student-led vs. teacher-led. It gives the students more ownership of the lesson, increases their interest, and becomes more personal to them....It sparks an interest on the front end of reading rather than just reading and recognizing "words".....(OC: 133-136)

In a moment of self-reflection, she continued:

This approach made me stop and think about how I am teaching and reaching my students. I now look at the "whole" picture not just one area. (OC: 143-144)

. . . .

I have modified my use of the [*Edmark*] *Series* except with students who have limited reading abilities, letter recognition, and/or symbol matching. (OC: 194-195)

By verbalizing her thoughts, Ariel offered a glimpse of the meta-cognitive work involved for growth in the teaching profession. Later, in the final interview, we revisited the mini-lessons she tried with her students. Ariel began this description with "Well, you know, change is always good"—a mantra she repeated twice more during the course of the interview. Through these instances and several others, Ariel revealed a theme of openness to change and of willingness to learn. Coding for the theme of motivation to learn, I revisited the transcripts for a closer reading of Ariel's words.

At the close of our two-day workshop on improving reading in the content areas, I asked Ariel if she would be willing to try a few of the strategies from the workshop with her students and then to chat with me about these mini-lessons by email. She responded with enthusiasm, and

thus began an intermittent email conversation that lasted an entire school year. Through these exchanges I learned that Ariel remained open to change because of her orientation to students. She was dedicated to finding better ways to increase student interest in learning, to augmenting student success, and to moving students from received knowing toward subjective or even connected knowing (Belenky, et al., 1997).

Despite being faced with unexpected responsibilities throughout the year, Ariel managed to try strategies from our workshop and formally shared her thoughts with me about two of these online. Like this study, the workshop reflected my personal epistemology; I shared with Ariel many constructivist strategies designed to increase student engagement in making meaning from text. The first mini-lesson Ariel tried from our workshop was one she designed to scaffold student comprehension of *The Cay* (Taylor, 1969). She did this first by presenting the book as a gift wrapped in plain, white paper. She reported that student anticipation for reading increased palpably with this approach and carried over as the students progressed through the book. Ariel capitalized on the students' excitement by using their curiosity as motivation to activate prior knowledge, to predict what will happen next, and to interpret events after reading each chapter. She seemed satisfied that the method was effective and voiced commitment to use these strategies again.

The mini-lesson went great. The students were more interactive with the scaffolding approach rather than just the *Edmark Series*. The students were able to ask and answer questions before, during and after the lesson. This approach is student led vs. teacher led. It gives the students more ownership of the lesson, increasing their interest, and becoming more personal to them. I will continue to use this method to reading because it sparks an interest on the front end of reading (for all the students) rather than just reading and recognizing "words." I feel the best thing about this approach is the fact that the students were eager to continue where we left off the time before. So many of our students don't appreciate books, reading, or comprehension of what they have read. They just read the "words."

From the students' response this time, I wouldn't change anything. I have continued to use this method with our book *The Cay*.

I personally feel this approach is perfect for my special education students. This approach made me stop and think about how I am teaching and reaching my students. I now look at the "whole" picture not just one area.

My next step is to incorporate this strategy into all my lessons. I am sure that there are some aspects that can carry over to other curricula. (OC: 131-147)

By incorporating scaffolding strategies for her struggling readers, Ariel substantially increased student engagement. The result was a group of students who are "eager" to read. In the final interview, I asked Ariel if she saw an emotional connection to reading in her students since they were finally making the change from word calling to comprehension. Her simple response was, "They enjoyed it." (I2: 297-307)

In the second mini-lesson, Ariel used a group of strategies we called *Talking and Writing about Text* in our workshop. As in the previous lesson, Ariel encouraged the students to activate prior knowledge. This time, however, she was teaching geography as opposed to literature. Writing on post-it notes, the students collected background knowledge about a geographic location prior to learning about a new place. In this manner, students connected old learning to new, forming a basis for comprehension and future writing activities. Ariel appeared to look forward to this mini-lesson as she relates the following:

I am interested in using *Talking and Writing about Text*, found on pages 1-23. I will be teaching geography using this strategy. I would have used the "read and memorize" approach in the past. That strategy would have been for test purposes and to regurgitate the information back. By using the new approach, students will strengthen their thinking skills, reading skills, and writing skills. The strength of this strategy will be that the students will feel more comfortable when given a writing assignment, whether in my class or out in the masses. My students have a very low self-esteem and by being able to complete a written assignment in another class would be 'a shot in the arm' for their self-esteem. I plan to implement this strategy by having students begin by writing one or two words to describe an area they are familiar with (prior knowledge) and to continue with

new knowledge learned. The fact that this approach was based on prior knowledge prompted me to choose this approach. This way the students feel comfortable discussing and hopefully writing about the topic. (OC: 500-511)

Using pictures, the internet, and travel advertisements, the students generated visual schema for new knowledge. Most students were able to connect new learning to life in this area of the United States. As in the previous mini-lesson, Ariel cited a positive student response:

I feel the students were able to get more from their reading experience than they normally would have because they "had sort of an ownership" in the text because of their own thoughts and reactions projected into the information that they would be receiving from the textbook. Otherwise, it would be purely self-directed reading....This approach gave students ownership plus building self-esteem by being knowledgeable of the subject matter....Students in special education always seem to have a much lower self-esteem than regular education students because of the remarks they overhear other students making regarding special needs students and their mental abilities. In this case, students were confident and proud of their input into the subject matter. (OC: 702-727)

Additional comments offered insight into why her students were feeling newly "confident and proud" of their participation in the lesson. Ariel explained,

The students were very unsure about writing on the post-it-notes. They thought there was a right/wrong answer and they wanted to have the correct answer. Once they understood that this was just to share their thoughts not a perfect answer, they were more accepting and willing to share their thoughts. Some students, with limited writing abilities, told me or an adult their thoughts and we wrote them on the post-it-notes for them to share with the class. (OC: 693-698)

In this post-it-note activity, Ariel created an environment where all student connections to the learning were celebrated. Each student made positive contributions to the learning endeavor, and none was ridiculed for wrong answers. As in the first mini-lesson, she moved her students from a receptive orientation to learning to a more active approach; once again, Ariel's students responded positively.

In our last interview, we revisited the mini-lessons. I asked Ariel to describe what she was feeling prior to trying one of the new strategies. Her words revealed that her thoughts on

what constitutes "knowing" (Belenky, et al., 1997) were fluctuating. Mirroring her students' understanding, she wrote:

...before, ...being a teacher, there's a right answer, and there's a wrong answer....You're wondering, you know, well is this right?....Then as you get into it, you realize it's you, it's your opinion, it's how you feel, it's how you think.... I told them, ..."there's no right or wrong. You know, your answer may be different from his answer, may be different from her answer, that's okay." (I2: 355-363)

Thus, in teaching her students to make personal connections to what they were reading, she experienced a paradigm shift from a positivist, receptive view of reading to a more constructivist, interpretive view. In an attempt to gauge if this is a temporary or more permanent transformation of thinking, I asked Ariel if she would consider using any of these strategies again in the future. Here is her response:

Yes! I will use it again....With my students, and I know you understand this, so many times kids make fun of them.... [And it] makes their self-esteem really low. And sometimes they'll hesitate; ...they won't respond.... But now with this approach, they understand that, "Yeah, that's my answer".... Those hands go up,..."I know, I know." And then they listen. They respect each other's answers. (I2: 384-418)

. . . .

My plans are to go back and review...my notes, to review the notebook that you provided me with.... Based on the two that I chose, I'm very pleased. Um, on a scale of one to ten, I'd go to eleven....[This approach] really worked with my students. It helped my students succeed. It helped them to feel positive about themselves. It gave them the ability to not be afraid, which is a major milestone for them. And, so I think, yes, I will use that again. (I2: 460-472)

So, as I chatted with Ariel about how she interpreted her experiences with the mini-lessons, I began to hear evidence that her personal epistemology in regard to reading comprehension might be changing. She reported that she was encouraging her students to go from "just reading and recognizing words" using the *Edmark Series* to comprehending teen literature, such as Taylor's *The Cay* (1969). She was moving her students from goals of "read and memorize" and

"regurgitate the information" to strengthening "their thinking skills...discussing and writing about the topic." Evidence from student behavior supported that students were attaining her new goals. From student hesitation to "I know, I know," student behavior showed signs of positive change. As I reflected on these transformations, my constructivist mind began to dream of a world in which her students' positive emotions about reading resulted in increased reading, and "ownership" of reading garnered empowered thinking—both truly positive outcomes.

Our conversation quickly returned, however, to the current reality of public education, which exists in a positivist environment governed by federal law that is grounded in psychometrics. When asked to reflect on how our joint professional development venture connects with her school's improvement plan, Ariel linked her learning with student test scores.

Melba: Do you feel like this experience connects to your school improvement plan?

Ariel: I think so, because, I'm sure other school systems are like this as well, but Gardendale City School System is data-driven. And I think that this experience has improved special education students' scores. Now I'm not sure that they're all passing, but it has at least improved their scores on their test data....When you... have a student, and you see that student pass a portion of the state test, when you didn't ever think she would ever make a ten on the state test, and to see that student beam, "I did it! I did it!" You know, it makes you feel good. You know it is not solely responsible, but had a part in that success. (I2: 831-847)

I was pleased that Ariel felt the strategies from our workshop helped her students, but I was also saddened that her students' success in education was measured by test data. When combined with Ariel's earlier remarks on seeking confirmation that her emails were "right," this conversation reminded me that we are all a product of our environment and that, while change may be "good," it is also often challenging and slow.

Later I asked Ariel to describe her experience of our "online learning partnership." Ariel responded by saying that she appreciated the convenience of communicating with me online and that she valued the fact that I was there to give her feedback:

I knew if what I had given you was not fulfilling the question, ... that you would let me know, and I could finish or complete whatever it was that I had omitted. (I2: 692-693)

This reply made me pause to think. In designing and executing this professional development/research study, I thought I had carefully cast Ariel as fellow learner versus student and as research participant versus research subject. I made a mental list, quickly ticking off deliberate decisions I had made in an effort to maintain a constructivist stance in my project: participation was voluntary, content of professional development was based on participant input, research was called a "joint-venture," email conversations were referred to as an "online learning partnership." "I'm learning from you, you're learning from me" (I2: 681) are the words I used to describe our shared experience. Yet in this latest context, Ariel chose concepts like "fulfillment and omission" to describe our emails, as if the products of her learning were an assignment that I held the answers to and could or would correct. In retrospect, this shift was not surprising. While earning her certification to teach special education, Ariel was required to take many classes in educational psychology, coursework that is heavily steeped in psychometrics that are used in supporting positivist theories. In addition, she works in an era of public education that is driven by the requirements of NCLB and for a school system with a strong reputation for maintaining high marks on college entrance exams. That she spoke of student behaviors in constructivist terms while using positivist terms to describe her own learning was no real surprise given the environments in which she was originally trained and currently works.

Although I was tempted to reframe Ariel's wording of our online discussion, I chose not to at this point in the interview. To redirect her thinking would have been confusing, interrupting my current role as co-researcher and reinforcing Ariel's perception of me as having answers. In retrospect, I am thankful that I decided to remain silent. My role was to listen and to learn while Ariel's was to work out the particulars of her personal epistemology.

Concerned that her promise to try two strategies from our workshop might have proven too burdensome over the course of a very stressful school year, I asked Ariel to describe how it felt to be responsible for trying two strategies from our workshop. Ariel responded by taking exception to my choice of words.

I didn't take it as a responsibility.... It was a part of what I was trying to do. And it was more or less an evaluation form of how the strategies worked for me... So I didn't take it as a responsibility....It was a feedback as to what I was doing and how the kids responded.... It wasn't any pressure. (I2: 649-657)

So in this passage, Ariel returned to the idea that she was constructing meaning from her experiences and thus benefited from trying the strategies out with her own students rather than just taking my recommendations at face value. On the whole, Ariel seemed to feel that our "joint-venture" was a worthwhile experience. When I asked her to "tell me how [she] feel[s] about this whole professional development experience," Ariel replied,

I think it was a very positive experience. I would suggest this to any teacher. I think it would be good for administration, too, to see that, yes, there are different approaches other than what's in the black and white that is given to us. (I2: 484-486)

By wishing for others to be open to approaches beyond "black and white," Ariel voiced her desire for an environment where teachers can trust sources other than those often presented as authorities in print. Her words described a world in which Ariel and her friends can take the words of "experts" and, combined with their own life-experiences, create their own authority,

one in which administration trusts her to move past that which we receive toward that which we can create on our own from being open to new approaches.

Through the lens of motivation, Ariel's words revealed a dedication to continued growth that had roots in her dreams for students. Ariel was committed to increasing student interest in learning, to fostering student success with learning, and to moving students from received knowing toward connected knowing. In the next section, I reviewed our conversations to uncover conditions she finds fertile for growth. Our discussions turned to time for talk, time for practice, freedom of choice, and challenge that is appropriately matched to her needs.

Conditions for Growth

My conversations with Ariel revealed a third theme, conditions needed for growth. From Ariel's remarks I learned which elements of PD she thought were vital for a fruitful experience. We spoke of recent PDs in the use of *Board Maker* and *Triad* where she felt the content, delivery, and follow-up were beneficial. She described a PD on autism that did not meet her needs. And finally, she spoke at length with me about what she learned this year from our experience together. From my discourse with Ariel, I identified four aspects of the professional learning environment she found meaningful: to talk with peers and mentors; to practice new learning; to enjoy freedom of choice in selection, implementation, and reflection of new learning; and to engage with challenge that is appropriately matched to her needs. When asked about what made a previous experience particularly worthwhile, for example, she talked about the benefit of attending PD with a teacher-buddy from her system. She wrote, "It was a very positive thing for both of us because, with two of us being there, we got to brainstorm and bounce ideas off each other....And as the old adage says, 'two heads are better than one.'" (I1:

118-121) Later, as we discussed whether our emails were helpful for her professional growth, she reiterated this subtheme of her need to talk, with only a slight variation:

Melba:what would you suggest to be the follow-up, if anything, to a reading strategies development?

Ariel: Well, again, Melba. I like this approach, because you're getting feedback.

Melba: The online approach?

Ariel: The online approach. You're getting feedback. (I2: 995-1000)

Thus, whether shared with a fellow teacher or with me, someone she perceived to be an "expert," time to communicate seemed important to Ariel for professional growth. The only difference in this instance and previous occasions was that here she sought a mentor rather than a peer. Reflection on past experiences revealed that time to rehearse new learning was as significant to Ariel for PD as time for talk. In several conversations she mentioned "opportunity for practice" as being important. Appropriate challenge, the last thread, was implicitly woven as a subtheme throughout our time together. "A lecture of information I already knew" is how she described a wasted learning opportunity while beneficial PD was described as introducing "something you could use on a daily basis." Throughout our discussions Ariel consistently wove those elements she valued most in PD.

Time for talk. In several instances Ariel mentioned the benefit of talk in processing what she learns through PD. She spoke positively about her PD with Board Maker, for example, because she was able to attend this PD with a fellow teacher from her system. She said they immediately began to brainstorm uses for Board Maker and on returning home continued discussion about implementation by phone and email. She also shared her success with Board Maker with other teachers from inside and outside the system. "You know," she tells them, "if

you have this type of student, this is a wonderful product." (I1:159-160) In terms of thinking, Ariel was doing the cognitive work that is required for sustained learning. Externally, Ariel was networking within her professional community to spread the word about an innovative tool. Internally, Ariel was rehearsing new learning; through talk, she was both processing what she was learning based on connections with prior experience and priming mental traces for future action with students.

In a similar vein, Ariel talked about *Triad*, a PD on autism she attended with a fellow teacher from the system. Because this teacher worked with an autistic child with whom Ariel will work next year, both teachers felt that attending the PD together would lend congruence of program that would be vital for this child's transition. She described the value of their time together.

...before we ever left the training we discussed how to set up the classroom. Everything is color coded. The student is given a mini schedule. "We're going to do this, then this, then this. Then he gets to do this. And the final thing is when he completes these three activities...then he gets to choose what he wants to do for a fifteen minute period." [Later we talked by] email and in person. (I1: 321-330)

Therefore, by virtue of their shared time, Ariel and her peer were allowed to discursively construct their understanding of the program and prepare for continuity of services for this child. On a much larger scale than one-to-one conversations, when grade-level teams converse with grade-level teams, this is called "vertical teaming" where groups of teachers collaborate to make student expectations connect in a logical, seamless flow as students matriculate through the K-12 system. In such cases, all students benefit from time for teacher talk, and Ariel's future student is no exception.

In our final interview Ariel shared another example of profitable teacher conversation. She described a meeting of her *Critical Friends Group* (Bambino, 2002), an alliance of teachers dedicated to presenting classroom issues and collaborating to create solutions. At this meeting, one teacher reported having difficulty convincing her students to read certain authors. In the following passage, Ariel told particulars from that exchange:

We broke into small groups during [Christmas]....And I presented [*QtA*] to the teacher who was having a problem. And she said, "That sounds wonderful....I have never tried that.... I can't get my students interested in certain playwrights,They just brush it off." And so she said she was going to try that....She said she thought that was an excellent way to get them involved. (I2: 804-814)

As with the *Triad* PD, Ariel shared with fellow teachers what she learned about *QtA* in our workshop. This professional talk about practice produced multiple benefits. In the retelling of new learning, Ariel not only consolidated her own understanding of what she learned but also inspired at least one other professional to consider this strategy. In the course of conversation, Ariel and her peer seized this opportunity to construct new learning regarding the need for student involvement in making meaning with text.

In the previous three instances, Ariel spoke about the benefits of talking with fellow teachers. In other cases, she addressed the advantage of speaking with mentors or "experts" about new practice. In referencing *Board Maker*, she said that the presenters gave an email address and a telephone number for providing technical support whereas the presenters for *Triad* would be returning to do an on-site follow-up with her and her fellow teacher. Ideally, she said that initial presentation of new material should "be delivered, not necessarily lecture, but in an informal...communicative way." (I1: 407-410) So, for Ariel, whether by email, phone, or in

person, it is important to her that she be able to engage with presenters for purposes of clarification and follow-up.

Over the course of two days of workshop, two interviews, and over thirty emails, Ariel and I forged a solid working relationship. In our final interview we spoke at length about our connection. She expressed what our relationship means to her in the following passage.

I appreciate you more than you know....You can have all kinds of friends, but not so many that are trustworthy. (I2: 212-215)

As I compared Ariel's remarks on friendship and trustworthiness with my memories of others who have helped me grow professionally, I realized the accuracy of her words. Only a true friend gently nudges you in the direction of growth and maintains the confidences necessary for deep self-reflection. On further reflection, I realized that the line between friend and mentor is often blurred, particularly if the mentor approaches his/her life's work from the constructivist standpoint, i.e., walking beside me rather than in front of me in my journey of development. As a basis of interpreting Ariel's words, I was reminded of an instance when a beloved mentor took exception to my having addressed her using her title versus her given name. Rightly so, she noted that this was a departure from my usual custom. She attributed this change as evidence of my current stress. While I was, in fact, stressed, I don't believe I used her full title as a subconscious marker of my distress. Instead, by using her full title I was acknowledging the role she shared in my life as mentor; my use of title was a sign of respect, not of distance. It had been some time since our last face-to-face meeting. In the interim I had spent considerable time with other professors, just as dear to me but less familiar. I addressed each of them using their title. In fact, over the course of my educational journey, many mentors have moved into my mental file of friends as they work with me on personal and professional growth. Most I continue to call by

their titles (Dr., Mr., Mrs.) out of respect for their life's experiences and appreciation for their life's choice to serve others. Mentally and linguistically, I was placing her in the same category with the other teacher-mentors of whom I had also grown fond. In retrospect, however, I now realized that this term was cause for concern for my constructivist mentor-professor-friend who is passionate in her dedication to helping me find my voice and who views her role as supporting more than guiding. It would have been a truer reflection of her epistemology, our relationship, and my growth had I used the endearment of her first name. At the time, I did not fully appreciate or understand the concern I sensed in my mentor's words. Feeling regret for past conduct, I returned to Ariel's remark. With new ears I heard her words and was filled with fresh appreciation for her choice to call me "friend."

