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Brian Paul Yusko

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Helen Featherstone
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PROFESSIONAL DEVELOPMENT ACROSS THE CAREER SPAN: VETERAN TEACHERS LEARNING LITERACY TEACHING PRACTICES WHICH FACILITATE ATTENTION TO STUDENTS

VOLUME I

By

Brian Paul Yusko

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ABSTRACT

PROFESSIONAL DEVELOPMENT ACROSS THE CAREER SPAN: VETERAN TEACHERS LEARNING LITERACY TEACHING PRACTICES WHICH FACILITATE ATTENTION TO STUDENTS

By

Brian Paul Yusko

This dissertation uses life history and narrative methods to describe the teaching and career-long learning of four elementary teachers who made significant lasting changes in their language arts teaching. Drawing on observations and life history interviews, this dissertation adopts the perspective that teachers' stories are a valuable source of information about their professional growth over the course of a career.

The first half of the dissertation examines what it means for each of the four teachers to pay attention to her students. Paying attention to students is a key component of current teaching standards (National Council of Teachers of English, 1996) as well as traditional progressive educational philosophy (Dewey, 1904/1964). The author identifies three types of attention to students: (a) attention to compatibility between students and contexts; (b) attention to student understanding and skills; and (c) attention to student interests. The four teachers possessed dominant orientations of the way they paid attention to their students. These orientations were consistent with the opportunities they created for gathering information about their students as well as how they used the information they gathered.

The second half of the dissertation examines the learning that enabled the teachers to develop their practices of paying attention to students. Rather than trying to

understand the effects of particular interventions, this study reconstructs the career histories of the four teachers from experiences that the teachers themselves considered "critical." The study examines how each teacher's experiences form "constellations" of professional development opportunities, both formal and informal, which contribute to individual teachers' growth and their capacity to learn from particular later experiences. The author concludes that the most influential professional development experiences occur when teachers are "ready" for those experiences. Readiness is a function of the match between learning opportunities and teachers' dominant orientations toward paying attention to their students and the location of those opportunities in teachers' personal and professional lives.

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To my family--Karen, Helen, and Samuel--for believing in me
and always reminding me what is most important

ACKNOWLEDGMENTS

In the spring of 1998, when I began writing my dissertation proposal, I took four cuttings from a hanging house plant. I rooted the cuttings in water and planted them in soil. Each of the four cuttings started with four leaves on it, and the plant kept growing more and more leaves as a tangible reminder of the passage of time. As the shoots of my "dissertation plant" grew longer and longer with each passing month, my dissertation continued to grow. Just as my "dissertation plant" needed water and sunlight and nutrients from the soil to keep growing, I needed the help and support of many other people to keep my dissertation growing.

Throughout my graduate studies I have been lucky to work and become friends with many wonderful graduate students who pushed my thinking. Early in my graduate career, I was helped by Jocelyn Glazier, Cindy Hartzler-Miller, and David Carroll who met with Charles Thompson and Sharon Feiman-Nemser to discuss our work with interns. They taught me much about teaching and helped me form my early ideas about research. Later, I was fortunate to work in the "clubhouse," where I shared not just the bill for the water cooler but also lunches, dissertation stories, and many conversations about research with my office mates Ruth Berry, Cindy Carver, Beth Herbel-Eisenmann, Joan Hughes, Shari Levine Rose, Jo Lesser, Brian Vance, and Susan Wallace.

I was also fortunate to be part of a writing support group, hatched in March 1998 over lunch with Cindy Hartzler-Miller and Gaston Dembele in a West Philadelphia Thai restaurant. During the next two months we invited Jocelyn Glazier and Joan Hughes to

join our group. We began writing proposals and met regularly throughout the summer to exchange ideas, offer feedback on one another's writing, and offer general encouragement. The following summer, after Cindy graduated and Gaston and Jocelyn left the group, Joan and I were joined by Brenda Neumann.

Throughout the writing process, the group was a crucial lifeline for me. Cindy always listened carefully to what I wrote and what I said. She helped me think carefully through many problems and brought a wealth of knowledge and expertise. Jocelyn Glazier, who challenged me and forced me to think about other sides of a problem. Gaston Dembele always provided a listening ear and words of encouragement. Brenda willingly read many drafts and pushed me to write even when I resisted it.