With these thoughts of friendship in mind, I returned to consideration of our final interview. Ariel and I returned to the topic of our bond by reflecting on our email communication.

Melba: This was like an online learning partnership. I'm learning from you,...and you're learning from me. Could you describe that for me? How did that feel for you?

Ariel: To me it was...great because, if it was something that I needed feedback from you, I knew you would respond....We had our...fall experience, which was good. But then I also knew that you were there if I had any problems, if I had any questions, if I needed more input you were just a mouse-click away or a phone call away, either one. And you were there to support me and to help me throughout the whole, I guess, adventure. If I have questions pertaining to my kids or to how I'm presenting,...you're there.

. . . .

Melba: What would you suggest to be the follow-up, if anything, to a reading strategies development [workshop]?

Ariel:I like this approach because you're getting feedback....The online approach, Melba, it's great, but also just knowing that if I needed someone to

come, that they would be there. You know what I'm saying, that we could do a face-to-face. We could do an online. We could do a phone call. That the support is there. Because...so many times with professional development, they're in, they're out, they're gone. And if you do [pay for consultants to do follow-up], it's not cost effective, especially with the budget crunches this year and job cuts.

. . . .

Ariel: And you know, this is not intimidating....You're my expert. But I'm not intimidated by that. I guess it's a relief to [know] that if I have questions, you can answer them. Or you can head me in the right direction. (I2: 996-1026)

Again Ariel indicated that trust was essential for her growth. She grounded that trust in the knowledge that her "expert" would be available ("just a mouse-click away"), reliable ("that you would be here"), credible ("if I have questions, you can answer them"), personable ("not intimidating") and, as revealed earlier, genuine ("you love kids as much as I do"). Furthermore, this bond did not form with her signature on the Participant Consent Form or with her director's signature giving me permission to provide PD. Our bond was discursively constructed as we engaged in talk, "in an informal, communicative way," about strategies to improve student reading in the content areas. This took time, time that was begrudged during our workshop by last minute, state-mandated Special Education training and school-wide planning for a gradelevel initiative, time that had to be stolen in snatches of emails from the demands of daily teaching concerns, and time that was sandwiched between summer-school sessions as Ariel and her students struggled to avoid summer set-back. Given the challenges we experienced in making time for further discussion, it is no wonder, then, that so many schools fall back on one-shot workshops with little to no follow-up. I think we both agreed, however, that our adventure together was worth the time; we both grew as a result of our collaboration. In these snippets of conversation, Ariel addressed the utility of having time for talk with peers or mentors. In the next section, her words revealed that she also valued time for practice.

Time for practice. Another element of professional development that Ariel valued was a chance to "interact" with new concepts, materials, tools, or techniques. When she mentioned that the *Board Maker* PD was a particularly meaningful experience, I pressed Ariel to find out what details of that experience made it noteworthy.

Being able to be interactive [with the presenters and the program]...gave us a feeling of... how it is to be [in the role of the student.] (I1: 106-109)

. . . .

They gave us an opportunity to be hands-on with the software....They also had materials that we could look at and see if they were something that we could use or might want to use. They told us how they made the materials, so we got to...interact with the materials and with the people who were doing the presenting. (I1: 153-187)

Later she mentioned that similar opportunity for practice was beneficial during the *Triad* PD. The *Triad* presenters first modeled techniques prior to giving participants time to practice in small groups with presenter assistance.

They did lots and lots of modeling....They would give us opportunities to practice what they had modeled. And as we practiced, they would come by and observe. (I1: 332-344)

Directly after, groups were selected to model their practice for the other participants. In total, participants had three exposures to the *Triad* methods. A second day of PD, Ariel said, was "nothing but materials."

We got to make materials to use with the student...Whatever you made you brought back to the classroom....It was all wonderful, but to have things in hand when you come back ready to go makes it even more so. (II: 334-341)

When asked about her vision of ideal PD, Ariel conveyed that

...it needs to be hands on. You need to have the opportunity to...give and take...you need to have the opportunity to make materials...and...see what

supplies you might need to implement ... the program ... to help you and the student be successful. Because that's what we're here for. (I1: 410-414)

In other words, it was insufficient to simply present a new concept, tool, strategy, or material.

For Ariel to internalize new learning, she needed time to actively engage with it, whether through role-play with peers, development of materials, hands-on with equipment, conversation with peers, or discussion with presenters. Interaction with new learning was vital for her professional growth. In the following section, our conversations revealed that flexibility was also required for her development. Flexibility in the selection, implementation, and avenue for reflection of learning opportunities was best accommodated through freedom of choice.

Freedom of choice. In discussing various PD experiences, Ariel described several instances where freedom to choose played a role in her degree of satisfaction with new learning. Personal agency in the process of selecting PD seemed to be important as Ariel strived to make her learning opportunities match her needs and those of her students. For example, it was significant to Ariel that her system-level supervisor intervened when the state department of education denied her request to attend Triad PD.

I think I was very lucky and very fortunate because when we first applied, the state said that I couldn't go, that we had to be teachers within one school....[My supervisor] was a vivid advocate for us....She explained,..."This child has one more year there [at the middle school] and will then be coming to the high school. They need to be uniform and consistent."....The state agreed. I got to go. (I1: 364-372).

So by the time Ariel made it to the PD, she had selected a program that would benefit her student, had applied and sought reinforcement from her supervisor, before ultimately securing a place for herself, and indirectly the student she would serve, in this educational setting. While her path to education in this example was not without obstacle, and in that sense was not an ideal exemplar, it nevertheless demonstrated the strength of determination she was prepared to muster

in order to acquire what she and her students needed. The chance to exercise personal agency in selecting this experience, as opposed to being compelled to attend, appeared to have added to the value of the experience for Ariel.

Freedom of implementation was similarly important to her as she strived to enact new methods of learning with her students. Unlike some innovations which are mandated by governing entities, negotiation of particulars from our fall workshop on reading instruction was left up to Ariel who was free to match strategies, timing, curriculum, and lesson design to her students' needs. In talking about which strategies she selected to try from our workshop, Ariel again clearly indicated her need to connect PD with regard for her students. In my emails, I asked Ariel to tell how she chose particular techniques from our workshop to teach specific curriculum. To teach reading comprehension, she said:

I plan to use the scaffolding model. I am going to have the class read *The Cay* as a group. I chose this strategy because I love to hear stories and to be read to, as do my students. (OC: 54-55)

For a later lesson, she wrote:

I will be teaching geography using [Talking and Writing about Text]....My students have a very low self-esteem....I plan to implement this strategy by having students begin by writing one or two words to describe an area they are familiar with (prior knowledge) and to continue with new knowledge learned. The fact that this approach was based on prior knowledge prompted me to choose this approach. This way the students feel comfortable discussing and hopefully writing about the topic. (OC: 500-511)

In each case, Ariel decided on strategies from our workshop based on what she perceived would most benefit her students. To present *The Cay* (Taylor, 1969), she considered her own favorable experiences with being read to and that her students appeared to enjoy this as well. Therefore she selected read-aloud as part of her strategy based on prior experience and knowledge that positive student emotion would increase student comprehension. She was again mindful of the role of

student emotion in learning as she planned her geography lesson. Concerned about her students' low self-esteem, Ariel decided that forming connections with prior knowledge would make new learning less intimidating. In this professional environment, Ariel was free to exert *agentic care*, a term I coined by joining words borrowed from Bandura (2001) and Noddings (1988) to mean employing one's own professional experiences in determining what is best suited to meet students' needs and to create conditions for oneself that are well-matched for one's own learning and that of one's students.

As revealed by our conversations, Ariel was most satisfied with professional growth opportunities when selection and implementation mirrored regard for student needs. This match occurred in an environment that afforded flexibility, offered choices, and recognized agency in the teacher-learner. Such a setting supported teachers as professionals who knew their students' strengths and deficits, who internalized these as their own, and who had the ability to seek and apply new knowledge in ways that would most benefit their students. This same consideration for teachers as adult learners allowed for freedom of reflection. Email offered one option for supporting teachers as reflective practitioners. Through online conversations, for example, Ariel was free to review past experiences and current mini-lessons at her convenience and at her own pace. In the following passage, she discussed the benefit of flexibility to growth.

Melba: What about having to log on and write to me about that you did?

Ariel: That to me was the easiest way....I'm there at seven every morning, and I turn on my computer. If I'm there, then I can sit down and type. You know, I may not get finished. So I can save what I've got and come back and do it later....With telephones, we're not always at home....During the day, there's not always time. So for me, [email] was the least restrictive. (I2: 666-679)

. . . .

With my online conversations, I didn't always get back to respond to you as quickly as I would like to. But I can [email] before school, after school during planning. You know, it's not "You have to do this by this." (I2: 748-754)

The flexibility of using email for reflecting and communicating supported Ariel in managing her other responsibilities while offering her an avenue for professional growth. By giving teachers freedom to impact their own learning, designers of PD are considering their needs as adult learners. Personal agency to select, implement, and reflect in ways that are meaningful to the individual empowers each teacher to meet their own learning needs. In the following section, conversations with Ariel revealed her thoughts on what challenges her to grow.

Appropriate challenge. As Ariel and I reflected on several of her past professional growth opportunities, she indicated that it was important to her that PD programs be well-matched to her needs. It has been my experience that finding time to pause for reflection on improvement during the school year is like trying to stop a freight train. Given that school is so fast-paced, I do not find it surprising that Ariel begrudged giving up precious time for a fool's errand. Here is what she had to say about one such experience:

Autism is the big thing. You know, and there are more and more students being identified with autism. And in the past, I have attended several autism sessions thinking, you know, that I would get good techniques, good strategies, and what it boiled down to, it was more or less a lecture of information I already knew....So I was kind of disappointed. I mean, it's good to hear things that you know because it brings things back to light that you may have [heard before]...."Oh, yeah I knew that. But by the same token, there was nothing new." So it was kind of, you know, "well, yeah, I could have been at school with my students, which I would've rather been." (II: 385-393)

Ariel's appraisal of this experience was that it contributed to no new development for her or her students. She was not challenged to change her thinking or to try new strategies. In contrast, the autism workshop called *Triad* that Ariel spoke favorably of did result in changes to the classroom and scheduling of student activities. PD that offers a reiteration of past experience

affords no new goals for future development, provides limited anticipation of novel events, and does little to stimulate the brain's attentional system needed for learning. In contrast, when faced with trying one of the strategies from our workshop, Ariel admitted that she felt some anxiety:

Ariel: I was a little bit apprehensive because I thought, you know, are they going to understand?

. . . .

Melba: So this whole process was, would you say,...a little painful? Or painless?

Ariel: I wouldn't say it was painful. It was a little, I guess, nervous.... (I2: 365-435)

At this point, I reminded Ariel that even the best performers feel some nerves before going on stage and hint that perhaps the occasional adrenaline rush is needed to help keep teachers at the top of their game. After getting past her initial bout with nerves, Ariel was able to enjoy this experience of trying something new with her students. When I asked Ariel to compare her initial feelings of concern with how she felt after the lesson, she had a change of heart.

Melba: Compare that with...afterwards.

Ariel: They were more open, they were more expressive in what they were trying.

Melba: And how did that make you feel?

Ariel: Made me feel great! (I2: 372-378)

For Ariel, the fact that this strategy raised her level of concern, and yet she persisted in trying it with her students, was indication that the strategy was both novel and one that she believed would meet her students' needs. In addition, it was important to Ariel that PD programs presented material that could enhance instruction more than on an occasional basis, as she indicated below:

Melba: So, tell me how you feel about this whole professional development experience.

Ariel:....You know, you learn something, you come away with something from every professional development....that you can use. But it's not always something that you can use repeatedly....This is something that you could use on a daily basis....It's very successful. Suggest it to any professional. (I2: 482-505)

With these remarks, Ariel revealed that PD sessions were most beneficial to her when they presented strategies that were adaptable to multiple learning scenarios. Specifically, she indicated that learning opportunities must be novel, must present material that will meet her students' needs, must demonstrate methods or tools that can be used in various settings.

By closely listening to Ariel's experience of PD, my intent was to uncover elements of learning that may be missing from our typical treatment of educators as learners. I examined our conversations through the lens of three themes: analysis of opportunity, motivation to learn, and conditions for growth. The following section is the fruit of this analysis—an attempt to interpret her description against the backdrop of works by others who contribute to the conversation on teachers as adult learners.

Interpretation: Ariel's Experiences as Signposts

Every project of phenomenological inquiry is driven by a commitment of turning to an abiding concern. "To think is to confine yourself to a single thought that one day stands still like a star in the world's sky" said Heidegger (Van Manen, 1990, p. 31).

For additional guidance in processing what I learned from my adventure with Ariel, I turned to a variety of sources ranging from classic literature to works on education theory and research. Particularly helpful were *The Little Prince* (Saint-Exupery, 2000), *Knowledge*, *Difference and Power* (Goldberger, Tarule, Clinchy, & Belenky, 1996), *Researching Lived*

Experience (Van Manen, 1990), Teaching from the Heart (Apps, 1996), and Pedagogy of Freedom (Freire, 1998). These sources and others combined to extend my understanding of Ariel's words and to further my appreciation for the value of listening to others as an avenue for growth. In the following sections, I used Ariel's ideas as signposts from our journey to extend our conversation to others.

Analysis of Opportunity

Through interviews and email conversations, I talked with Ariel about her PD experiences—both real and ideal. Repeatedly she oriented her remarks to what worked best for her students, using them as the primary basis for determining whether PD experiences were worthy of her time and attention. Thinking of her students' physical, emotional, and academic needs, she grounded analysis of her own learning opportunities in what would most benefit students. Ariel associated PD on *Board Maker* with personal growth, for example, because it gave her nonverbal students a tool for communicating, thereby enhancing the quality of their lives. To judge an initial use of QtA for teaching reading, she turned to students for immediate feedback. Close observation of student remarks, body language, and facial expressions provided clues to the appropriateness of using this technique with her students. Hours of kid-watching contributed to Ariel's ability to use these sources to inform her work; Ariel knew individual students well enough to attend to these features and to learn their nuances before assigning meaning. In each instance, Ariel looked beyond self to judge the worth of professional development, exercising what Stanton labeled "an ethic of care" (Goldberger, Tarule, Clinchy, Belenky, 1996, p. 45). Acknowledging the importance of altruism in education, Goethe remarked that "one learns to know only what one loves, and the deeper and fuller the knowledge is to be, the more powerful and vivid must be the love, indeed the passion" (1963, p. 83). SaintExupery's fox gave similarly sage advice by hinting that the universe rewards those who give to others.

My life is monotonous. I hunt chickens; people hunt me. All chickens are just alike, and all men are just alike. So I'm rather bored. But if you tame me, my life will be filled with sunshine. I'll know the sound of footsteps that will be different from all the rest. Other footsteps send me back underground. Yours will call me out of my burrow like music....The only things you learn are the things you tame. (2000, pp. 59-60).

Ariel "learned" what she loved most—her students; every raised eyebrow, clinched shoulder, or bitten nail were to her a code to individual student needs. Like the fox, however, she invited this taming and was "filled with sunshine" by the thought of a single child who sat through an award ceremony without incident.

With individual student needs as her primary gauge for PD, it is not surprising that Ariel expressed frustration for "garden variety" sessions that did little to extend her knowledge and instead increased her distrust for presenters with "something to sell." She knew that such sessions offered limited guidance on differentiated instruction and that once money had changed hands, presenters were often gone before teachers realized they needed further support.

Commenting on teacher preparation, Freire (1998) echoed Ariel's concerns when he wrote,

To know that I must respect the autonomy, the dignity, and the identity of the student and, in practice, must try to develop coherent attitudes and virtues in regard to such practice is an essential requirement of my profession (p.61).

Unfortunately, this requirement is often left unmet by PD plans that blanket schools with a single approach. Due to time constraints, one-shot PD is delivered via the transfer model, giving teacher-learners limited opportunity to engage with materials, other learners, or presenters. Additionally, demands of uniform adherence to the new approach by all teachers in all grade levels and all subjects disrespect both teacher-learners and students.

There are PD options that provide flexibility for teacher implementation. Many of these, however, are costly and time intensive. With the current education environment created by the federal government's NCLB, school systems are often left scrambling for PD to fulfill state and local mandates for school improvement with scarce monies or time for sessions. Teachers are frustrated, as is the case with Ariel when she says that "Special education is not a one-size-fits-all....When they do the garden variety, they're gone. They're in, they're out." Not only does Ariel feel stymied by inadequate support, she recognizes that the material presented will not offer enough flexibility to meet her students' individual needs. In the race to meet federal expectations, administrators hire a single outside consultant as an expedient and facile solution, leaving individual teachers feeling disrespected. Saint-Exupery (2000) captures this feeling in the following passage:

"Ah, Here's a subject!" the king exclaimed when he caught sight of the little prince.

And the little prince wondered, *How can he know who I am if he's never seen me before?* He didn't realize that for kings, the world is extremely simplified: All men are subjects (p. 28).

In the current world of education, the federal government casts administrators in the role of king; administrators behave as if they do not know teachers, their unique gifts or individual needs.

The PD providers, hired for the day, cannot know teachers if they do not take the time to interact with them. Just as it is inappropriate to presume to teach student-learners well who remain strangers, it is equally unethical to presume the same for teacher-learners.

Motivation to Learn

In reflecting on the role of PD in her life, Ariel pronounces more than once that "change is always good." Through these words, Ariel captures her orientation to life: an openness to

learn from the world around her so that she may better serve others. Freire (1998) describes this approach to living as an awareness of one's own "unfinishedness." Of the pedagogical perspective specifically, he writes,

To live in openness toward others and to have an open-ended curiosity toward life and its challenges is essential to educational practice. To live this openness toward others respectfully and, from time to time, when opportune, critically reflect on this openness ought to be an essential part of the adventure of teaching (p. 121).

By being open to change, Ariel is motivated to continue developing her craft based on the changing needs of her students. In order to address their needs, she must know what those needs are; in order to recognize needs, she must get to know her students. Such knowledge about individual students is gained by establishing relationships, what Stanton and others call an "ethic of care" (Goldberger, Tarule, Clinchy, Belenky, 1996, p. 45). By caring for others, Ariel establishes relationships through which she learns what she has yet to know; her heart is her principal guide for learning. Whether or not she has read *The Little Prince* (2000), Ariel knows the secret shared by Saint-Exupery's fox: "One sees clearly only with the heart. Anything essential is invisible to the eyes" (p. 63). By listening to students, Ariel gains direction for her own learning. Goldberger, et. al. (1996) makes a similar point about the importance of care in teaching when she shares that the Chinese incorporate the symbol for heart into the character for thinking. Thus, for many Asians, the heart and brain work together to form thought (see Figure 2). In writing about research and the art of teaching, Van Manen (1990) seems to echo eastern thought when he writes that "we can only understand something or someone for whom we care"



Figure 2: Chinese Character for "Think." Top part is for brain; bottom portion is for heart.

(p. 6). In these instances we find that Ariel's source of motivation for learning is shared by many who look to those they care about for directing their own development.

In light of Ariel's desire to direct her own development, it is unfortunate that much education PD is currently determined by NCLB and those in authority. Teachers are not trusted to collect experiential data from their relationships with students but are instead directed to rely on test measurements of groups of students to determine where teacher growth is needed. The fallacy of reliance on numbers and of blindly following orders is depicted in several scenes from Saint-Exupery's *The Little Prince* (2000). From the businessman, we learn that the beauty of individual stars cannot be captured in numbers. From the lamplighter, who mechanistically lights and extinguishes his lamp though he is his planet's only inhabitant, we see the futility of blindly following orders. In the personage of the geographer, we find the conceit of one who assumes authority but believes himself too important for first-hand experience. Through the

prince's encounters with each of these individuals, we see the incongruity of living a life apart. I would argue that a life lived apart from others, whether mentally, physically, or both, is not living. I would argue, in fact, that as educators we must reconnect with our hearts; we must tie what we do to our relationships with students, in spite of the current national directive to focus on test scores, lest we risk losing the very part of ourselves that brought us into the profession in the first place. My intent is not to foster insubordinate behavior on the part of teachers. Rather my goal is to find ways of satisfying local, state, and federal mandates while maintaining congruence with constructivist beliefs. Perhaps the best path for doing this is to encourage those in authority to share their power with those who have connected with students, who have first-hand experience with students. On examining this path, we find that Ariel's focus on her students for motivation is appropriate because the student is the expert on self. If one believes that knowledge is situated in experiences of the individual, then one must **know** the individuals in order to understand. Teachers are in a unique position to contribute, as witnessed by Freire (1998) in the following passage.

There is a relationship between the joy essential to the teaching activity and hope. Hope is something shared between teachers and students. The hope that we can learn together, teach together, be curiously impatient together, produce something together, and resist together the obstacles that prevent the flowering of our joy (p. 69).

Teacher-hope, as described by Freire, is vital for learning. Without a hopeful orientation to students and their futures, instruction becomes mechanistic, void of authenticity. In the next section, Ariel's words provide keys for maintaining teacher-hope by describing those conditions she finds vital for professional growth.

Conditions for Growth

Time for talk. When asked about past PD experiences, Ariel indicated that opportunities to talk with peers and mentors about professional learning was important. Unfortunately, many of the learning opportunities offered to teachers today follow the transfer model, with administrators or consultants giving speeches on what teachers "ought" to be doing to raise test scores, increase graduation rates, and improve student attendance. Freire (1998) expresses concern for the prevalence of this PD model in education when he writes:

Indifference to the integral education of the human person and the reductionist mentality that talks only of training skills strengthens the authoritarian manner of speaking from the top down. In such a situation, speaking "with" which is part and parcel of any democratic vision of the world, is always absent, replaced by the more authoritarian form: speaking "to." ...One sign of this trend is that pedagogical evaluations of teachers and students are becoming progressively more dominated by "top down" forms of discourse that try to pass themselves off as democratic (p. 103).

Despite the predominant reliance on authoritarian-style "training" for teacher professionals, some educators are gifted with opportunities to collaborate. Ariel described three occasions when communication with peers contributed to her learning. In discussions with co-workers about new programs (*Boardmaker*), techniques (*Triad*), and strategies (*QtA*) for use with specific students, for example, Ariel reaped cognitive and affective benefits that reinforced new learning. Through conversation, she made connections with past experiences, rehearsed new meanings, received affirmation and feedback, and primed for future collaboration. She revealed similarly positive feelings about talk with mentors when she wrote "If I needed more input, you were just a mouse-click away." The importance of time for talk for adult learning resonates with Apps (1996) who wrote that "a first step in learning from the heart is accepting that talking with someone else, sharing ideas, and attempting to answer each other's questions are powerful ways of learning" (p. 25). Time for teachers to talk among themselves is vital for fostering teacher

growth and must be carved from the school calendar. Furthermore, administrators and those who are charged with meeting the needs of teachers should work to strengthen relational ties with teachers in order to support continued teacher development. We are reminded by Saint-Exupery's fox of the importance of relationships.

Prince: "What does tamed mean?"

Fox: "It's something that's been too often neglected. It means, 'to create ties'..."

Prince: "To create ties?"

Fox: "That's right," the fox said. "For me you're only a little boy just like a hundred thousand other little boys. And I have no need of you. And you have no need of me, either. For you I'm only a fox like a hundred thousand other foxes. But if you tame me, we'll need each other. You'll be the only boy in the world for me. I'll be the only fox in the world for you..." (year, p. 59).

As a teacher, when I first meet a class, there are no ties established. I face a sea of students. I am only a teacher like a hundred thousand other teachers, and my students have little need of me. By the end of the term, each student is a unique individual with distinct hopes and dreams for the future. A PD provider newly hired from outside the system is like a hundred thousand others. An environment of trust similar to classroom must be similarly established for effective PD. Only with time for communication will relational ties be established that are vital for professional growth.

From Maslow's *Theory on the Hierarchy of Needs* (1943/1995), we know that "belonging and esteem needs" must be met before individuals will realize their potential. This theory applies to all learners, whether students or teachers. Teachers who feel welcomed and respected by fellow educators are much more likely to attend to new learning than those who feel disrespected or unwanted. While facial expressions and body language do much to convey acceptance and appreciation, words are more specific. Typically, in a dialogue between two

conversants, a mutual exchange of perspectives occurs before both participants feel truly understood. Saint-Exupery (2000) demonstrates the importance of perspective in fostering development. As the pilot of Saint-Exupery's tale recalls his first attempt at drawing, he describes the mismatch between adult interpretation and his childhood drawing. Discouraged by adults who insist on calling his "boa constrictor digesting an elephant" a "hat" (p.2), the self of this pilot's childhood memory determines never to draw again. Thus, the artist-turned-pilot truncates his artistic development due to the adults' inability to view life from a child's perspective. Similar is the case of many teachers who are commanded to attend vague, transfermodel "training" while what they really desire is time to mutually construct "development."

Perhaps the childhood memory recalled by Saint-Exupery's (2000) pilot is what later motivates him to persevere in responding to the prince's request to "draw me a sheep" (p. 3). The pilot goes through several versions before the prince is finally satisfied. The final drawing of sheep-in-box is a product constructed dialogically between pilot and prince. This example reveals the importance of being allowed to connect ideas to one's own experiences and the importance of give and take with others in the learning process. Both pilot and prince attend to the perspective of the other to engage in mutual development. Implicit in this exchange is the act of listening; one must listen in order to hear another's perspective. As Freire (1998) remarks, "To accept and respect what is different is one of those virtues without which listening cannot take place" (p. 108). I would argue that the opposite is also true, that real acceptance and respect cannot occur without listening. In this study, for example, our face-to-face informal interviews and online conversations served as a forum for dialogical processing of the teacher-as-learner experience. In order to engage in meaning-making with Ariel, however, I had to first hear her.

Despite the fact that Ariel refers to me as her "expert," my relationship more closely resembles

equal-parts teacher and learner. I extend my understanding of teacher-learners as Ariel describes her experiences. According to Apps (1996), there is an implied problem with those who would provide PD via the top-down or transfer model. He writes,

Some equate education with an approach or process as in 'Pay attention and I will educate you....' I believe education is a series of relationships: learners relating to their own intellectual, emotional, physical, and spiritual selves; teachers relating to learners; learners relating to each other; learners relating to knowledge; and teachers and learners relating to contexts and communities (p. 9).

Thus, regardless of whether a learning environment supports communication among peers, between teachers and mentors, or all of the above, a PD environment that facilitates two-way communication must be available for teachers to experience growth. Apps continues in his description of the ideal environment for adult learning:

Everyone is a learner *and* everyone is a teacher. Some people are designated teachers. It is their profession; they are trained to do it. But this doesn't mean that others can't or shouldn't teach. I am not talking about replacing professional teachers, but widening the definition of *teacher*. For instance, when we share our knowledge and experience, and our hopes and fears, we teach. When we ask questions of others, we teach. When we listen to the problems and concerns of people and do nothing more than try to hear, we teach. Within formal educational programs led by professional teachers, everyone can share in the teaching, just as everyone, including the professional teacher, shares in the learning (p. 15).

After combining Apps' take on the needs of adult learners with Ariel's ideas on the ingredients for fruitful PD, we find that time for reflective talk is imperative for teacher growth, and by extension, school improvement. In the next section I review Ariel's request of time for practice in light of what others have to say about learning, adult learning, and teacher learning.

Time for practice. In Saint-Exupery's *The Little Prince* (2000), the fox gives the prince advice about discerning what is most important in life. He says, "Anything essential is invisible to the eyes....It's the time you spent on your rose that makes your rose so important" (pp. 64-65).

Though time spent is an intangible aspect, it is nonetheless one of the most important things in life: time spent with one's children, time spent striving toward a goal, time spent rehearsing, time spent getting to know another before making a commitment are all aspects that contribute to the quality of life. In education, time spent engaged in conversation with a student in the service of learning is time well-spent; equally productive is time spent practicing a new teaching strategy to make it one's own. In the *Boardmaker* and *Triad* workshops, Ariel mentions the importance of time for interaction with presenters, with fellow attendees, with materials, and with computer programs as being significant to her learning. Time is again referenced when we negotiated the length of time she would need to try two or more strategies from our workshop. Initially, we anticipated that she would need two months. Over the course of the year, as other responsibilities demanded time and attention, the length of time needed for trial lessons extended to an entire school year. In retrospect, the length of time we took to accomplish both minilessons was providential. A narrower time frame would have lessened mental processing of our experiences and online collaboration, and perhaps not included her sharing that she used strategies from our workshop more often than the two assigned times (e.g., OtA). With the study's expanded time for reflection and practice, she was able to gain a wider experience than originally planned. Ariel's reflections on professional learning remind us that humans require time for active engagement and for mental processing. Her thinking is coherent with Apps (1996) who writes that real learning—the kind that results in changed behavior—requires time and effort:

Learning at a deeper level requires some distancing and some work. Learning from the heart takes time and often requires solitude....Learning more deeply takes practice and discipline. We must push ourselves to see things more profoundly, to feel more intensely, and to allow our minds to explore experiences more broadly. For many persons this is not easy. The inner censor that each of us

has asks, why bother examining old experiences when there are new things to learn? Such learning can evoke fright as well as elation. Deep-seated beliefs and values are challenged. Long-held ideas are found wanting" (p. 30).

In essence, learning "from the heart" involves *agency*, an idea that is congruent with constructivism and that casts the role of learner as active rather than passive (Goldberger, et. al., 1996). Learners require time to make themselves "architects of their own cognition process" (Freire, 1998, p. 112) and freedom to apply ideas to their own lives. As teachers, time for reflection and independent practice should be allocated within the work calendar instead of a single activity assigned to all teachers in the name of fulfilling a PD requirement. The freedom to choose how one spends time on PD is the focus of the following section.

Freedom of choice. As I shared in an earlier section, Saint-Exupery begins The Little Prince (2000) with the story of a child who is discouraged from pursuing a career in art by the misguided remarks of adults. In this partially autobiographic tale, Saint-Exupery exposes the loss of motivation that results from restraining curiosity. We learn that Saint-Exupery, like the pilot in his story, rejects art at an early age to pursue a more accepted career in aviation. Because Saint-Exupery's artistic talents are prematurely restricted, we have only one work, both written and illustrated, for which this author/artist is widely known. We is left to wonder how many more well-known works of fiction he might have produced had his artistic talents been given full reign. Such is the power of choice.

Where there is disjuncture between innate interest and imposed learning tasks, agency is the casualty. Learners in general and adult learners in particular are affected by inflexible learning environments where individual needs are glossed over for the sake of expediency, facility, finances, or control. Freire (1998) warns of the peril of denying teacher-learners their freedom.

One of the signs of the times that frightens me is this: the insistence, in the name of democracy, freedom, and efficacy, on asphyxiating freedom itself and, by extension, creativity and a taste for the adventure of the spirit. The freedom that moves us, that makes us take risks, is being subjugated to a process of standardization of formulas and models in relation to which we are evaluated (p. 101).

Unfortunately, PD is often prescripted by those in authority based on standardized "formulas and models," with little consideration for individual teaching experience. Limited choices deny teachers the flexibility needed for real learning. As Freire explains, "to teach is not *to transfer knowledge* but to create the possibilities for the production or construction of knowledge" (p. 30). Teachers who are denied options by traditional forms of PD are relegated to receptive forms of knowing resulting from the transfer model versus the more complex forms of connected knowing that result from the generation of knowledge (Mahoney, 1996). And yet teachers are the very being imbued with the responsibility of developing more complex forms of knowing in our students. Given that responsibility, it would seem logical that administrators and others in control of education would want teachers to foster this ability in themselves rather than the compliant flock that authorities currently seem intent on nurturing.

Appropriate challenge. As the title implies, challenges are at times inappropriate. A prime example would be when teachers are given two days of PD on Differentiated Instruction and then are expected to execute flawless implementation so that all students, regardless of home environment, genetic make-up, or prior academic record, graduate on time with enough credits to attend college. Apps (1996) acknowledges that teachers are often disrespected by the quality of PD experiences they encounter in the name of improving education.

These are baffling times for all of us, especially for teachers. Many people are talking about learning and teaching these days. And everybody, it seems, has an opinion about how to fix whatever problem they believe exists. They have ideas about how to learn better, learn faster, remember more, and apply that learning to making money and leading a happier, more fulfilled life. Those who teach receive an equal amount of suggestion and admonition—do this and students will learn more, become more efficient, get back to the basics, take charge, be in control, learn about the past, study the future, and so on (p. 8).

Continued support and consistent instruction for new initiatives in professional teaching is often sadly lacking. Ariel's descriptions indicate that teachers crave congruence in improvement efforts and realistic initiatives that can be readily applied to their students' needs. A blanket initiative that is presented as a panacea for all that ails education, as a magic bullet for all students, grade levels, and subjects, and as a quick-fix for struggling teachers will not capture serious attention of faculty. Teachers need presentations that apply to their individual, current experiences. PD that is otherwise planned is ineffectual.

In contrast, PD that matches individual teacher needs and readiness can be powerful in motivating teachers to improve instruction. An individualized approach requires that authority figures first trust teachers' interest in learning and second care for each teacher as individuals with unique needs. The former should be a given since most teachers pursue their careers because at some point they have found joy in learning. For educators, the desire to learn is a natural appetite. It is the role of PD planners to find ways to tap into this natural tendency. In *Teaching from the Heart*, Apps (1996) paints a picture of an ideal learning environment. He writes,

Learning from the heart goes beneath the surface. The surface aspects are the accumulation of information, the development of skills, and a change in behavior. Learning from the heart includes surface learning, but also encompasses the exploration of the relationships among the intellectual, emotional, physical, and spiritual dimensions of a person's life, and the relationships of the individual to

the community, to the environment, and so on. At an even deeper level, learning from the heart includes discovering what it is to be human and exploring the relationship of *doing* to *being*. Many of us are so busy "doing" that we have forgotten how to "be." We are humans *doing* rather than *human beings*.

From this description we find many clues for creating a quality environment for teacher-learners. Relationships are vital; action is essential; reflection is crucial. All three require opportunity to come together as a learning community and time for independent thought. Since each teacher-enactment of a human *doing* is unique, then teachers must be awarded the power to make their own learning learner-specific. Freedom of choice is critical. When these requirements are met, then teachers' natural appetite for learning is satisfied. Motivation to learn grows, and opportunities are assessed as being worthy of attention.

CHAPTER V: CONCLUSIONS AND RECOMMENDATIONS

Conclusions: Providing Professional Development That Supports Teacher Learners

Through conversations from informal interviews and emails, this study revealed an image of teacher as professional learner. As I reflect on this experience of a teacher committed to growth, combined with my own experience and the literature on teacher professional development and adult learning, two things seem clear. First, there are critical actions that foster teacher development and learning. And second, individuals who influence continuing education for teachers have a responsibility to act through an ethic of care. These are discussed in detail below, followed by recommendations for practice and for research that grow out of them.

Critical Actions That Foster Teacher Development and Learning

Individuals charged with responsibility for teacher professional development should operate with the highest standards in mind, starting by only offering PD experiences that are worthy of teacher time and attention. Further, they should enhance learning by mining sources of teacher motivation and should capitalize on teacher potential by adopting conditions that nurture teacher growth.

Offering Experiences Worthy of Teacher Time and Attention

Goal Congruence. One standard that Ariel used for deciding if a learning opportunity was worthy of her time and attention was her students. She was only interested in PD if it would generally benefit her students, as in reading instruction, or if it would specifically benefit individual students, as in programs for autistic individuals. She oriented her energy toward PD

that would produce positive experiences for students through increased enthusiasm or active engagement. Learning opportunities for Ariel had to be congruent with her students' needs, regardless of whether those were physical, emotional, or mental. If a professional learning opportunity failed to present material that matched readiness levels of her current students, then Ariel was not inclined to take time away from the classroom. Therefore, congruence with student needs was a primary consideration for determining whether to pursue PD on a given topic. Through Ariel's experience I must conclude that goal congruence is a significant factor to be considered in providing quality PD. Adult learners will not attend to programs that fail to match their immediate goals. Findings from research on PD concur that teacher-learners must clearly see a link between the PD being offered and goals based on student needs in order for instructional practices to improve (Linek, Fleener, Fazio, Raine, Klakamp, 2003). Sadly, this is typically not the case since most PD in the United States attempt to blanket whole faculties (Richardson, 2003) with limited attention for individual teachers (Hill, 2009). Instead, Darling-Hammond and McLaughlin (1995) suggest that PD link with teacher goals by dealing with "concrete tasks of teaching, assessment, observation and reflection" (p. 598). A recent report form the National Staff Development Council adds that teachers connect with PD that focuses on "how to engage in specific pedagogical skills and how to teach specific kinds of content to learners. Equally important is a focus on student learning" (Wei, Darling-Hammond, Andree, Richardson, and Orphanos, 2009, p. 3), a recommendation that agrees Ariel's experience.

Flexibility. A second element that Ariel used in analyzing PD opportunities was flexibility of implementation. She was not interested in acquiring information that featured limited uses with a few select students. She was eager, however, to pursue any professional learning that was adaptable to multiple students and varied content, particularly if it could be

easily tried, without outside coaching, on return to the classroom. With many schools acquiring access to the Internet and intranet, it is feasible that some may offer online PD as an option for teacher learners who often are hard-pressed to successfully juggle after-hour meetings, papergrading, and family responsibilities. Some scholars voice concerns that the digital divide could impede online learning (Moore, 2001; Page, 2005; Kelland, 2005). Nevertheless, Internet World Stats (2009) has estimated that there are close to 252 million Internet users in North America, or 73.9% of the total population. As recently as 2001, Moore reported that "high-income households [were] twenty times more likely to have access to the Internet than low-income families." He continued by saying that "two-thirds of the college-educated people [in the United States had] access to the Internet and only 6% of those with primary or elementary education" (2001, p. 25). Given that educators in K-12 public schools are college-educated with incomes typically above the poverty level, one may assume that the vast majority of these educators do have access to the Internet and would benefit from the option of online PD participation.

Credibility. A third issue that Ariel considered in determining whether to attend PD was trust in the source of the presentation. She was skeptical of sources that stood to benefit financially from the presentation or that glossed over individual student needs as if all young learners were of uniform genetic make-up and life-experience. Therefore, it was important to Ariel that she be able to trust the intentions of PD providers as being student-centered. It was also significant that she be able to rely on providers for follow-up or support if needed. Darling-Hammond & McLaughlin (1995) agree that trust has an impact on teacher attention in PD endeavors. In a list of "key factors related to teachers' learning and change" they advise asking the following:

Does the [PD] policy establish an environment of professional trust and encourage problem solving, or does it exacerbate the risks involved in serious reflection and change and thus encourage problem hiding (p. 604)?

As their question indicates, credibility also involves respecting teachers as professionals who are capable of problem solving and providing an environment that supports open teacher communication.