I would not have been able to finish my dissertation without the help of Joan Hughes. As the two longest running members of the dissertation group, Joan and I shared all the ups and downs, the triumphs and frustrations, the new ideas and dry spells of the entire dissertation writing process from proposal to defense. Before we ever began writing dissertations, Joan and I bonded over the rearrangement of the furniture in the office and claimed the first two desks in the new Spencer office. Joan and I were regular fixtures in the office. We talked about our ideas as well as the details of selecting and contacting participants. We processed our meetings with advisors and committee members, and we helped each other prepare for our defense. Throughout the process, Joan always gave me the necessary "kick in the behind" to keep me writing.

Graduate students were not only a source of intellectual stimulation; they provided a much-needed social outlet. I have many vivid memories of special times spent with graduate student friends: playing poker on Friday nights, picking apples and

baking pies in October, cross-country skiing in Northern Michigan on New Year's Day, going with international students to their first Fourth of July celebration, camping, barbecuing on the back deck, swapping first-time homeowner horror stories and parenting advice. All these friendly graduate students made it easy to live in a strange new city far from family and other friends.

I always found the professors at Michigan State University accessible and helpful. There were many professors throughout my graduate career that deserve my thanks for teaching me about doing research. David Labaree, Aaron Pallas, Anna Neumann, Doug Campbell, Susan Florio-Ruane, Cheryl Rosaen, Charles Thompson, and Suzanne Wilson all taught me important lessons about research. In their own way, they all shaped my thinking about posing important questions that deserved study, about collecting, representing, and thinking carefully about data, and about thinking beyond the particulars of the data.

My committee members were a wonderful group of people who each pushed my thinking in different directions. Sharon Feiman-Nemser helped me learn about doing research on many occasions. She helped me write my first AERA proposal. Working closely with her on my writing, I learned how to revise my writing and think more carefully about everything I said. She always asked me insightful questions and gave me new insights about my data. Bob Floden taught me ways to keep myself focused and he always provided helpful and relevant references. Anna Neumann helped me think hard about methodological issues. What did I hope to learn by beginning interviews as I did? How did my relationship with my participants affect the data I gathered? Who had control over the stories? Steve Weiland always reminded me that I was only writing a

dissertation and that the main goal was to finish. At the same time, he always offered fresh insights and provided me with things to read other than educational research.

Helen Featherstone was the best dissertation chair anyone could hope for. Meeting with me every other week for over a year, she was extremely generous with her time. She always read my writing carefully, listened closely to what I said, and offered probing questions to stimulate my thinking. Helen taught me the value of a good conversation, and we had many of them. I always left her office with something new to consider, and her enthusiasm for my work always gave me energy to keep writing. She helped me remember that writing a dissertation should be fun and playful. Helen's deep respect for the value of one's personal life always reminded me to keep spending time with my rapidly growing family.

I could not have written this dissertation without the four teachers who were willing to participate. Carrie, Linda, Vera and Michelle each allowed me into their classrooms and into their lives in a special way. Every time I met with them, I felt lucky that they entrusted me with their stories. I have tried to do justice to them in this dissertation, and I hope that I have succeeded in capturing a meaningful slice of their lives. The first time I interviewed her, Michelle asked me, "Are you going to write something that makes a difference?" I told her I would try, but the process has convinced me of the deep selfishness of writing a dissertation. My writing and thinking have certainly made a difference in the way I think about teachers and their learning. I don't know whether it will make any difference for the four teachers.

Last, but not least, I must thank my family members, who made it possible for me to write. From the time I was little, my parents taught me to follow my dreams, and by

writing this, I have fulfilled one of my dreams. They always believed in me and taught me that I could do anything if I tried. My wife's family also supported me throughout the process. My wife Karen, and my two children Helen and Sam, have always supported me. When I decided to go to graduate school, Karen willingly came even though it meant leaving behind many friends and going to a strange place far from home. She worked full-time while I contributed my meager graduate student salary to the family income. She believed in me and encouraged me all along the way, and she worked hard to give me this opportunity.

Having young children while writing a dissertation was not always easy, but I would not have traded it. Helen always provided a much-needed diversion and helped me keep everything in perspective. When I sat down at the computer so often and Helen insisted on typing her "comments" on my computer, I realized how integral my writing had become to our family life. The times I spent wrestling with her, running around outside, and putting her to bed are precious memories I will always have and that took me away from writing and thinking. Sam did not come until near the end of the process, but there was nothing as effective as a crying baby to remind me that it was time to put the computer away and spend time holding and talking to my children.