Mining Sources that Motivate Teacher Growth

Effort to foster learning in teachers can be a waste of time, effort, and money if not planned and framed in a way that captures teacher interest. Gilbert (2002) presented this issue with the following query:

- Q: How many staff developers does it take to change a light bulb?
- A: One, but the light bulb has got to want to change (p. 6).

Ariel's experiences combined with research on adult learning provide clues to those sources of interest that teachers find most compelling—their students and themselves.

Benefit to Students. When pursuing growth on a given professional topic, Ariel did more than attend a seminar or workshop. Professional learning involved her attention, reflection, trial implementation, and further reflection. It was important to Ariel, therefore, that she be able to justify investing in time away from students. Repeatedly in conversation, Ariel indicated that she decided whether to continue PD through all the stages of implementation by determining if the new learning benefited her students. Cognitive benefits included increased student engagement with ideas, enhanced student-to-student collaboration, students as empowered learners, strengthened skills, and movement beyond received knowing to connected knowing.

Affective benefits were associated with improved student self-esteem, enhanced student anticipation for learning tasks, augmented student curiosity, improved student appetite for learning. If new learning offered proven benefits for her students, Ariel was eager to investigate. Offering PD that clearly benefits a teacher's students is a key element for securing teacher motivation for learning. As called for in an article on "policies that support professional development" which recommends that quality PD be grounded in teachers' work with current students (Darling-Hammond & McLaughlin, 1995, Fuller, 1969; Hargreaves & Fullan, 1989; Huberman, 1989; Weasmer, Woods, & Coburn, 2008).

Benefit to Self. Implied in my conversations with Ariel was one other source of motivation for continued learning. Ariel referred to herself when reflecting on what she had learned from our workshop as she transitioned her epistemology on reading from positivist to constructivist and her thinking on instruction from received knowing to connected knowing. It is important that PD providers offer opportunities that support teachers in development of increasingly complex epistemologies. Teachers tend to teach the way they were taught. If the intent is for teachers to use constructivist strategies with their students, then those who design PD for teacher learners must reach beyond the traditional transfer delivery model. Mezirow's (1981) transformative learning theory offers one model for PD developers. Learning that results in transformation occurs when there is change in beliefs, attitudes, or perspective. Merriam, Caffarella, and Baumgartner (2007) add that "through transformative learning we are freed from uncritical acceptance of others' purposes, values, and beliefs" (p. 133). Mezirow's theory is comprised of a four-part process: "experience, critical reflection, reflective discourse, and action" (Merriam, et. al., p. 134). Admittedly, tremendous preparation is required of individuals who would facilitate transformative learning opportunities. But this would seem to be one goal

of PD providers for teachers, a change in beliefs that over time would manifest as changed behavior in the classroom.

Adopting Conditions that Nurture Teacher Growth

I believe that adult learning, like that of a child, responds positively to nurturing.

Research by Caspi and Elder (1986) supports this assumption. A 1999 study by Heckhausen further indicates the potential of environmental factors to foster adult learning. In addition, I base this assumption on the importance of environment on my own life experiences as well as on the data collected in preparation of this study. Ariel's experiences indicate that time for talk and practice is important as well as freedom of choice and appropriate challenge. Examination of these four elements reveals other influences that further foster adult learning and development.

Time for Talk with Peers. In my communications with Ariel, she indicated that she needed time to talk with peers in pursuit of professional learning. From these conversations she revealed several personal benefits, including immediate brainstorming sessions and on-going conversations with peers after time for implementation and reflection. From the discussions she described, one can infer that she gained collaborative benefits by networking with peers and cognitive benefits through mental consolidation of new learning. Conversations like the one Ariel shared with a member of her *Critical Friends Group* contribute to an environment that celebrates life-long learning, merging what Holland, Lachicotte, Skinner, and Cain (2003) call identity construction, agency, and cultural worlds. Senge's (1990) work on learning organizations indicates that socialization in the service of organizational improvement generates synergy that benefits both individual members and the organization. Articles and research from the field of education agree that time for peer collaboration is imperative for teacher growth (Darling-Hammond & McLaughlin, 1995; Borko, 2004; Borman & Dowling, 2008).

Communication also fosters congruence of school-wide programming by engaging participants in talk about professional practice (Rock, 2005). For those of us who believe that learning is situated and discursively constructed, the role of talk is vital for growth. Driver, Asoko, Leach, Mortimer & Scott (1994) suggest that knowledge is

constructed when individuals engage socially in talk and activity about shared problems or tasks. Making meaning is thus a dialogic process involving persons-in-conversation, and learning is seen as the process by which individuals are introduced to a culture by more skilled members (p. 7).

By explaining how knowledge is generated discursively, Driver, et al. reveals the importance of conversation with peers and mentors in adult learning. Unfortunately, current PD usually fails to offer teachers the opportunity to discuss what they are learning (Evans & Broemmel, 2008; Johnson, 2007; Richardson, 2003; Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009). In contrast, teachers who are given extended opportunities to collaborate on sustained PD benefit cognitively and affectively (Kimble, Yager, & Yager, 2006; Reynolds, Murrill, & Whitt, 2006; Socol, 2006).

Time for Talk with Mentors. Hoare (2006) in her Handbook of Adult Development and Learning reflects on the impact of globalization on individual identity. In today's fast-changing culture, she writes, there is a "primal need for social relatedness" (p.19). Talk with co-workers and mentors is one avenue for maintaining a sense of self. Time for communication with mentors was another condition that Ariel mentioned as being supportive of professional learning. Specifically, she indicated that informal, two-way communication that supported teachers in finding their own answers was helpful in transitioning teachers from initial understanding to mastery. It was important that she trust the mentoring relationship as grounded in student-centered goals. She revealed that she valued a mentor who was readily available, personable,

reliable, and genuine. Scholars agree with Ariel that access to mentorship can be significant in pursuit of professional learning. Outside facilitators are indicated as having a positive impact on student achievement when made available to support teachers (Borko, 2004; Bowman & Dowling, 2008; Darling-Hammond & McLaughlin, 1995; Gilrane, et al., 2008; Hill, 2009; Richardson, 2003; Wei et al., 2009; Yoon et al., 2007).

Kegan (1982) explores the role of empathy in supporting others toward finding new perceptions and understanding. In contrast, Daloz (1990) indicates that learning opportunities designed for adults typically overemphasize challenge at the expense of providing support, leading to a negative response to learning in the absence of nurture. Access to a quality mentoring program would do much to counter this tendency in favor of providing teachers as adult learners the support they so richly deserve. This does not necessarily imply an extensive mentoring program. Having an administrator present and participating in PD, learning shoulder-to-shoulder with teachers, is an implied mentoring relationship that strengthens the collegial environment of the school and sends a message to all that continued professional learning is important (Richardson, 2003; Darling-Hammond & McLaughlin, 1995; Gilrane, Roberts, & Russell, 2008).

Time for Practice. Time for practice or rehearsal of new concepts was a third condition prized by Ariel. Only through actual trial and error with students was Ariel able to judge the appropriateness of a new instructional strategy for her students. The same would apply for assessing the worth of new materials, concepts, or tools. She indicated that time to observe others, model for others, engage with technology, make materials, rehearse with peers, and practice with students was important for her in professional learning. Only with time for

rehearsal, practice, and reflection will new learning be transformed into new behavior. In a study of academically successful individuals, Zimmerman (2002) illustrates the significance of practice for high achievement. Practice contributes to advanced levels of self-awareness and skill that when combined contribute to high achievement. It seems reasonable that those charged with planning PD would desire high achievement in their teachers. PD is most effective when teachers are actively engaged (Darling-Hammond & McLaughlin, 1995). Curry and Killion (2009) make the distinction between "micro" and "macro" learning with micro-level learning being the initial stage of exposure to new information and macro-level learning resulting from practice and reflection on experience with the new learning. Studies reviewed by Wei, et al. (2009) agree that active engagement of teachers is necessary for consistent and lasting change to occur in teacher behavior as a result of PD.

Time for Reflection. Embedded in the time required for communication and practice is the additional need for reflection, the mental processing required for developmental change. Unfortunately, an article reporting results by the National Staff Development Council (Darling-Hammond, Wei, Andree, Richardson & Orphanos, 2009) reveals that over "nine out of 10 U.S. teachers have participated in professional learning consisting primarily of short-term conferences or workshops" (p. 46). This cultural norm in the education landscape contrasts sharply with findings in the field of adult education. Brookfield (1986), a leading researcher in the field of adult learning, addressed the importance of reflection in helping adults take control of their own learning. Jarvis (2001, 1987) continues the discussion of reflective practice in his model on adult learning. Jarvis considers learning through reflection and learning by experimentation as the two highest types of learning. Interestingly enough, Haigh (2005) indicates that "one of the first considerations for any teacher should be a reflection on how students construct knowledge" (p.

162). Thinking about one's epistemology and how that impacts teaching strategies takes support, time, and energy. Other researchers document the positive impact of teacher reflection, in the form of "interpretation of performance," on development of self-efficacy (Gabriele & Joram, 2007, p. 62). Reflection requires time; to plan a course of behavior, act in accordance with the plan, and then think about the result of the action for the purpose of directing future behavior requires time. Participants who would grow through reflection must sustain attention on a topic over an extended period. Unfortunately, sustained involvement in a single PD effort is often not part of school improvement planning. Instead, faculty members are frequently required to attend a string of single-day workshops on a myriad of disjointed topics, many of which lack congruence with individual teacher goals. Numerous articles and research indicate the importance of ongoing PD over extended time for quality teacher learning to occur (Borko, 2004; Cooper & Jackson, 2005; Dall'Alba & Sandberg, 2006; Darling-Hammond & McLaughlin, 1995; Gilrane et al., 2008; Neuman & Cunningham, 2009; Richardson, 2003; Wei et al., 2009). Ironically, Jarvis (2001) finds that more learning opportunities do not necessarily lead to increased learning. So a series of unrelated PD programs may cover the same span of time, but without sustained attention over time, adult learners may not have enough time for experimentation or reflection to make new knowledge their own or to construct new meaning from connections with past experience.

Other research furthers the case for sustained reflection in adult learning. In a review of empirical studies, Kitchener, King, and DeLuca (2006) demonstrate that adult learners who engage in reflective judgment continue to increase that capability over time as well as openness to new ideas, capacity for making wise decisions, and ability for learning. In a related article on

learning in the health profession, Fleming (2007) gives advice that is prudent for those planning PD in education as well. He writes,

To reflect on these influences [internal factors such as attitudes, skills, experience, team dynamics and external factors such as policy professional and societal influence], freedom from managerial, political and other constraints is important. Reflection should normally sit outside formal programme/project reporting mechanisms and be within the realm of personal/professional development (p.658).

It is vital, therefore, that teachers' privacy be respected and protected as they grapple with issues related to growth. Trotter (2006) in an article connecting PD in education and adult learning theories, expresses support for journaling as an appropriate venue for teachers to engage in reflection while remaining private.

Welton (1993) situates reflective thinking in society when he warns that "systemic imperatives...threaten to disempower men and women who have the capacity to be empowered, reflective actors" (p. 88). In the context of our nation's schools, "systemic imperatives" range from the current focus on test scores driven by NCLB, circumventing teacher reflection in favor of blanket directives issued from afar, to local reliance on one-shot workshops whose lack of continuity or focus diffuses teacher attempts to grow professionally. Sadly, research on PD in the United States indicates that teachers typically receive far less time in PD than is indicated will result in improved student learning. In a meta-study sponsored by the U.S. Department of Education of existing research on the impact of PD on student achievement, nine out of 1,300 studies were found to meet evidence standards established by the What Works Clearing House. Of these nine studies, an average of 49 contact hours in PD resulted in significant student achievement, approximately "21 percentile points" (Yoon et al., 2007). Subsequent studies add

support to the call for teacher reflection time (Lee, 2007; Weasmer et al., 2008). Merriam and Clark (2006) reiterate that time for reflection is vital for learning and development in the following passage:

Reflection is fundamental to learning....It is likewise impossible to think about the process of personal development without putting reflection at the center. The central reason for this is that reflection and experience are concepts that are fundamentally intertwined (p. 39).

Therefore, given the importance of reflection in adult learning, it is vital that reflection be recognized as part of the cognitive process of teacher development. Furthermore, regardless of whether teachers are engaged in communication with peers or mentors, in practice, or in reflection, all of these behaviors play legitimate roles in teacher development and should be provided for in planning PD for teacher learners.

Freedom of Choice. Freedom was the third condition that Ariel indicated was supportive of professional growth. She valued the chance to select which opportunities best fit her students' needs. Likewise, she appreciated the opportunity to choose which methods of implementation complemented her teaching and fulfilled student needs. And finally she welcomed the option to choose which venues for reflection met her needs as teacher-learner. That teachers are capable of planning their own learning is supported by research indicating that "90 percent of adults are engaged in self-directed learning projects and that 70 percent of projects are planned by the learner" (Merriam, Caffarella, & Baumgartner, 2007, p. 92). Adults who engage in autonomous learning enjoy enhanced facility for independent thought, greater capacity for handling responsibility, and increased ability to direct learning behaviors toward goal attainment (Brockett & Hiemstra, 1991; Garrison, 1992; Tennant and Pogson 1995). In fact, Brockett and Hiemstra (1991) find that a connection exists between self-directed learning and a positive sense of self.

Since positive self-concepts are vital for successful educators, then PD plans that acknowledge the role of autonomy in identity construction will foster self-directed learning by offering teachers choice. Only by having multiple options to choose from will teachers have enough variety to find a best-fit for meeting their individual learning goals. With the option of choice comes "empowerment of teachers as decision makers" which is "highly correlated with professional community" (Wei et al., 2009, p. 10).

Personal agency and identity formation. Several concepts from critical studies relate to communication and control in the workplace. Because PD is typically a collective endeavor, personal agency, hegemony, power, and identity formation are concepts that are informative when considering under what social conditions teachers learn best. Merriam, Caffarella, and Baumgartner (2007) warn that adult learners "often find themselves in learning situations where others around them determine what is worth knowing and how that knowledge should be used" (p. 124). Their warning seems particularly apt for the public school setting that has historical roots in top-down management and is heavily impacted today by the current reality of NCLB. Holland, Lachicotte, Skinner, and Cain (1998) explain the connection between identity to the ability to behave altruistically. They write that "identities are a key means through which people care about and care for what is going on around them. They are important bases from which people create new activities, new worlds, and new ways of being" (p. 5). Perhaps in more than in all other careers, it is important that teachers have a sound base for creating "new activities, new worlds, and new ways of being." Holland et al. (1998) continue by describing the impact of agency in cultural worlds on identity formation. By spanning the globe, their series of qualitative studies demonstrate the link between societies' support of free will and the individual's understanding of self, what they term "identity in practice" (Holland et al., p. 271).

Concern for hegemony arises when individuals with power impose identity on others through the denial of agency via control of the environment (Holland et al.). In the case of schools, when those in administration or policy development curb teacher agency by limiting opportunities for communication, stipulate what must be learned, or provide paltry few opportunities for growth, then hegemonic conditions arise that infringe on development of healthy identities among teachers. By treating school faculties as a homogeneous unit, individual power of self-determination is denied and unique needs are ignored. Holland et al. further the link between personal agency and power in the following passage:

Unexamined assumptions of homogeneity are a problem not so much because they may be unjustified according to scientific canons as because they permit inattention to the social distribution of cultural knowledge and its role in power relations. Assumptions of homogeneity deflect attention from the social conflict, the social symbolism of knowledge, and individual appropriation and individual resistance...." (p. 122).

Because assumptions impact all aspects of human-to-human interaction, concern for issues of power and control extend beyond policy, such as design of PD, to impact communication between individuals. Borrowing concepts from Bahktin and Vygotsky, Holland, et al., explains that as individuals strive to develop the "self-in-practice" (p. 32), they internalize discourse from the surrounding environment as "inner speech" (p. 177), processing such inner speech in the authoring of self. Therefore, as teachers process interactions within their environment, the manner in which PD is both planned and communicated has potential to have dramatic impact on development of individual teacher identities. In a study on characteristics of schools with high teacher attrition, for example, Borman and Dowling (2008) find that schools unsupportive of "collaboration, teacher networking, and administrative support" (p. 398) experience greater teacher attrition. Urging schools to reframe PD as PL (professional learning), Webster-Wright

(2009) states that there must be a link between teacher accountability and agency in designing quality learning opportunities.

Although PL cannot be controlled, in that no one can make another person learn, professionals can be supported to continue to learn in their own authentic way while taking into account the expectations of their working contexts. This balance between accountability and agency not only is an issue in learning but also is of importance in other areas of contemporary life (Borko, Liston, & Whitcomb, 2007). This balance has similarly been framed as between supporting community and competence in PL (Lieberman & Miller, 2008).

In seeking a way forward to support professionals in their continuing learning, guidelines are required that are congruent with professionals' authentic experiences of learning yet cognizant of the realities of the workplace with respect to professional responsibilities. Constructive strategies need to be developed to enable change from the current practice of delivering PD to that of supporting authentic PL (p. 26).

Only through authentic learning opportunities will teachers gain from PD experiences. Therefore those who are charged with school improvement must also care for their teachers as adult learners. Concern for inclusion of teacher voice, choice, and agency typically is repaid in benefits of teacher development (Goddard, Hoy, & Hoy, 2004; Mok, 2002; Wood, 2007).

"Communities of practice," a term coined by Lave and Wenger (1991), applies to schools where individual teachers assemble their skills to form faculties. Holland and Lave (2001) explore the individual's inner experience of a community of practice while Keating (2005) extends this thinking by examining the subjective impact of the community on identity formation. And Creese (2005) studies the role of silenced and privileged communication in identity construction and social negotiation of power. These ethnographic studies offer a strong case for further examination of power and control as situated in language use involved in PD design, delivery, and evaluation. Creese indicates, for example, that loss of voice results in

marginalization within a community of practice. It would be reasonable to anticipate, therefore, that teachers who are repetitively denied control over their own learning environment could eventually experience atrophy to their sense of identity due to loss of self-determination.

Instead, teacher-learners should be empowered to generate their own developmental opportunities based on their individual needs and the needs of their students (Darling-Hammond & McLaughlin, 1995; Farrell & Weitman, 2007; Richardson, 2003; Warren, Doorn, & Green, 2008; Wei et al., 2009). Only in this manner will our teacher-workforce continue to be resilient to changes in the environment and capable of continuing development to meet the changing demands of society.

The ethnographic studies conducted by Belenky, Clinchy, Goldberger and Tarule (1986/ 1997) provide information on the avenues women take in constructing knowledge about themselves and their world. Concerned that earlier developmental studies had been conducted by men on men (e.g. Perry, 1970), Belenky, et al. decided to conduct similar studies for women on women. The results indicated that women and men have distinct differences in their paths to development. This has dramatic ramifications for school settings. As of 2007-2008, for example, 75.6 percent of teachers were female (National Center for Education Statistics, 2009). In contrast, for 2003-2004, only 49.7 percent (rising from 39.1 percent in 1993-1994) of principals were female (National Center for Education Statistics, 2007). This is significant because administrators typically have the responsibility of planning PD. From Belenky, et al., we learn that female-learners need to experience the agency of learning in groups; talk is important to the female learner. Therefore, the question remains how many female teachers are afforded that opportunity and how many male administrators are aware of the distinct learning needs of their

predominantly female faculties? With tremendous insight, Hall and Donaldson (1997) eloquently voice concern for female-learners who lack agency. They write,

At the heart of nonparticipation lies a 'deterrent' so deeply embedded in some women that no theory can fully capture its meaning. The way a woman feels about herself, her self-esteem and self-confidence, and the way she can express herself are significant elements in her decision about whether to participate in adult education" (p. 98).