Two years after I planted it, my dissertation plant is still alive and growing. All of the shoots have grown, some longer than others. The longest strand now has eight leaves and hangs low to the ground. One of the strands has lost its leaves over a long stretch. In another place, a new shoot is just beginning to poke out of the soil. Who knows what the future has in store?

TABLE OF CONTENTS

LIST OF TABLES xv

LIST OF FIGURES xvi

PART I: ATTENTION TO STUDENTS

CHAPTER 1
INTRODUCTION 2

ORIGIN OF THE STUDY 2
IMPORTANCE OF PAYING ATTENTION TO STUDENTS 4
NARRATIVE-BASED BIOGRAPHICAL STUDY OF FOUR TEACHERS' CAREER-LONG DEVELOPMENT 10
Carrie *12*
Linda *14*
Vera *15*
Michelle *16*
DISSERTATION OUTLINE 18

CHAPTER 2
ATTENTION TO STUDENTS AS AN AGENDA FOR TEACHER LEARNING 21

ATTENTION TO STUDENTS: A PROBLEM OF MEANING 21
INTELLECTUAL ATTENTION 26
Attention to Compatibility between Learners and Contexts *28*
Attention to Student Understanding *37*
Attention to Student Interests *43*
THE RECURSIVE CYCLE OF ATTENTION 48

CHAPTER 3
TEACHING PRACTICES WHICH PROVIDE WINDOWS ONTO STUDENTS 55

INTRODUCTION 55
CARRIE: ATTENDING TO AFFECTIVE DIMENSIONS OF STUDENTS 56
Snapshot of Carrie's Classroom *57*
Carrie's Attention to Students' Attitudes and Emotions *60*
Carrie's Attention to Student Abilities *68*
Carrie Discussion *71*

LINDA: HELPING STUDENTS DEVELOP SELF-EFFICACY THROUGH ENGAGEMENT
Snapshot of Linda's Classroom
Linda's Question
Linda's Windows
Linda Discussion
VERA: "WHAT YOU WANT TO KNOW IS WHAT DOES A CHILD KNOW"
Snapshot of Vera's classroom
Vera's Questions
Vera's Windows
Vera's Documentation
Vera Discussion
MICHELLE: "I NEED TO TEACH THE WHOLE CHILD"
Snapshot of the classroom
Michelle's Questions
Michelle's Windows
Michelle's Documentation
Michelle Discussion
COMPARISON ACROSS THE FOUR TEACHERS' PRACTICES

CHAPTER 4
STORIES OF EARLY PRACTICE: EVIDENCE OF CHANGE

FEATURES OF EARLY PRACTICE
Organization of Instruction
Student Work
Opportunities for Student Expression
MIXED FEELINGS
Dissatisfaction
Teacher Role
Yearning
DEFINING THE CHANGE: WHAT DID THESE TEACHERS LEARN?

PART II: HOW DO TEACHERS LEARN TO CHANGE THEIR PRACTICE TO ATTEND TO THEIR STUDENTS IN NEW WAYS?

CHAPTER 5
CURRENT PERSPECTIVES ON EFFECTIVE PROFESSIONAL DEVELOPMENT

PROFESSIONAL DEVELOPMENT AS "EDUCATIVE EXPERIENCE"
CURRENT PERSPECTIVES ON PROFESSIONAL DEVELOPMENT
The "Consensus Model"
Dangers
PROMISING RESEARCH DEVELOPMENTS
Focus on Content
Stories of Individual Teachers' Learning
CONCLUSION AND PLAN FOR PART II

CHAPTER 6
CARRIE AND LINDA: DEVELOPING A SECOND SET OF EYES 186

CARRIE: THE EARLY YEARS 187
Introduction *187*
Memories of Schooling *188*
Early Learning Opportunities *190*
Discussion *196*
LINDA: THE EARLY YEARS 197
Internal Conditions: Patience and Passion *197*
Early Learning: The Power of Inertia, Even Though Something's Gnawing at Me *200*
Discussion *203*
TEACHER LEARNING GROUP: A CRITICAL EXPERIENCE FOR CARRIE AND LINDA 205
The Journal Sharing Incident *207*
Critical for Carrie: I Changed in One Weekend *210*
Critical for Linda: Overcoming Concerns *218*
RECENT PROFESSIONAL DEVELOPMENT EXPERIENCES 228
Carrie: In Search of New Ideas *228*
Linda: Faith in Herself and Empowered Experimentation *231*
WHAT CAN WE LEARN FROM CARRIE AND LINDA'S STORIES? 234