If female teachers internalize PD delivered by the transfer model as a "deterrent," then it would seem prudent that those who design PD make plans to support teacher input and communication in the service of offering quality learning opportunities to all. I choose to close this section with lines borrowed from two feminist scholars, Maher and Tetreault (1996), who connect the idea that such an approach not only protects the growth of female teacher-learners but is a wise choice for all who would prepare individuals for life in the 21st Century. They write,

...because we are always in the act of being 'constructed' within communities of knowers, it is important to make those communities as diverse and broad as possible in the classroom, to counteract the increasing isolation of individuals and groups in contemporary society. It is important to see constructed knowing as a function of whole communities of learning, as well as of individuals (p. 170).

Appropriate Challenge. Appropriate challenge was the final condition that Ariel mentioned as supportive of professional growth. In our conversations, Ariel revealed that it was important that PD be well-matched to her students' needs and her own needs. If the topic presented could not be adapted for her students, she was not interested. This agrees with what Knowles (1970) indicated was typical of adult learners, the need for clear application and

immediate use. She was similarly uninterested if the PD was a review of material she had already experienced. Novelty or challenge was important to her in order to justify time and energy taken from her students. Multiple uses are a plus as are varied paths for experimentation and reflection. Taylor (2006) gives that following advice for how to respectfully engage adult learners. She writes.

It is crucial not to infantilize adult learners, but it is also important to remember that when one is committed to another's development, that relationship bears similarities to the role of a good parent: someone who guides without imposing, who nurtures without creating dependency, who encourages without inauthenticity, and who understands that the learner is an adult who will make his or her own choices, even if those choices are sometimes not to grow in the way the educator has encouraged (p. 214).

Acting Through an Ethic of Care

Because my profession is neither superior nor inferior to any other, it demands of me the highest level of ethical responsibility, which includes my duty to be properly prepared professionally, in every aspect of my profession. A profession that deals with people whose dreams and hopes are at times timid and at other times adventurous whom I must respect all the more so because such dreams and hopes are being constantly bombarded by an ideology whose purpose is to destroy humanity's authentic dreams and utopias (Freire, 1998, p. 127).

Those charged with responsibility for planning teacher professional development should create programs that Noddings (2001, 1988) would call grounded in an "ethic of care." She explains that "one who is concerned with behaving ethically strives always to preserve or convert a given relation into a caring relation" (1988, p. 219). In as much as one often behaves as one has been treated, Noddings' words should guide treatment of students and teachers alike.

Throughout the discussion above of the conditions needed to support teachers as adult learners—the "what" to do—are key words that indicate "how" these critical actions should be taken—in caring way. The words "respect," "trust," "mentor" and "relationship," recurring constantly, point to the need to care for each other in the way that we plan and carry out professional development.

National attention focused on student test scores and graduation rates by NCLB, however, further distances decision-makers from the individuals responsible for generating test scores and graduation rates, namely students and teachers. From local administrators to U.S. members of Congress, those with financial and legislative power for influencing the educational environment are relying on numbers to form the basis for decisions. Nevertheless, the teachers and students who are served by these decisions are more than scores on a test and more than commodities to be traded in the marketplace. In the following exchange between businessman and prince, Saint-Exupery (2000) eloquently illustrates the loss of soul that can result when numbers are confused with identity.

"That amounts to five-hundred-and-one million, six-hundred-twenty-two thousand, seven hundred thirty one."

"Five-hundred million what?"

"Hmm? You're still there? Five-hundred-and-one-million...I don't remember...I have so much work to do! I'm a serious man. I can't be bothered with trifles!"

. . . .

"Million what?"

The businessman realized he had no hope of being left in peace. "Oh, of those little things you sometimes see in the sky."

"Flies?"

"No, those little shiny things."

"Bees?"

"No, those little golden things that make lazy people daydream. Now, I'm a serious person. I have no time for daydreaming."

"Ah! You mean the stars!"

"Yes, that's it. Stars."

"And what do you do with five-hundred-million stars?"

. . . .

"I manage them. I count them and then count them again." The businessman said.

"It's difficult work. But I'm a serious person" (pp.36-39).

In the current positivist environment, PD decisions are driven by NCLB where students are seen as Saint-Exupery's businessman sees the stars—as mere numbers to be managed. Percentages are expedient. Normal Curve Equivalents (NCE's) can be managed. Stanines can be compared. But unlike the words used to describe Ariel and her students, percentages, NCE's, and stanines are void of emotion. Numbers are not descriptive; they cannot possibly tell the whole story needed for making wise decisions regarding the continuing development of teachers or the education of individuals. Given the disabilities of Ariel's students, I am sure that their scores on standardized tests tend to be low, thus failing to reveal the heart with which Ariel approaches every lesson taught or the tremendous growth experienced by each student. In *Teaching from the Heart*, Apps (1996) warns against continuing to use outdated thinking as the basis for educational improvement.

"The belief in the scientific method as the only valid approach to knowledge, the view of the universe as a mechanical system composed of elementary building blocks; the view of life in society as a competitive struggle for existence; and the

belief in unlimited progress to be achieved through economic and technological goals" (Fritjof Capra, 1983, p. 31). These industrial age beliefs and slogans are not serving us well as the world moves beyond the industrial age (p. 8).

Over-reliance on positivist thinking may not serve us as well as it did during the industrial age when Americans benefited from a strongly independent, entrepreneurial spirit. In today's global economy, we must reach beyond our tendency toward ethnocentric thinking. In order to face the challenges of the new century, honoring and valuing the traditions of those beyond our borders will become increasingly important as we collaborate to solve issues threatening our existence. 21st Century challenges have specific implications for education. As indicated by Apps (1996), today's misguided approach to education has as its source our nation's history. During the industrial age, when the United States economy was based on a physically fit and skilled workforce, a high school education steeped in the basics of reading, writing, and arithmetic was sufficient for a job that supported most nuclear families of mother, father, and two children. In today's global economy, industry has moved such jobs overseas to third-world markets where labor is cheaper. Corporations hiring in this country are looking for a work-force capable of critical reflection, collaboration, and creative problem-solving. The business world for the 21st Century seeks workers with a college degree or higher. As a result, many states are joining the American Diploma Project, part of which is to align student achievement with high NAEP, ACT, and College Board/SAT scores. Unfortunately, these tests assess very little in the way of critical thinking. Schools are faced with a disjuncture between expectations and assessment. While the world expects graduates capable of higher order thinking, common methods of assessment used by states for judging quality education programs do not evaluate critical thinking skills. In a misguided attempt to meet the demands of the marketplace, school administrators nevertheless

base PD decisions on psychometric tests that are the product of an earlier age. "Training," a term formerly associated with industrial-age need of a skilled labor pool, continues to be used to label teacher and student preparation for the 21st Century. In light of the challenges facing us as we enter the new millennium, Freire (1998) urges us to consider a more active approach with learners. He writes.

It does not matter whether it is learning to be a mechanic or a surgeon, as long as it is a critical learning that has in mind real change in the world, especially change in structural injustice. What it cannot be is simply a learning that leads to passive immobility (p. 123).

Learners and teachers alike must be enthusiastically engaged in the making of our nation's future. No longer may we rely on the transfer model to adequately prepare us for what lies ahead. In order for students to learn agency, teachers must be allowed to develop and practice "agentic care" for their students. Freire (1998) cautions those who would influence the course of education from the position of "king" or "businessman" when he writes,

The power of genuine authority to form students is emasculated and rendered impotent by small-mindedness, just as it is also impoverished by pharisaical or conceited arrogance....Coherently democratic authority carries the conviction that true discipline does not exist in the muteness of those who have been silenced by in the stirrings of those who have been challenged, in the doubt of those who have been prodded, and in the hopes of those who have been awakened (p. 86).

The "democratic authority" on which this country was founded should include those who have been entrusted with preparing our young for the future. Sadly, teachers' voices are not being heard. Until the "kings" and "businessmen" decide to listen, we must find other ways to comply with authority while working to make our jobs coherent with real student needs.

Recommendations for Practice

We know from this research and other investigations in the fields of teacher education, adult learning, and adult development, that teachers have specific needs that must be fulfilled by their learning environment. These include flexibility, activities designed for adult learning and development, sustained engagement, support for collaborative learning, and obvious benefit to students. In the discussion that follows, I connect my assertions about teachers as adult learners to specific recommendations for practice.

First, only by presenting a variety of models will PD provide sufficient choices to meet the needs of individual teacher-learners (Darling-Hammond & McLaughlin, 1995; Richardson, 2003; Yoon, Duncan, Lee, Scarloss & Shapley, 2007). Since adult-learners experience added responsibilities that make demands on their time, flexibility also implies the need for PD to consider scheduling issues. A variety of options, such as job-embedded learning opportunities, summer workshops with periodic year-long follow-ups, and on-line reflection and collaboration venues, offer teachers choices to find an environment that best meets their learning needs and allows them to fulfill competing responsibilities (Borko, 2004; Darling-Hammond & McLaughlin, 1995; DuFour & Eaker, 1998; Richardson, 2003; Speck, 2002; Wei, et al., 2009; Wenger, 1998).

Second, like young students, teacher-learners need time for learning to occur: time for reflection, time for talk, and time for practice (Borko, 2004; Dall'Alba & Sandberg, 2006; Darling-Hammond & McLaughlin, 1995; Gilrane et al., 2008; Neuman & Cunningham, 2009; Richardson, 2003; Speck, 2002; Wei et al., 2009; Yoon et al., 2007). Since the United States is

no longer dependent on an agrarian-based economy, teachers no longer need release time to work in the fields. Therefore, summer presents the perfect opportunity for teachers to be nourished as learners.

Third, access to opportunities that match need is vital for teacher motivation to continue learning. Since educators range in age from 20 to 65 and beyond, it is imperative that PD be planned with consideration for multiple trajectories of development, years of experience, and levels of ability. Hoare (2006) explains that "individuals become more, not less, heterogeneous as they age. This is due to differential roles, education, experiences, environments, and inclinations" (p. 9). Therefore, in order for PD to enhance learner self-efficacy, then there must be a match between readiness of intended learners and the learning experience. The best way to accomplish this is to offer a variety of options and flexibility. Furthermore, if teachers rely on their students' needs and their own experiences to direct motivation for professional learning, then it is the teachers themselves who are most cognizant of those two things. Management should entrust more experienced teachers with control over their own learning and should provide structures that allow for choice and flexibility for less experienced teachers.

Fourth, use of online settings offers one opportunity to diversify learning experiences. We know from studies on adult development that healthy minds continue developing, typically not experiencing decline until age 65 or after. (Schaie, 1983b, 1989b, 1993, 1994, 1996; Schaie & Hertzog, 1983). Those who influence PD, therefore, should consider the range of developmental needs that exist within a given faculty and offer variety of learning options for meeting those needs. Lea (2005) encourages staff developers to think of professional learning as situated and as "participation in practice" (p. 183). Borrowing from constructivist concepts first

developed by Vygotsky (1986) and "communities of practice" initially explored by Lave and Wenger (1991), Lea advocates the use of online communication as a means of moving novice members of a learning community from "peripheral practice" to full participation (p. 184). Asychronous platforms offer potential for adding variety to the learning environment and supporting communication as participants strive to create meaning while engaging in individual and community development. In addition, online environments may support the transition of experienced peers into mentoring roles as they foster less experienced teachers. Web-based communication also provides opportunities for less-experienced teachers to develop their voices as they engage with others in the online environment. Moll (2000) suggests that through writing, literacy "may serve its most important mediating function, not by facilitating communication or obtaining information but by helping students create new worlds..." (p. 266). Thus, by writing online, teachers may envision their goal of improved learning for students, thereby finding their own paths from the imagined world to reality. In fact, several research studies indicate that online environments are fruitful venues for teacher professional development (Allan & Lewis; 2006; Barab, MaKinster, Moore, Cunningham, 2001; Chen, 2003; Lock, 2006; Sprague, 2006).

Finally, regardless of which learning theory is followed, it is important that individuals charged with planning PD be open to new ways of learning that reach beyond traditional additive approaches. Ideally, PD for teacher learners is primed for promoting *development* and *learning*. According to Hoare (2006), adult *development* is "systematic, qualitative changes in human abilities and behaviors as a result of interactions between internal and external environments" (p. 8). Teachers who become better able to move students from received knowing to subjective or connected knowing (Belenky, Clinchy, Goldberger, & Tarule, 1997) have experienced development. In contrast, Hoare defines adult *learning* as "a change in behavior, a gain in

knowledge or skills, and an alteration or restructuring of prior knowledge" (p. 11). A type of learning is a teacher's discovery that readers individually construct meaning with text based on prior experience. Thus, whether engaged with "micro" learning or "macro" development activities, both types of growth are important for teachers-as-learners who wish to improve their practice. As a means of accomplishing this, PD for teacher-learners should reflect a basis in adult learning and development theory, such as the characteristics of adult learners established by Knowles (1970). He indicates that adult learners desire autonomy and self-direction, have a need to connect new learning to their existing knowledge and experiences, must see a clear connection between what is planned for study and their immediate goals, appreciate when new learning is immediately adaptable to their work setting, and enjoy being valued for their training, life's experiences, and years of wisdom. Following these characteristics would reflect an "ethic of care" that is so richly deserved by our nation's teachers.

Recommendations for Research

In an article describing the current state of teacher professional development, Darling-Hammond and her colleagues (2009) pose two questions to be answered by research:

How can states, districts, and schools build their capacity to provide high-quality professional learning that is effective in building teacher knowledge, improving their instruction, and supporting student learning? And how can they assess the impact of their efforts over time (p. 49)?

The authors indicate that the national research agenda calls for case studies of state and local PD practices to determine which practices result in improved teacher learning; I propose that an expansion of the research begun in this study would contribute to that conversation. Specifically, such a study would involve more teachers, representing greater variety in ethnicity, years of

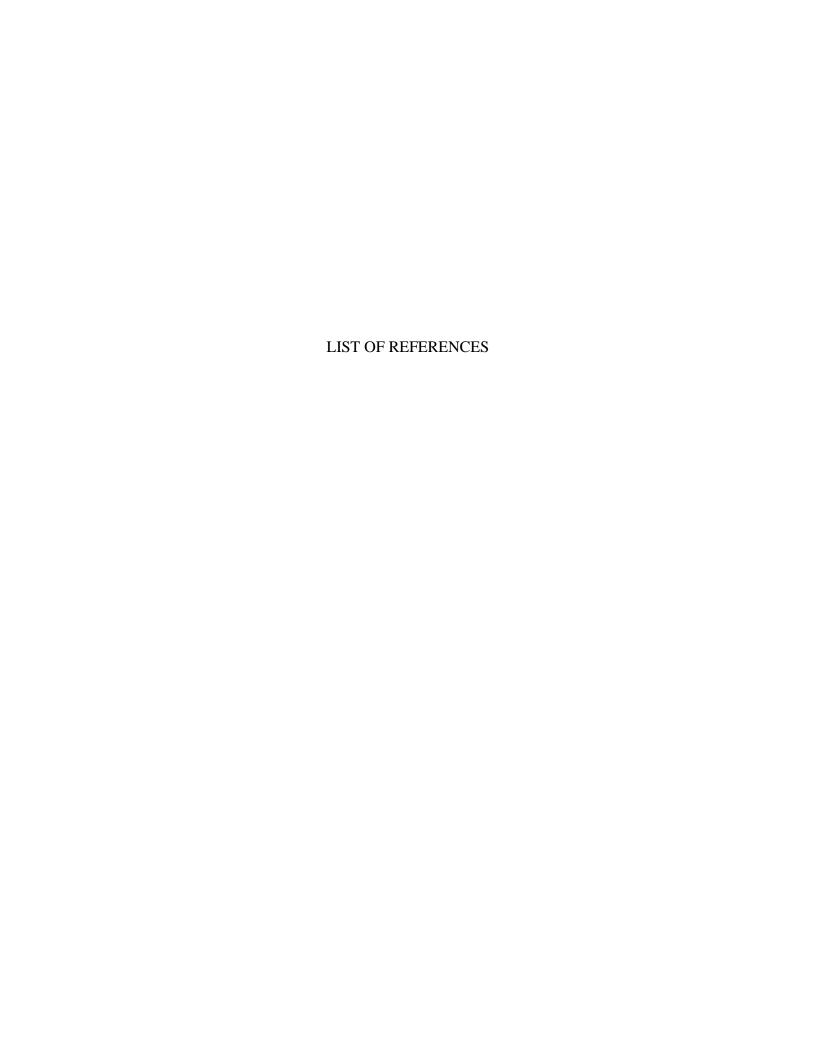
experience, age, and gender. Field observations of departmental meetings and instruction and data collection of artifacts, such as pre and post student work samples, would further strengthen triangulation of the data. According to the most recent research in teacher professional development, PD activities that are sustained and apply teacher knowledge to practice are much more likely to result in changes to teacher practice and in student achievement gains (Cohen & Hill, 2001; Desimone, Porter, Garet, Yoon, & Birman, 2002; Garet, Potter, Desimone, Birman & Yoon, 2001; Knapp, 2003; McGill-Franzen, Allington, Yokio & Brooks, 1999; Supovitz, Mayer, & Kahle, 2000; Weiss & Pasley, 2006). The PD designed for this study was both sustained and applied teacher knowledge to practice. In an expanded version of this research I would also look at differences in student achievement between children whose teachers undergo a one-shot PD experience, as in the two-day workshop offered in this case, versus the achievement in children whose teachers experience the same two-day workshop, followed by year long, online collaboration with PD provider and peers. In 2003-2004, the national Schools and Staffing Survey Teacher Questionnaires asked about professional activities that were collaborative in nature. Only 17% of the teachers surveyed reported high cooperative effort (Darling-Hammond, et al., 2009, p. 47). Therefore, continued investigation of teacher experience of online PD follow-up is worth pursuing.

I would use the interview transcripts and online communication from the expanded study to follow a secondary line of inquiry using discourse analysis methods (Wood & Kroger, 2000). First, I would analyze teacher language for patterns indicative of micro (factual) learning and macro (experiential) learning. From the social constructivist perspective that discourse is "text and talk in social practice," and in that sense is revelatory of "what people do" (Potter, 1997, p. 146), discourse analysis would contribute to the conversation of what effective, sustained PD

sounds like and looks like in a community of teacher-learners. Furthermore, including teachers in the investigation as action researchers is a characteristic of effective schools (Langer, 2004) that could lead to greater feelings of teacher empowerment and enhanced learning through reflexivity. Methods for assessing levels of empowerment and reflexivity would also be explored.

I would follow a tertiary line of inquiry using critical discourse analysis methods to explore hidden issues of hegemony and power in environments that influence the success of teachers-as-learners. Margolis (2009) writes that "to ask someone to inspire without inspiration, or promote learning while in a state of stagnation is both foolish and wasteful of human resources" (p. 80), yet that is precisely what occurs in many schools today. Several research questions could be answered with these data. For example, what does an "ethic of care" sound like in a community of learners? Is there a link between constructivism (as reflected in administrator/teacher talk and practice) and a professional learning environment that demonstrates an "ethic of care" to teachers as adult learners? I am also interested in gaining a better perspective of the ways in which administrative decisions and discourse impact teacher professional learning and practice. In what ways are administrative cultural practices regarding professional development coherent with adult learning theory? Are there signs of hegemony in administrative language on PD? Can this coexist in a learning climate that is based on the principles of constructivism or in an environment that supports teachers as adult learners? What is the difference in the words used by participants to describe professional learning and practice in a community administered from a positivist paradigm and those used in a community administered from a constructivist paradigm.

Publication of some or all of these research findings would add to the conversation on the use of qualitative research in education to extend our understanding of professional learning that leads to student achievement, on the use of discourse analysis to increase understanding of teacher-learning environments, and on the use of critical discourse analysis to uncover hidden agendas of hegemony and power that influence professional development. It has potential for informing administrator preparation in education leadership programs. And finally, it could add to the current education reform efforts by further unpacking the idea that treating teachers with an "ethic of care" results in teaching students from the heart.



LIST OF REFERENCES

- AACTE Focus Council on Literacy. (2002). Research-based literacy instruction: Implications for teacher education. Washington, DC: American Association of Colleges for Teacher Education.
- ACT, Inc. (2005a). *ACT's college readiness standards: Reading*. Retrieved April 8, 2008, from http://www.act.org/standard/planact/reading/index.html
- Allan, B., & Lewis, D. (2006). The impact of membership of a virtual learning community on individual learning careers and professional identity. *British Journal of Educational Technology*, *37*(6), 841-852.
- Alvermann, D.E., Swafford, J., & Montero, K.M. (2004). Content area literacy instruction for the elementary grades. Boston: Allyn & Bacon.
- Amer, A.A. (1992). The effect of story grammar instruction on EFL students' comprehension of narrative text. *Reading in a Foreign Language*, 8(2), 711-720.
- Anderson, R.C., & Pearson, P.D. (1984). A schema-theoretic view of basic processes in reading.

 In P.D. Pearson, R. Barr, M.L. Kamil, & P. Mosenthal (Eds.), *Handbook of reading*research (Vol.1, pp.255-291). White Plains, NY: Longman.
- Apol, L. (2002). The power of text: What a 19th century periodical taught me about reading and reader's response. *Journal of Children's Literature*, 28(1), 53-62.

- Apps, J. W. (1991). *Mastering the teaching of adults*. Malabar, FL: Krieger Publishing Company.
- Apps, J.W. (1996). Teaching from the heart. Malabar, FL: Krieger Publishing Company.
- Baer, A. L. (2005). Do you hear voices? A study of the symbolic reading inventory. *Journal of Adolescent & Adult Literacy*, 49, 214-225.
- Bambino, D. (2002). Critical friends. Educational Leadership, 59(6), 25-27.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26.
- Barab, S., Makinster, J., Moore, J. & Cunningham, D. (2001). Designing and building an on-line community: the struggle to support sociability in the inquiry learning forum. *Educational Technology Research and Development, 49*(4), 71-96.
- Barton, B. & Sawyer, D.M. (December 2003/January 2004). Our students *are* ready for this:

 Comprehension instruction in the elementary school. *The Reading Teacher*, *57*(4), 334-347.
- Bean, T.W., Potter, T.C., & Clark, C. (1980). Selected semantic features of ESL materials and their effect on bilingual students' comprehension. In M. Kamin & A. Moe (Eds.), Perspectives on reading research instruction: Twenty-ninth yearbook of the National Reading Conference (pp. 1-5). Washington, D.C.: National Reading Conference.

- Beck, I.L., McKeown, M.G., Hamilton, R.L., & Kucan, L. (1997). Questioning the author: An approach for enhancing student engagement with text. Newark, DE: International Reading Association.
- Belenky, M.F., Clinchy, B.M., Goldberger, N.R., & Tarule, J.M. (1986/1997). Women's ways of knowing: The development of self, voice, and mind. New York: Basic Books.
- Bogdan, R.C., & Biklen, S.K. (2007). *Qualitative research for education: An introduction to theories and methods*. New York: Pearson Education, Inc.
- Boling, C. J., & Evans, W. F. (2008). Reading success in the secondary classroom. *Preventing School Failure*, 52(2), 59-66.
- Bolles, E. B. (1988). *Remembering and forgetting: An inquiry into the nature of memory.* New York: Walker.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15.
- Borko, H., Liston, D., Whitcomb, J. (2007). Conversations that renew. *Journal of Teacher Education*, 58(4), 263-268.
- Borkowski, J.G., Levers, S., & Gruenenfelder, T.M. (1976). Transfer of mediational strategies in children: The role of activity and awareness during strategy acquisition. *Child Development*, 47, 779-786.
- Borman, G.D., & Dowling, N.M. (2008). Teacher attrition and retention: A meta-analytic and narrative review of the research. *Review of Educational Research*, 78, 367-409.

- Bowen, G. A. (2005). Preparing a qualitative research-based dissertation: Lessons learned. *The Qualitative Researcher*, 10(2), 208-222.
- Boyer, N. R., Maher, P. A., & Kirkman, S. (2006). Transformative learning in online settings:

 The use of self-direction, metacognition, and collaborative learning. *Journal of Transformative Education*, 4, 335-361.
- Bransford, J. Brown, A., & Cocking, R. (Eds.). (1999). *How people learn: Brain, mind, experience, and school.* Washington, DC: National Academy Press.
- Brockett, R. G., & Hiemstra, R. (1991). Self-direction in adult learning: Perspectives on theory, research, and practice. New York: Routledge.
- Brookfield, S. D. (1986). *Understanding and facilitating adult learning: A comprehensive analysis of principles and effective practices*. San Francisco: Jossey-Bass.
- Brookfield, S.D. (1990). The skillful teacher. San Francisco: Jossey-Bass.
- Brown, A. & DeLoache, J.S. (1978). Skills, plans and self-regulation. In R. Siegler (Ed.), *Children's thinking: What develops?* (pp. 3-35). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cain, K., & Oakhill, J. (2004). Reading comprehension difficulties. In T. Nunes & P. Bryant (Eds.), *Handbook of children's literacy* (pp.313-338). Dordrecht, The Netherlands: Kluwer Academic.
- Calkins, L.M. (2001). The art of teaching reading. New York: Longman.

- Cambourne, B. (2002). Holistic, integrated approaches to reading and language arts instruction:

 The constructivist framework of an instructional theory. In A. E. Farstrup & S. J.

 Samuels (Eds.), *What research has to say about reading instruction* (3rd ed.), (pp. 25-47).

 Newark, DA: International Reading Association.
- Capra, F. (1983). *The turning point: Science, society, and the rising culture*. New York: Bantam Books.
- Carrell, P.L. (1984). Evidence of formal schema in second language comprehension. *Language Learning*, 34(2), 87-112.
- Caspi, A., & Elder, G. (1986). Life satisfaction in old age: Linking social psychology and history. *Journal of Psychology and Aging*, *1*, 18-26.
- Cavenaugh, J.C., & Borkowski, J.G. (1979). The meta-memory memory "connection": Effects of strategy training and maintenance. *Journal of General Psychology*, 101, 161-174.
- Chao, E. L. (2006, February). *Remarks by the U.S. Secretary of Labor*. Presented at the WIRED Inititive Town Hall Event, Washington, D.C.
- Chen, P. (2003). *Creating Memorable Online Learning Experiences*. Presentation at Technology in Education International Conference and Exposition (TechED), Ontario, CA.
- Chinn, C.A., & Anderson, R.C. (1998). The structure of discussions that promote reasoning. *Teachers College Record*, 100(2), 315-368.
- Cohen, D.K., & Hill, H.C. (2001). Learning policy. New Haven, CT: Yale University Press.

- Conti, G.J. (2004). Identifying your teaching style. In M. W. Galbraith (Ed.), *Adult learning methods: A guide for instruction* (3rd ed.), (pp. 75-86). Malabar, FL: Krieger Publishing Company.
- Cooper, E.J., & Jackson, Y. (2005). The importance of professional development to unlock the potential of students in urban settings: A response to Virginia Richardson and Patricia Anders. In J. Flood & P.L. Anders (Eds.), *Literacy development of students in urban schools: Research and policy*. Newark, DE: International Reading Association.
- Cox, C., & Many, B. (1992). Toward an understanding of aesthetic response to literature.

 Language Arts, 69, 28-33.
- Creese, A. (2005). Mediating allegations of racism in a multiethnic London school: What speech communities can tell us about discourse and power. In D. Barton & K. Tusting (Eds.), *Beyond communities of practice: language, power and social context* (pp. 55-76). New York: Cambridge University Press.
- Creswell, J. W. (2007). Qualitative inquiry and research design: Choosing among five approaches. Thousand Oaks, CA: Sage Publications.
- Curry, M., & Killion, J. (2009). Slicing the layers of learning: Professional learning communities fill the gaps as educators put new knowledge into practice. *Journal of Staff Development*, 30(1), pp. 56-58,60,62.
- Dall'Alba, G., & Sandberg, J. (2006). Unveiling professional development: A critical review of stage models. *Review of Educational Research*, 76, 383-412.

- Daloz, L. (1990). Mentor. San Francisco: Jossey-Bass.
- Damasio, A. (1994). Descartes' error. New York: Putnam and Sons.
- Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, 76(8), 597-604.
- Darling-Hammond, L., Wei, R., Andree, A., Richardson, N., & Orphanos, S. (2009). State of the profession. *Journal of Staff Development*, 30(2).
- Davey, B., & McBride, S. (1986). Effects of question-generating training on reading comprehension. *Journal of Educational Psychology*, 78, 256-262.
- Day, M. J. (2004). Enhancing learning communities in cyberspace. In M. W. Galbraith (Ed.), *Adult learning methods: A guide for instruction* (3rd ed.), (pp. 141-164). Malabar, FL: Krieger Publishing Company.
- Dean, G. J. (2002). *Designing instruction for adult learners*. Malabar, FL: Krieger Publishing Company.
- Denzin, N.K., & Lincoln, Y.S. (1994). Entering the filed of qualitative research. In N.K. Denzin and Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 1-17). Thousand Oaks, CA: Sage Publications.
- Desimone, L., Porter, A., Garet, M., Yoon, K., & Birman, B. (January, 2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Education Evaluation and Policy Analysis*, 24(2), 81-112.

- Dimitriadis, G., & Kamberelis, G. (2006). *Theory for education*. New York: Routledge, Taylor & Francis Group.
- Dressman, M., & McCarthey, S.J. (2004). Toward a pragmatics of epistemology, methodology, and other people's theories in literacy research. In N.K. Duke & M.H.Malette, *Literacy research methodologies* (pp. 322-346). New York: The Guildford Press.
- Driver, R., Asoko, H. Leach, J., Mortimer, E., & Scott, P. (1994). Constructing scientific knowledge in the classroom. *Educational Researcher*, 23(7), 5-12.
- Dufour, R., & Eaker, R. (1998). Professional learning communities at work: Best practices for enhancing student achievement. Bloomington, IN: National Educational Services.
- Duke, N. K, & Pearson, P. D. (2002). Effective practices for developing reading comprehension.In Farstrup, A. E. & Samuels, S. J. (Eds.), What research has to say about reading instruction, (pp. 205-242). Newark, DE: International Reading Association.
- Dyson, A.H., & Genishi, C. (2005). *On the case: Approaches to language and literacy research.* New York: Teachers College Press.
- Edelsky, C. (Ed.). (2000). *Making justice our project*. Urbana, IL: National Council of Teachers of English.
- Farrell, J.B., & Weitman, C.J. (2007). Action research fosters empowerment and learning communities. *Delta Kappa Gamma Bulletin*, 73(3), 36-40, 45.

- Ferraro, J. M. (2000). Reflective practice and professional development. ERIC Digest: eric Clearinghouse on Teaching and Teacher Education, American Association of Colleges for Teacher Education. Retrieved June 13, 2008, from http://www.ericdigests.org/2001-3/reflective.htm
- Flavell, J.H. (1977). Cognitive development. Englwood Clifts, NJ: Prentice-Hall.
- Flavell, J.H., & Wellman, H.M. (1977). Metamemory. In R.V. Kail & J.W. Hagen (Eds.),

 *Perpectives on the development of memory and cognition (pp. 3-33). Hillsdale, NJ:

 Erlbaum.
- Fleming, P. (2007). Reflection—a neglected art in health promotion. *Health Education Research*, 22(5), 658-664.
- Franzak, J.K. (2006). Zoom: A review of the literature on marginalized adolescent readers, literacy theory, and policy implications. *Review of Educational Research*, 76(2), 209-248.
- Freire, P. (1998). *Pedagogy of freedom: Ethics, democracy, and civic courage*. (P. Clark, Trans.) New York: Rowman & Littlefield Publishers, Inc.
- Fuller, F. (1969). Concerns of teachers: A developmental conceptualization. *American Educational Research Journal*, 6(2), 207-226.
- Gabriele, A.J., & Joram, E. (2007). Teachers' reflections on their reform-based teaching in mathematics: Implications for the development of teacher self-efficacy. *Action in Teacher Education*, 29(3), 60-74.

- Galbraith, M.W. (1989). Essential skills for the facilitator of adult learning. *Lifelong Learning:*An Omnibus of Practice and Research, 12(6), 10-13.
- Galda, L. (1998). Mirrors and windows: Reading as transformation. In T. E. Raphael and K.H. Au, (Eds.), *Literature-based instruction: Reshaping the curriculum* (pp. 1-11). Norwood, MA: Christopher-Gordon.
- Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K.S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945.
- Garrison, D. R. (1992). Critical thinking and self-directed learning in adult education: An analysis of responsibility and control issues. *Adult Education Quarterly*, 42(3), 136-148.
- Gergen, K. J. (2001). From mind to relationship: The emerging challenge. *Education Canada*, 41, (pp. 8-12).
- Gilbert, K. (2002). Can we alter the quality of teaching by changing the curriculum? Putting the cart before the horse. Retrieved September 28, 2009 from http://www.ecu.edu.au/conferences/herdsa/main/papers/nonref/title.html#c
- Gilrane, C.P., Roberts, M.L., & Russell, L.A. (2008). Building a community in which everyone teaches, learns, and reads: A case study. *Journal of Educational Research*, 101(6), 333-349.

- Gilley, J.W. (2004). Demonstration and simulation. In M.W. Galbraith (Ed.), Adult learning methods: A guide for effective instruction (pp. 361-381), 3rd ed. Malabar, FL: Krieger Publishing Company.
- Glass, L. A. (2006). The year the gypsies came. New York: Henry Hold and Co., LLC.
- Goddard, R. G., Hoy, W. K., & Woolfolk Hoy, A. (2004). Collective efficacy: Theoretical development, empirical evidence, and future directions. *Educational Researcher*, *33*, 3-13.
- Goethe, W. (1963). *Goethe's world view, presented in his reflections and maxims*. New York: Frederick Ungar.
- Goldberger, N., Tarule, J., Clinchy, B., & Belenky, M. (Eds.). (1996). *Knowledge, difference, and power: Essays inspired by women's ways of knowing*. New York: Basic Books.
- Goodwin, C., & Duranti, A. (1992). Rethinking context: An introduction. In C. Goodwin & A. Duranti (Eds.), *Rethinking context: Language as an interactive phenomenon* (pp.1-46). New York: Cambridge University Press.
- Graves, M. F. (2004). Theories and constructs that have made a significant difference in adolescent literacy—but have the potential to produce still more positive benefits. In T. L. Jetton & J. A. Dole, (Eds.), *Adolescent literacy research and practice*, (pp. 433-452). New York: The Guilford Press.

- Greene, J. P., & Winters, M. A. (2005, February). *Public high school graduation and college-readiness rates:* 1991-2002 (Education Working Paper No. 8). New York: Manhattan Institute for Policy Research.
- Guba, E.G., & Lincoln, Y. S. (1981). Effective evaluation: Improving the usefulness of evaluation results through responsive and naturalistic approaches. San Francisco, CA: Jossey-Bass.
- Haigh, N. (2005). Tertiary teacher development: Connecting policy, personal theory and practice. In P.M. Denicolo &M. Kompf (Eds.), *Connecting policy and practice:*Challenges for teaching and learning in schools and universities (pp. 171-176). New York: Routledge Falmer.
- Hall, A. G., & Donaldson, J. F. (1997). An exploratory study of the social and personal dynamics that deter underserved women from participating in adult education activities.
 In R. Nolan & H. Chelesvig (Eds.), *Proceedings of the 38th Annual Adult Education Research Conference* (pp. 96-101). Stillwater: Oklahoma State University.
- Hansen, J. (2001). When writers read (2nd ed.). Portsmouth, NH: Heinemann.
- Hargreaves, A., & Fullan, M. (2000). Mentoring in the new millennium. *Theory Into Practice*, 39(1), 50-56.
- Hatch, J. A. (2002). *Doing qualitative research in education settings*. Albany, NY: State University of New York Press.

- Heckhausen, J. (1999). Developmental regulation in adulthood: Age-normative and sociostructural constraints as adaptive challenges. Cambridge: Cambridge University Press.
- Heyde, E. (2000). On mature reflection: *Strange Objects* and the cultivation of reflective reading. *Children's Literature in Education*, *31*(3), 195-205.
- Hiemstra, R., Brockett, R. B., & Knox, A. B. (Eds.). (1991). *Creating environments for effective adult learning*. San Francisco: Jossey-Bass.
- Hiemstra, R., & Sisco, B. (1990). *Individualizing instruction: Making learning personal, empowering, and successful.* San Francisco: Jossey-Bass, 1990.
- Hoare, C. (2006). Growing a discipline at the boarders of thought. In C. Hoare (Ed.), *Handbook of adult development and learning* (pp. 3-26). New York: Oxford University Press.
- Holland, D., Lachicotte, W., Skinner, D., & Cain, C. (1998). *Identity and agency in cultural worlds*. Cambridge, MA: Harvard University Press.
- Holland, D., Lachicotte, W., Skinner, D., & Cain, C. (2003). *Identity and agency in cultural worlds*. Cambridge, MA: Harvard University Press.
- Holland, D., & Lave, J., Eds. (2001). *History in person: Enduring struggles, contentious practice, intimate identities.* Santa Fe: The School of American Research Press.
- Huberman, M. (1989). The professional life cycle of teachers. *Teacher College Record*, 91(1), 31-57.

- Hudson, J. & Slackman, E. (1990). Children's use of scripts in inferential text processing.

 Discourse Processing, 13, 375-385.
- Husserl, E. (1970). *The crisis of European sciences and transcendental phenomenology*. Evanston: Northwestern University Press.
- Internet Data Corporation. (2008, March). The diverse and exploding digital universe: An updated forecast of worldwide information growth through 2011. IDC Information and Data.
- Internet World Stats (2009). http://www.internetworldstats.com/stats2htm. Accessed October 1, 2009.
- Jager, B. (1975). Theorizing, journeying, dwelling. *Phenomenological Psychology*, 11, 235-260.
- James, W.B., & Maher, P.A. (2004). Understanding and using learning styles. In M.W. Galbraith, (Ed.), *Adult learning methods: A guide for effective instruction*, 3rd ed., (pp. 119-139). Malabar, FL: Krieger Publishing Company.
- Janas, M. (2001). Striking a balance. Kappa Delta Pi Record, 38(1), 24-27.
- Jarvis, P. (1987). Adult learning in the social context. London: Croom Helm.
- Jarvis, P. (2001). Learning in later life: An introduction for educators and careers. London: Kogan Page.
- Jenkins, J.R., Johnson, E., & Hileman, J. (2004). When is reading also writing: Sources of individual differences on the new reading performance assessments. Scientific Studies of Reading, 8, 125-121.

- Jetton, T. L., & Dole, J. A., Eds. (2004). *Adolescent literacy research and practice*. New York: The Guilford Press.
- Johnson, C.C. (2007). Effective science teaching, professional development and No Child Left Behind: Barriers, dilemmas, and reality. *Journal of Science Teacher Education*, 18(2), 133-136.
- Kagan, J. M. (1994). Galen's prophecy. New York: Basic Books.
- Keating, M. C. (2005). The person in the doing: Negotiating the experience of self. In D.