CHAPTER 7
VERA AND MICHELLE: TWO BRICOLEURS 240

VERA'S NARRATIVE: WHAT ARE MY STUDENTS READY FOR? 241
Images of Teaching *242*
Michigan Health Model and Cooperative Learning *244*
Math Their Way *248*
Teaching Kindergarten *252*
The Rest of the Story *259*
Discussion *260*
MICHELLE'S NARRATIVE: LISTENING TO KIDS' VOICES AND LETTING THEM DO THE WORK OF LEARNING 266
Introduction *266*
Images of Teaching *267*
Early Learning Experiences *269*
Developmentally Appropriate Kindergarten *270*
The "Growing Year": Moving to Multi-age *276*
Graduate Work *282*
The Rest of the Story *287*
Discussion *289*
WHAT CAN WE LEARN FROM VERA AND MICHELLE'S STORIES? 291

CHAPTER 8
CONCLUSIONS 294

ATTENTION TO STUDENTS AS A LENS FOR STUDYING TEACHING PRACTICE 294

Practices that Facilitate Teachers' Attention to Students *295*
Relationship Between Teachers' Orientations and Teaching Practices *297*
ATTENTION TO STUDENTS AS A LENS FOR STUDYING TEACHER LEARNING 301
Dissatisfaction with Existing Practice *302*
Influx of New Ideas *304*
Confidence to Experiment *306*
Meaningful Collegial Interaction *308*
Alignment with Orientations Toward Attending to Students *311*
Part of a Constellation *312*
FURTHER QUESTIONS 314
Descriptive Questions *314*
Normative Questions *316*
Concluding Thoughts *317*

APPENDIX A
METHODOLOGY 319

PARTICIPANT SELECTION 320
PARTICIPANTS 323
DATA COLLECTION 328
Observation *332*
Interviews *334*
ANALYSIS 337
METHODOLOGICAL ISSUES 341
Self-awareness *342*
Memory *343*
Audience *344*
Life History: The Best Alternative *346*

REFERENCES 349

LIST OF TABLES

TABLE 1: QUESTIONS, WINDOWS AND EVIDENCE GATHERED BY TEACHERS WHO PAY ATTENTION TO COMPATIBILITY BETWEEN LEARNERS AND CONTEXTS 35

TABLE 2: QUESTIONS, WINDOWS AND EVIDENCE GATHERED BY TEACHERS WHO PAY ATTENTION TO STUDENT UNDERSTANDING 41

TABLE 3: QUESTIONS, WINDOWS AND EVIDENCE GATHERED BY TEACHERS WHO PAY ATTENTION TO STUDENT INTERESTS 48

TABLE 4: QUESTIONS, WINDOWS AND EVIDENCE GATHERED BY THE FOUR TEACHERS..122

TABLE 5: TEACHER DEVELOPMENT AND PROFESSIONAL LEARNING OPPORTUNITIES.....166

TABLE 6: CONNECTION BETWEEN TEACHERS' QUESTIONS, WINDOWS AND USE OF INFORMATION 298

TABLE 7: PROMISING PRACTICES FOR TEACHER DEVELOPMENT AND PROFESSIONAL LEARNING. ADAPTED FROM LIEBERMAN (1996).....322

TABLE 8: CHARACTERISTICS OF TEACHER PARTICIPANTS 323

LIST OF FIGURES

FIGURE 1: THE RECURSIVE CYCLE OF ATTENTION 53

FIGURE 2: CARRIE'S CONSTELLATION 216

FIGURE 3: LINDA'S CONSTELLATION 226

FIGURE 4: VERA'S CONSTELLATION 262

FIGURE 5: MICHELLE'S CONSTELLATION 290

FIGURE 6: CYCLE OF ATTENTION TO STUDENTS 300

PART I

ATTENTION TO STUDENTS

Chapter 1

Introduction

Origin of the Study

This dissertation began as a study of the experiences which promote and support teacher change. As a beginning high school math teacher, I was frustrated with my students' lack of success. In spite of my best efforts, many students struggled to understand what I was teaching. Even when students scored well on tests, their learning was short-lived. When it came time to prepare for the final exams, students watched with blank stares as I reviewed the material.