 Barton & K. Tusting (Eds.), *Beyond communities of practice: language, power and social*context (pp. 105-138). New York: Cambridge University Press.
- Kegan, R. (1982). *The evolving self: Problems and process in human development.*Campbridge: Harvard University Press.
- Kelland, J. H. (2005). Distance learning: Access and inclusion issues. In R. J. Hill & R. Kiely (Eds.), *Proceedings of the 46th Annual Adult Education Research Conference* (pp. 253-258). Athens: University of Georgia.
- Kimble, L.L., Yager, R.E., Yager, S.O. (2006). Success of a professional-development model in assisting teachers to change their teaching to match the more emphasis conditions urged in national science education standards. *Journal of Science Teacher Education*, 17(3), 309-322.

- Kincheloe, J. L., & McLaren, P. L. (1998). Rethinking critical theory and qualitative research.

 In N. K. Denzin & Y. S. Lincoln, (Eds.), The landscape of qualitative research: Theories and issues, (pp. 260-299). Thousand Oaks, CA: Sage.
- Kitchener, K. S., King, P. M., & DeLuca, S. (2006). Development of reflective judgment in adulthood. In C. Hoare, (Ed.), *Handbook of adult development and learning*, (pp. 73-98). New York: Oxford University Press.
- Knapp, M.S. (2003). Professional development as a policy pathway. *Review of Research in Education*, 27(1), 109-157.
- Knowles, M. S. (1970). *The modern practice of adult education: Andragogy vs. pedagogy*. New York: Association Press.
- Knowles, M.S. (1980). *The modern practice of adult education: From pedagogy to andragogy.*(Rev. ed.) New York: Cambridge University Press.
- Knowles, M.S. (1990). The adult learner: A neglected species (4th ed.). Houston: Gulf Press.
- Knox, A. B. (1977). Adult development and learning. San Francisco: Jossey-Bass.
- Knox, A.B. (1986). Helping adults learn. San Francisco: Jossey-Bass.
- Krajewski, B. (1995). Professional growth: A personal change model. Catalyst 7(5): 5-9.
- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers for African-American children.* San Francisco: Jossey-Bass.

- Langer, J.A. (1987). A sociocognitive perspective in literacy. In J.A. Langer (Ed.), *Language*, *literacy, and culture: Issues of society and schooling* (pp.1-20). Norwood, NJ: Ablex.
- Langer, J. A. (2004). *Getting to excellent: How to create better schools*. New York: Teachers College Press.
- Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. New York: Cambridge University Press.
- Lea, M. R. (2005). 'Communities of practice' in higher education: Useful heuristic or education model. In D. Barton & K. Tusting (Eds.), *Beyond communities of practice: Language*, power and social context, (pp. 180-197). New York: Cambridge University Press.
- LeCompte, M.D., & Preissle, J., with Tesch, R. (1993). *Ethnography and qualitative design in educational research*. (2nd ed.) Orlando: Academic Press.
- LeDoux, J. (1993). Emotional memory systems in the brain. *Behavioral Brain Research*, 58(1-2), 69-79.
- Lee, C. D., & Smagorinsky, P., Eds. (2000). *Vygotskian perspectives on literacy research:*Constructing meaning through collaborative inquiry. Cambridge, UK: The Cambridge University Press.
- Lee, H. (2007). Developing an effective professional development model to enhance teachers' conceptual understanding and pedagogical strategies in mathematics. *Journal of Educational Thought*, 41(2), 125-144.

- Levin, J.R., & Pressley, M. (1981). Improving children's prose comprehension: Selected strategies that seem to succeed. In C.M. Santa & B.L. Hayes (Eds.), Children's prose comprehension: Research and practice (pp. 44-71). Newark, DE: International Reading Association.
- Lewis, C., & Ketter, J. (2004). Learning as social interaction: Interdiscursivity in a teacher and researcher study group. In R. Rogers, (Eds.), *An introduction to critical discourse analysis in education*, (pp. 117-146). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Library of Congress. (2007). *Year 2007 at a glance*. Retrieved June 11, 2008, from http://www.loc.gov/about/generalinfo.html#2007 at a glance
- Lieberman, A., & Miller, L. (Eds.). (2008). *Teachers in professional communities: Improving teaching and learning*. New York: Teachers College Press.
- Lieberman, J. M., & Wilkins, E. A. (2006). The professional development pathways model: From policy to practice. *Kappa Delta Pi Record*, 42(3), 124-128.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Linek, W. M., Fleener, C., Fazio, M., Raine, I. L., & Klakamp, K. (2003). The impact of shifting from "how teachers teach" to "how children learn". *The Journal of Educational Research*, 97, 78-89.

- Little, J.W. (1994, September). *Teachers professional development in a climate of educational reform*. U.S. Department of Education. Retrieved June 12, 2008, from http://www.ed.gov/pubs/EdReformStudies/SysReforms/index.html
- Little, T.C. (1981). History and rationale for experiential learning. Unpublished manuscript.
- Lock, J.V. (2006). A new image: Online communities to facilitate teacher professional development. *Journal of Technology and Teacher Education*, *14*(4), 663-678.
- Long, H.B. (1971). Are they ever to old to learn? Englewood Cliffs: Prentice-Hall.
- Long, H.B. (1983a). Adult learning: Research and practice. New York: Cambridge.
- Long, H.B. (1983b). Academic performance, attitudes and social relations in intergenerational college classes. *Educational Gerontology*, *9*(5-6), 471-482.
- Long, H. B. (2004). Understanding adult learners. In Galbraith, M. W. (Ed.), *Adult learning methods: A guide for effective instruction*, (3rd ed.), (pp. 23-37). Malabar, FL: Krieger Publishing Company.
- Maher, F. A., & Tetreault, M. K. (1996). Woment's ways of knowing in women's studies, feminnist pedagogies, and feminist theory. In N. Goldberger, J. Tarule, B. Clinchy, & M. Belenky (Eds.), *Knowledge, difference, and power: Essays inspired by women's ways of knowing*, (pp. 148-170). New York: Basic Books.
- Mahoney, M.J. (1996). Connected knowing in constructive psychotherapy. In N. Goldberger, J. Tarule, B. Clinchy, & M. Belenky (Eds.), Knowledge, difference, and power: Essays inspired by women's ways of knowing, (pp. 126-147). New York: Basic Books.

- Manzo, A., Manzo, U., & Albee, J. J. (2002). iREAP: Improving reading, writing, and thinking in the wired classroom. *Journal of Adolescent & Adult Literacy*, *46*, 42-47. Retrieved on February 27, 2008, from http://vnweb.hwwilsonweb.com.proxy.lib.utk.edu:90/hww/results/results_singls_fulltext.j
- Margolis, J. (2009). Start with the passion that fuels a teacher's soul. *Journal of Staff Development*, 30(1).
- Marienau, C., & Chickering, A. W. (1982). Adult development and learning. In B. Menson (Ed.), *Building on experiences in adult development* (pp. 62-84). New Directions for Experiential Learning, no. 16. San Francisco: Jossey-Bass.
- Maslow, A.H. (1998). Toward a psychology of being, 3rd ed. New Jersey: Wiley.
- Mathis, J. B. (2002). An album of response reflecting on the images. *Journal of Children's Literature*, 28(1), 41-46.
- Mathis, J., & Giorgis, C. (1999). Educators as audience for children's literature: The significance of personal text sets to learners and teachers. *Journal of Children's Literature*, 25 (2), 24-35.
- McGill-Franzen, A., Allington, R.L. Yokio, L., & Brooks, G. (1999). Puttings books in the classroom seems necessary but not sufficient. *Journal of Educational Records* 93(2), 67-74.

- McLafferty, Jr., C. M. (2000). Technology revolution = education evolution. *Kappa Delta Pi**Record, 37(1), 22-25.
- Merriam, L. S. (1893). Higher education in Tennessee. In H.B. Adams (Ed.), *Contributions to American educational history* (Bureau of Education Circular of Information No. 5).

 Washington, D. C.: Bureau of Education.
- Merriam, S.B. (1998). Qualitative research and case study applications in education: Revised and expanded from "case study research in education." San Francisco: Jossey-Bass.
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2007). *Learning in adulthood: A comprehensive guide* (3rd ed.). San Francisco: Jossey-Bass.
- Merriam, S. B., & Clark, M. C. (2006). Learning and development: The connection in adulthood. In C. Hoare, (Ed.), *Handbook of adult development and learning*, (pp. 27-48). New York: Oxford University Press.
- Meyer, B.J.F.,& Rice, E. (1984). The structure of text. In P.D. Pearson, R. Barr, M.L. Kamil, & P. Mosenthal (Eds.), *Handbook of reading research* (pp. 319-352). New York: Longman.
- Mezirow, J. (1981). A critical theory of adult learning and education. *Adult Education*, 32(1), 3-27.
- Mezirow, J. (1990). Fostering critical reflection in adulthood. San Francisco: Jossey-Bass.
- Miles, M. B. (1995). Forward. In T. Guskey & M. Huberman, (Eds.), *Professional development in education: New paradigms and practices*. New York: Teachers College Press.
- Mishler, E. G. (1986). Research interviewing. Cambridge, MA: Harvard University Press.

- Mok, Y.F. (2002). Teacher growth: The formation and pursuit of personal values. *Interchange*, 33(2), 115-138.
- Moll, L. C. (2000). Inspired by Vygotsky: Ethnographic experiments in education. In C.D. Lee & P. Smagorinsky (Eds.), Vygotskian perpectives on literacy research: Constructing meaning through collaborative inquiry, (pp. 256-268). New York: Cambridge University Press.
- Moore, D. W., & Cunningham, J. W. (2006). Adolescent agency and literacy. In D. E. Alvermann, K. A. Hinchman, D. W. Moore, S. F. Phelps, D. R. Waff, (Eds.).

 *Reconceptualizing the literacies in adolescents' lives (2nd ed.), (pp. 129-146). Mahwah,
 NJ: Lawrence Erlbaum Associates, Inc., Publishers.
- Moore, M. G. (2001). *Distance education in the United States: The state of t7he art*. Series of lectures on the education use of ICT and virtual education by UOC. http://www.uoc.edu/web/eng/art/uoc/moore/moore.html. Accessed July 1, 2004.
- Moustakas, C. (1994.) *Phenomenological research methods*. Thousand Oaks, CA: Sage Publications.
- Mycue, S. (2001). The professional circle. *Kappa Delta Pi Record*, 38(1), 28-31.
- National Center for Education Statistics. (2001, June). *Teacher education and professional development:* 2000. U.S. Department of Education. Retrieved June 12, 2008, from http://nces.ed.gov/pubs2001/2001088.pdf

- National Center for Education Statistics. (2007). *The condition of education 2007: Indicator*34, Characteristics of school principals. U.S. Department of Education.

 http://nces.ed.gov/programs/coe/2007/section4/indicator34.asp Accessed October 4,
 2009.
- National Center for Education Statistics. (June, 2009). *Characteristics of public, private, and bureau of Indian education elementary and secondary school teacher in the United States: Results from the 2007-08 schools and staffing survey.* U.S. Department of Education. http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009320 Accessed October 4, 2009.

National Defense Education Act of 1958. Public Law 85-864.

Neuman, S.B., & Cunningham, L. (2009). The impact of professional development and coaching on early language and literacy instructional practices. *American Educational Research Journal*, 46(2), 532-566.

No Child Left Behind Act of 2001, 20 U.S.C.6301 et seq. (2002).

- Noddings, N. (February, 1988). An ethic of caring and its implications for instructional arrangements. *American Journal of Education*, 96(2), 215-230.
- Noddings, N. (Winter, 2001). The care tradition: Beyond "add women and stir." *Theory Into Practice*, 40(1), 29-34.
- Nussbaum, M.C. (1995). *Poetic justice: The literary imagination and public life*. Boston: Beacon Press.

- Page, G. A. (2005). Adult education and technology in a rural county: The irony of persistent poverty and "progress" in the information age. In R.J. Hill & R. Kiely (Eds.), Proceedings of the 46th Annual Adult Education Research Conference (p. 331-336).

 Athens: University of Georgia.
- Perry, W.G. (1970). Forms of intellectual and cognitive development in the college years. New York: Holt, Rinehart, & Winston.
- Pert, C. (1997). Molecules of emotion. New York: Charles Scribner's Sons.
- Porter, A.C., Birman. B.F., & Garet, M. S. (2000). *Does professional development change teaching practice? Results from a three-year study*. U.S. Department of Education. Retrieved June 12, 2008, from http://www.ed.gov/rschstat/eval/teaching/epdp/execsum.pdf
- Potter, J. (1997). Discourse analysis as a way of analysing naturally occurring talk. In D. Silverman (Ed.), *Qualitative Research*, (pp. 144-160). London: Sage.
- Pratt, D.D. (1984). Teaching adults: A conceptual framework for the first session. *Lifelong learning: An omnibus of practice and research*, 7(6), 7-9, 28, 31.
- Pratt, N. (2008, February). Multi-point e-conferencing with initial teacher training students in England: Pitfalls and potential. *Teaching and Teacher Education*. Retrieved June 12, 2008, from http://www.sciencedirect.com/science? ob=ArticleURL& udi=B6VD8-4S7HSB6-
 - 1&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_acct=C000050221&_ version=1&_urlVersion=0&_userid=10&md5=ad20c111851613f5c7cfb92c9c60ef1d

- Preece, J. (2000). *Online communities: Designing usability, supporting sociability*. New York: John Wiley & Sons, Ltd.
- Pressley, M. (2006). *Reading instruction that works: The case for balanced literacy*. New York: The Guilford Press.
- Pressley, M., & Afflerbach, P. (1995). Verbal protocols of reading: The nature of constructively responsive reading. Hillsdale, NJ: Erlbaum.
- Purcell-Gates, V. (2004). Ethnographic research. In N.K. Duke & M.H.Mallette (Eds.), *Literacy* research methodology (pp. 92-113). New York: The Guilford Press.
- Reynolds, T., Murrill, L.D., & Whitt, G.L. (2006). Learning from organizations: Mobilizing and sustaining teacher change. *The Educational Forum*, 70(2), 123-133.
- Richardson, V. (2003). The dilemmas of professional development. *Phi Delta Kappan*, 84(5),401-406.
- Roach, M. (2003). *Stiff: The curious lives of human cadavers*. New York: W. W. Norton & Company.
- Rock, F. (2005). "I've picked some up from a colleague": Language, sharing and communities of practice in an institutional setting. In D. Barton & K. Tusting (Eds.), *Beyond communities of practice: Language, power and social context*. New York: Cambridge University Press.
- Rosenblatt, L. (1938/1983). *Literature as exploration* (4th ed.). New York: Modern Language Association.

- Rosenblatt, L. (1982). The literary transaction: Evocation and response. *Theory into Practice*, 21(4), 268-277.
- Rosenblatt, L. (2005). Making meaning with texts. Portsmouth, NH: Heinemann.
- Rubin, D.L. (1990). Introduction: Ways of thinking about talking and learning. In S. Hynds & D.L. Rubin (Eds.), *Perspectives on talk and learning* (pp. 1-17). Urbana, IL: National Council of Teachers of English.
- De Saint-Exupery, A. (2000). *The little prince* (R. Howard, Trans.). New York: Harcourt, Inc. (Original work published 1943).
- Samovar, L.A., & Porter, R.E. (Eds.). (1997). *Intercultural communication: a reader*. (8th ed.). New York: Wadsworth.
- Santa, C. M. (2006). A vision for adolescent literacy: Ours or theirs? *Journal of Adolescent & Adult Literacy*, 49, 466-476.
- Schaie, K.W. (1983b). The Seattle longitudinal study: A 21-year exploration of psychometric intelligence in adulthood. In K.W. Schaie (Ed.), *Longitudinal studies of psychological development* (pp. 64-135). New York: Guilford Press.
- Schaie, K.W. (1989b). Individual differences in rate of cognitive change in adulthood. In V.I. Bengston & K.W. Shaie (Eds.), *The course of later life: Research and reflections* (pp. 65-86). New York: Springer.
- Schaie, K.W. (1993). The Seattle Longitudinal Studies of adult intelligence. *Current Directions* in *Psychological Science*, 2, 171-175.

- Schaie, K.W. (1994). The course of adult intellictual development. *American Psychologist*, 49, 304-313.
- Schaie, K.W. (1996). Intellectual development in adulthood. In J.E. Birren & K.W. Schaie (Eds.), *Handbook of the psychology of aging* (4th ed., pp.265-286). San Diego, CA: Academic Press.
- Schaie, K.W., & Hertzog, C. (1983). Fourteen-year cohort-sequential analyses of adult intellectual development. *Developmental Psychology*, 19, 531-543.
- Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education* and the social sciences, (3rd ed.). New York: Teachers College Press.
- Senge, P. M. (1990). The fifth discipline: The art and practice of the learning organization.

 New York: Doubleday.
- Serafini, F. (2002). A journey with *The Wild Things*: A reader response perspective in practice. *Journal of Children's Literature*, 28(1), 73-78.
- Sisco, B.R. (1991). Setting the climate for effective teaching and learning. In R. Hiemstra, R.B. Brockett, A.B. Knox (Eds.), *New directions for adult and continuing education*, no. 50., (pp. 41-49). San Francisco: Jossey-Bass Publishers.
- Sloan, G. (2002). Reader response in perpective. Journal of Children's Literature, 28(1), 22-30.
- Smagorinsky, P. (2001). If meaning is constructed, what is it made from? Toward a cultural theory of reading. *Review of Educational Research*, 71(1), 133-169.

- Smith, M.W. (1992). Submission versus control in literary transactions. In J. Many & C. Cox (Eds.), Reader stance and literary understanding: Exploring the theories, research, and practice (pp. 143-161). Norwood, NJ: Ablex.
- Smith, M.W., & Wilhelm, J.D. (2002). "Reading don't fix no Chevys": Literacy in the lives of young men. Portsmouth, NH: Heinemann.
- Smylie, M. A., Allensworth, E., Greenberg, R. C., Harris, R., & Luppescu, S. (2001). *Teacher professional development in Chicago: Supporting effective practice*. Consortium on Chicago School Research. Retrieved June 12, 2008, from http://ccsr.uchicago.edu/content/publications.php?pub_id=36
- Socol, T.T. (2006). Immersed in literacy learning: One staff shifts its thinking and lives to tell about it. *Reading Research and Instruction*, 45(3), 179-208.
- Speck, M. (2002). Balanced and year-round professional development: Time and learning.

 Catalyst for Change, 32(1), 17-19.
- Spillebeen, G. (2002). Kipling's choice. Boston, MA: Houghton Mifflin Company.
- Spradley, J.P. (1979). The ethnographic interview. New York: Holt, Rinehart, and Winston.
- Sprague, D. (2006). Research agenda for online teacher professional development. *Journal of Technology and Teacher Education*, 14(4), 657-661.
- Stahl, S. A., & Shanahan, C. (2004). Learning to think like a historian. In T. L. Jetton & J. A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 94-115). New York: The Guilford Press.

- Stake, R.E. (1995). The art of case study research. Thousand Oaks, CA: Sage Publications.
- Steffy, B. E., & Wolfe, M. P. (2001). A life-cycle model for career teachers. *Kappa Delta Pi Record*, 38(1), 16-19.
- Supovitz, J.A., Mayer, D.P., & Kahle, J.B. (2000). Promoting inquiry-based instructional practice: The longitudinal impact of professional development in the context of systemic reform. *Educational Policy*, *14*(3), 331-356.
- Sylwester, R. (2000). A biological brain in a cultural classroom: Applying biological research to classroom management. Thousand Oakes, CA: Corwin Press.
- Taylor, E.W. (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.
- Taylor, T. (1969). *The cay*. New York: Doubleday & Company, Inc.
- Tennant, M. C., & Pogson, P. (1995). Learning and change in the adult years: A developmental perspective. San Francisco: Jossey-Bass.
- Tennessee State Department of Education, 2007.
- Tennessee Department of Education. (2007). *Report Card 2007* Retrieved June 6, 2008, from https://edu.warehouse.state/tn/us
- Tennessee Valley Authority. (2007). Retrieved June 3, 2008, from http://www.tvasites.com

- Tomasino, K., Zarnowski, M., Backner, M., & Schneider, E. (2002). Of professional interest:

 Books about reader response. *Journal of Children's Literature*, 28(1), 95-99.
- Trotter, Y.D. (2006). Adult learning theories: Impacting professional development programs. *The Delta Kappa Gamma Bulletin*, 72(2), 8-13.
- United States Census Bureau. (2000-6). American fact finder: Census 2000 demographic profile highlights. Retrieved June 7, 2008, from http://factfinder.census.gov
- United States Census Bureau. (2000-6). American fact finder: Profile of general demographic characteristics. Retrieved June 7, 2008, from:

 http://factfinder.census.gov
- Vacca, R. T. (2002). Making a difference in adolescents' school lives: visible and invisible aspects of content area reading. In A. E. Farstrup & S. J. Samuels (Eds.), *What research has to say about reading instruction* (3rd ed.), (pp. 184-201). Newark, DA: International Reading Association.
- Van Dijk, T.A., & Kintsch, W. (1983) . Strategies of discourse comprehension. New York:

 Academic Press.
- Van Manen, M. (1990). Researching lived experience: Human science for an action sensitive pedagogy. Ontario: The University of Western Ontario.
- Vygotski, L. S. (1986). Thought and language. Cambridge, MA: MIT Press.

- Walker, M. P., Brakefield, T., Hobson, J. A., & Strickgold, R. (2003). Dissociable stages of human memory consolidation and reconsolidation. *Nature*, 425, 616-620
- Warren, S., Doorn, D., & Green, J. (2008). Changes in vision: Teachers engaging in action research. *The Education Forum*, 72, 260-70.
- Weasmer, J., Woods, A.M., & Coburn, T. (2008). Enthusiastic and growing teachers: Individual dispositions, critical incidences, and family supports. *Education*, 129(1), 21-35.
- Webster-Wright, A. (2009). Reframing professional development through understanding authentic professional learning. *Review of Educational Research OnlineFirst*, 1-38. Retrieved March 18, 2009 from http://rer.aera.net
- Wei, R.C., Darling-Hammond, L., 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. Dallas, TX: National Staff Development Council.
- Weinstein, A. (2004). A scream goes through the house: What literature teaches us about life.

 New York: Random House Trade Paperbacks.
- Weiss, I.E., & Pasley, J.D. (2006). Scaling up instructional improvement through teacher professional development: Insights from the local systemic change initiative.

 Philadelphia, PA: Consortium for Policy Research in Education.
- Welton, M. (1993). Social revolution learning: The new social movements as learning sites. *Adult Education Quarterly*, 43, 152-164.

- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York: Cambridge University Press.
- Wenglinsky, H. (2000). How teaching matters: Bring the classroom back into discussions of teacher quality. Princeton, NJ: Milken Family Foundation and Educational Testing Service.
- Wenglinsky, H. (2006). Technology and achievement: The bottom line. *Educational Leadership*, 63(4), 29-32.
- West, K. C. (2008). Weblogs and literary response: Socially situated identities and hybrid social languages in English class blogs. *Journal of Adolescent & Adult Literacy*, *51*, 588-598.
- Western Regional Educational Laboratory. (2000). *Teachers who learn, kids who achieve: A look at schools with model professional development*. WestEd. Retrieved June 12, 2008, from http://www.wested.org/cs/we/view/rs/179
- Wlodkowski, R. J. (2004). Creating motivating learning environments. In M.W. Galbraith (Ed.), *Adult learning methods: A guide for instruction* (3rd ed.), (pp. 141-164). Malabar, FL: Krieger Publishing Company.
- Wood, D. (2007). Teachers' learning communities: Catalyst for change or a new infrastructure for the status quo? *Teachers College Record*, 109(3), 699-739.
- Wood, L. A., & Kroger, R. O. (2000). *Doing discourse analysis: Methods for studying action in talk and text.* Thousand Oaks, CA: Sage Publications, Inc.

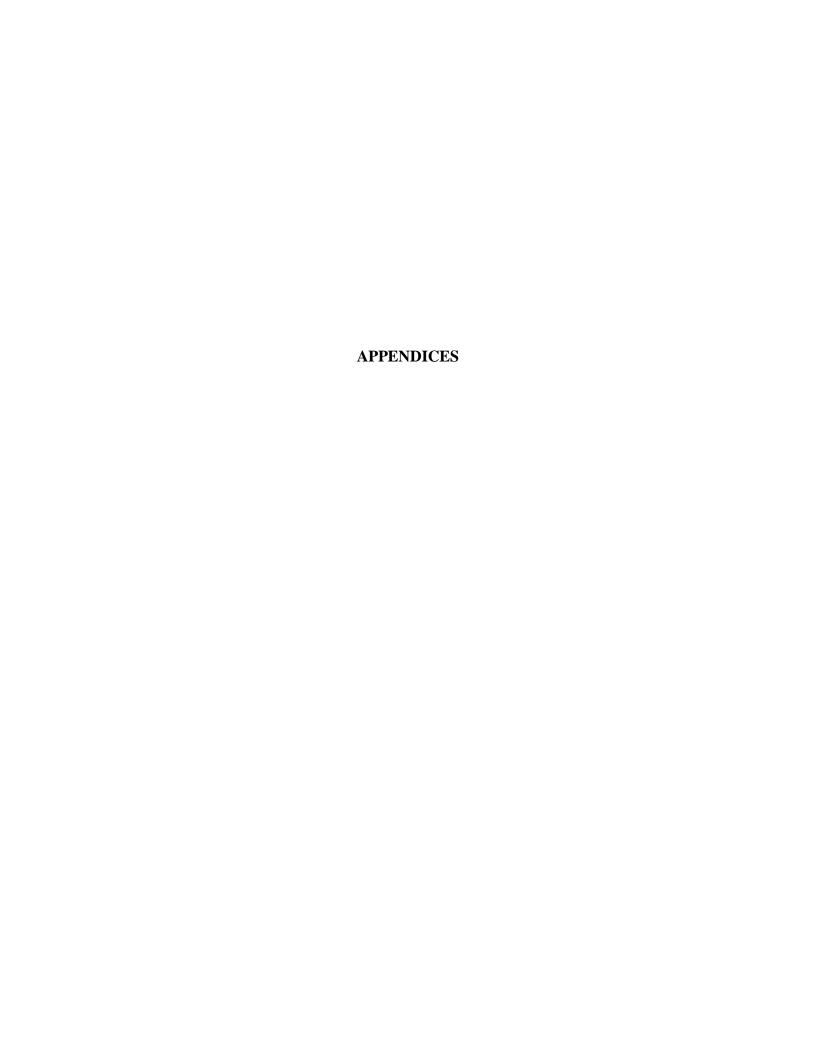
- Wooten, D. A. (2000). Valued voices: An interdisciplinary approach to teaching and learning.

 Newark, DA: International Reading Association.
- Yin, R. (1994). Case-study research: Design and methods (2nd ed.). Thousand Oaks, CA: Sage Puplications.
- Yoon, K.S., Duncan, T., Lee, S. W. –Y., Scarloss, B., & Shapley, K. L. (2007). Reviewing the evidence on how teacher professional development affects student achievement.

 Washington, D.C.: U.S. Department of Education, Institute of Education Sciences,

 National Center for Education Evaluation and Regional Assistance.
- Ziegler, M., Paulus, T., & Woodside, M. (2006). This course is helping us all arrive at new viewpoints, isn't it? Making meaning through dialogue in a blended environment.

 *Journal of Transformative Education, 4(4), 302-320.
- Zimmerman, B. J. (2002). Achieving academic excellence: A self-regulatory perspective. In M. Ferrari (Ed.), *The pursuit of excellence through education. The educational psychology series* (pp. 85-110). Mahwah, NJ: Erlbaum.



APPENDIX A: READER RESPONSE THEORY

Reader Response Theory was introduced by Louise Rosenblatt in *Literature as* Exploration (1938/1983). New Criticism, which also appeared in literary circles in the 1930's, maintained that meaning was locked in the words of the author's text. In contrast, Rosenblatt postulated that meaning was located in the reader's interpretation. About meaning Rosenblatt (1983) wrote that "the literary work exists in the live circuit set up between the reader and the text" (p. 25). Further, according to the New Critics, the reader received the author's message and was thus passively involved in the meaning-making (reading) process (Sloan, 2002). Rosenblatt, however, positioned the reader as actively engaged in the interpretation of text in a two-way process (Apol, 2002). In Reader Response no single interpretation gained primacy over another as long as each reader's interpretation had connection with the text (Rosenblatt, 1983). Because a reader might or might not be aware of the author's situation, purpose, historical context, or life experiences, the reader constructs meaning by interpreting text through his or her own personal knowledge and life experiences as well as time, place, circumstance, and purpose, thereby rendering every response entirely unique yet equally valid (Heyde, 2000). Interpreting Rosenblatt's Reader Response Theory, Galda (1998) wrote,

The content of any book is not simply the words the author put there but those words as they are infused with meaning by their readers, meaning that reflects the various experiences and knowledge that readers bring to their reading (p. 2).

Moreover, since reader experiences change with time, the interpretive process is dynamic, subject to constant change. Rosenblatt theorized that readers make two distinct responses to text, aesthetic and efferent. The aesthetic response is an emotional connection to text whereas the

efferent response is a factual connection to text (Rosenblatt, 1983). Readers can experience both responses to a single article of text.

Reader Response Theory impacts our understanding of reading in that it gives readers control of the meaning-making process (Heyde, 2000; Serafini, 2002). The reader's role is active rather than passive. The act of comprehending is to be engaged in rather than to be attained, a process to do rather than a final product to be consumed or received. This response process can be done independently or collaboratively with others, in written or spoken form, as a unidirectional speech act or in concert with a roomful of discussants. Structures for engaging readers in shared response range from single words on post-it notes to literature circles to journal entries to weblogs (Serafini; Sloan, 2002; Wooten, 2000). By moving the position and timing of meaning-making from the act of authoring text to the act of responding to text, Rosenblatt transferred authority to the reader (Mathis, 2002).

The benefits of Reader Response Theory to readers are many. Instruction based on this theory has potential for connecting learning to the personal lives of students, leading to increased self-confidence (Mathis, 2002) and improved motivation for reading (Franzak, 2006).

Marginalized readers in particular take a submissive stance to reading and would benefit from approaches that foster active engagement in reading (Smith, 1992). Such connections improve comprehension and increase the likelihood that new learning will be retained (Anderson & Peaarson, 1984; Barton & Sawyer, 2003; Bransford, Brown & Cocking, 1999; Hudson & Slackman, 1990; Mathis, 2002). In addition, once readers realize that their interpretations have valence, the act of reading becomes more appealing for reluctant readers (Franzak; Smith & Wilhelm, 2002). By facilitating the grounding of interpretation in text, instruction through

reader response may develop critical reading skills (Apol, 2002; Heyde, 2000; Mathis, 2002). Furthermore, collaboration with others in the co-construction of interpretation positions students to develop appreciation for others' experiences as well as tolerance for multiple interpretations (Mathis; Mathis & Giorgis, 1999; Tomasino, Zarnowski, Backner, Schneider, 2002). Finally, and perhaps most importantly, seating control of the comprehension process in readers rather than in texts gives learners increased opportunities for developing agency and voice, both significant considerations in learning and the development of reading skills (Calkins, 2001; Franzak; Moore & Cunningham, 2006). A primary goal of education is to develop readers with critical skills—able, ready, and confident in voicing interpretations, cognizant of the power of words to shape perspectives, resistant of texts that seek to control, yet open to hearing the interpretations of others (Apol, 2002; Edelsky, 2000; Sloan, 2002; Tomasino, et al.). Such individuals will be well-prepared for life in the Information Age and will be better prepared to for the difficult decisions facing us in the 21st Century (Smagorinsky, 2001; Tomasino, et al.). Learning experiences based on Reader Response Theory offer one option for accomplishing this goal.

APPENDIX B: PROFESSIONAL DEVELOPMENT AGENDA

Reader Response: Improving Reading in the Content Areas

Day One

Talking and Writing About Text:

Before Reading Strategies

Metaphors for Clarifying Thinking

List-Group-Label

Vocabulary Building (Post-It Notes and Graphic Organizers)

Visuals

Activating Prior Knowledge, Establishing Context, Setting Purpose

During Reading Strategies

Narrative Pyramid

Summarization

Expository Pyramid

After Reading Strategies

Writing a Summary

Reading Theory and Metacognition:

Social Constructivism

Reader Response Theory

Transaction with Text

Metacognition

Reading Goal of Content Area Teachers Metacognition

- Tell students what we think about while reading
- Model what we thing about while reading
- Have students write, talk, reflect on what they think about while reading

Before Reading Strategies

Visuals: Activating Prior Knowledge

During Reading Strategies

QtA (Questioning the Author)

Sensory Images

Inference

After Reading Strategies

Synthesis

Text Structure

Questioning in 3 Levels

Day Two

Scaffolding and Critical Literacy:

Thinking Like a Historian

Super Sources

Critical Literacy and Good Citizenry

Technology and Motivation:

Paths to Student Publication

Invitation to Participate in Sustained Professional Development and Research

APPENDIX C: RESEARCH LOG

On-line Communication with Ariel

Date	Time	Sender	Message
9/29/2008	10:00 AM	Melba	I hope you and your family are happy and healthy!
10/1/2008	12:58 PM	Melba	I hope you and your family are happy and healthy!
10/1/2008	3:40 PM	Ariel	I hope you and your family are happy and healthy too!
10/1/2008	3:56 PM	Melba	THANKS Ariel! I am so glad we finally found a
10/2/2008	7:26 AM	Ariel	I hope I answered all the questions. The "thanks" goes to
10/23/2008	4:03 PM	Melba	How did your mini-lesson go? What did you think about
10/24/2008	7:48 AM	Ariel	The mini-lesson went great. The students were more
11/6/2008	11:14 AM	Melba	Please see attachment:
11/4/2008 att.			
Part A			I am sorry that several days have passed since our last
Part B			Could you tell me more about the students with whom
11/6/2008		Ariel	The Edmark Series is a computer reading program where
11/7/2008	12:47 PM	Melba	Our school clinic is overflowing! Hope you and your
11/12/08	12:35 PM	Melba	Can you please tell me if you got the email and
12/3/08	5:07 PM	Melba	Hopefully by now you are caught up and can spend a bit
11/6/08 att.			
Part B only			Could you tell me more about the students with whom
12/16/2008	12:12 PM	Melba	I have lost your home phone number. I left a message
12/16/2008	3:10 PM	Ariel	My home phone is

			134
12/16/08	3:44 PM	Melba	Great to hear from you. I will try you by phone tonight.
1/13/2009	1:25 PM	Ariel	Hope you had a restful and blessed holiday. I know that I
1/22/2009	1:02 PM	Melba	Hope you had a lovely snow day to enjoy the
1/27/2009	3:42 PM	Ariel	Long time passed. Sorry to be so late in returning my
2/24/2009	4:37 PM	Melba	Things have been busy, busy here. I am sure they have
3/31/2009	2:50 PM	Melba	Hope things are going well. Looking forward to hearing
4/1/2009	6:24 AM	Ariel	Hope things are wonderful with you. I was wondering if
4/1/2009	10:04 AM	Melba	Hey! Here is the email that I sent you in February. It has
2/24/2009 att.			Things have been busy, busy here. I am sure they have
4/1/2009	11:38 AM	Ariel	Hey, I received it! YEAH! I'll get this back to you by
4/7/2009	6:24 AM	Ariel	The students who participated in this lesson were grades
4/15/2009	3:37 PM	Melba	I know that this is an incredibly busy time of year, but I
4/15/2009	3:41 PM	Ariel	This week has been a nightmare for me. I am hoping that
4/15/2009	3:49 PM	Melba	So sorry that your week has been tough. I am afraid to
4/16/2009	7:12 AM	Ariel	Hope you are good this morning. By "unfold" I am
4/16/2009	8:37 AM	Melba	Calamities are part of teaching, I have learned over the
4/22/2009	3:34 PM	Melba	Hope this week is going better. Hope to hear from you
5/18/2009	11:21 AM	Ariel	Ariel's responses embedded in Melba's email from 2/24/2009, resent on 4/1/2009
5/18/2009	2:10 PM	Melba	Great to hear from you! I am hoping that we can get

APPENDIX D: PARTICIPANT DESCRIPTION

In an effort to protect her identity, I asked my participant to select a name for use in this research. My participant elected to go by the name "Ariel." She was a middle-aged female of Amerindian/Caucasian descent. At the time of the study, Ariel was a fifteen-year veteran of the teaching profession, grades K-12, who specialized in working with severely mentally and physically handicapped teens in a self-contained classroom. She first began work in education as a teacher for Head Start and then as an assistant for elementary Special Education classrooms. While working full time, she earned both her Bachelor of Science and Masters of Science Degrees in Education.

This description revealed several added elements of Ariel as teacher-learner. First, with her length of experience in the field, Ariel's professional identity was more stable than if she were younger and just beginning in the teaching profession. In her fifteen years on the job, she had attended a variety of professional development sessions, giving her a broad experience base for evaluating learning opportunities. The fact that she earned two degrees while working full time indicated that she was dedicated to increasing her professional knowledge. Given that she had worked with a variety of age groups, her understanding of the teaching profession was not limited to the high school experience. Because she was a minority female working in a predominantly white school for male administrators, one could infer that she may have experienced issues of hegemony or loss of power to influence her own professional learning. Her role as advocate for the severely mentally handicapped may also have limited her voice in professional learning decisions due to the limited number of others who shared her role on the

faculty. And finally, since she worked with 10 to 12 students in a self-contained classroom over the course of four years, one could assume that she developed close ties with the students and families she served.

VITA

I was born in Maryville, Tennessee in 1963 to Dorothy (a high school English teacher) and Ralph Petree (an office manager for Pittsburg Plate Glass). My parents were dedicated to supporting my education, both in formal schooling and through enriching summer experiences. As a child I read widely, traveled extensively, took private music and dance lessons, and participated in theater productions. By the time I graduated from high school, I was well-prepared for college. For my undergraduate work, I majored in Spanish. I attended the *Universidad Nacional Autónoma de México* in Mexico City for my Junior Year Abroad. I graduated *summa cum laude* in 1983 with a Bachelor of Arts Degree from Maryville College and a Tennessee teaching certificate in Spanish and English, grades 7-12. As a Career Level III teacher with eighteen years of classroom experience, I have variously taught high school Spanish I-IV and English grades 9-11, ranging from basic to honors level classes. For several summers I taught Spanish for grades K-8.

In 1988 I earned a Master of Science Degree from Lincoln Memorial University in Education Administration and Supervision. In 2002 I earned an Education Specialist Degree from Tennessee Technological University in Education Leadership. I am licensed by the State of Tennessee in Education Administration, grades PreK-12. Like my teaching experience, my administrative experience is varied. I have served as assistant principal of elementary, middle, and high school, and principal of a Career-Technical school. While working as assistant principal for an elementary school, I was assigned to help administer a \$368,000 *Reading*

Excellence Act Grant. That experience led me to The University of Tennessee to pursue a Doctor of Philosophy Degree in Education with a concentration in Literacy.

My research interests include literacy, teacher preparation, and professional development resulting in increased student achievement. To support my research interests and teaching career, I currently hold memberships in the International Reading Association and the National Education Association. Based on my work on the federal reading grant, I presented research at meetings of the National Research Council, the International Reading Association, and the American Association of Colleges of Teachers of Education. I also co-authored an article published in the *Journal of Educational Research* (Gilrane, Roberts & Russell, 2008).