I struggled to figure out how to improve my teaching to help my students learn better. I wracked my brain to devise new ways to present the material, to keep my students engaged, and to offer activities that would help students understand the math. Occasionally, I spoke with fellow math teachers. Usually, we talked about the topics we had already covered, the amount of time we should spend on upcoming topics, and our timelines for finishing the syllabus. I recall few conversations, certainly none of any great length, about how any of us taught or whether our methods were successful.

I began to take graduate education courses. One course, offered by an experienced teacher, was about strategies for teaching math. In the course I learned a few techniques for teaching specific math topics, but I had difficulty figuring out how to use these techniques to teach the curriculum I had been given. My other graduate courses

were about generic topics such as multicultural education, issues and trends in education, and curriculum design. Again, I had a hard time translating these techniques into practice.

One afternoon, I stayed after school talking to the English teacher next door. We shared frustrations about our teaching and stories about our students. We decided to have ongoing conversations about teaching, and we invited other teachers to join us. Other teachers expressed interest, but due to time pressures and teachers' other commitments, the discussion group never got off the ground. Even so, I became convinced that conversations with fellow teachers could be a powerful tool for improving my own teaching. With more time and opportunity, I reasoned, our conversations would have helped me improve my teaching. I came to graduate school to learn how schools could provide opportunities for some teachers to work and learn together.

As a graduate student, I read literature about professional development and studied arguments about the value of collaborative work among teachers. At the same time, my wife was teaching fifth grade in a school where teachers were expected to work together in teams of three. Watching my wife's struggles and listening to her stories of other ill-formed teams, I wondered about the negative sides of collaboration and the importance of allowing teachers to work alone. Although there are some research articles which acknowledge these challenges (Hargreaves, 1993; Huberman, 1993; Little, 1990), most of the literature focuses on the widespread agreement that collaboration must be valued and promoted in schools. This dissertation began with a desire to understand how experiences for working together and alone were combined in the career-long professional development of teachers who had successfully made changes in their

practice. I wanted to gather teachers' stories of their career-long professional development to figure out which experiences were most memorable and how they continued to affect their practices long after they were finished.

Importance of Paying Attention to Students

I did not want to study every possible kind of teacher change. I needed to decide what kinds of changes were "significant and worthwhile" (Richardson, 1990). I decided to focus on teaching practices that enabled teachers to "pay attention" to their students. This choice was rooted in my teaching experiences and was also featured prominently in classical progressive thinking (Dewey, 1902/1990) as well as recent standards documents (National Council for Teachers of English, 1996; National Council for Teachers of Mathematics, 1991).

During my first year of teaching, as an eighth grade teacher, I learned about the importance of attending to students. I remember one student in particular, Edmond. Edmond was larger and more clumsy than the other students in my class, and while I was teaching, I often saw his back with his head bobbing up and down as he chatted with his fellow students. When I corrected his papers, he rarely got more than half the answers correct. Frustrated with his inattentiveness and disappointed with his achievement, I encouraged him to study harder. I renewed my efforts to stop his talking during class. I was sure that if he just worked harder, he would succeed. Time passed, and his work did not improve.

In November, I examined his previous school records and discovered that he had left a special education classroom to come to our school. The secretary who graded his placement test had mistakenly marked every answer correct because she did not have an

answer key. At the first parent conference, his father was intoxicated when he arrived. I realized that Edmond's obstacles were larger than mere lack of effort. I tutored him individually once a week after school, and he barely managed to graduate from eighth grade.

Concerned about Edmond's achievement, I had learned some things about Edmond. I looked at old school records and school entrance exams. Through the scheduled meeting with his father during conferences, I gained some insight into Edmond's home life. That information helped me renew my efforts to help him succeed, but there were many things I might have learned about Edmond that I did not. I never gained further insight into the nature of his learning difficulties or explored different methods for teaching him. I learned little about topics that interested or excited Edmond. Learning something about Edmond and establishing a personal bond with him improved Edmond's experience in my class, but I still wonder whether I might have helped him more if I had learned some of these things.

The idea that teachers need to pay attention to their students is a prevalent feature of traditional progressive educational philosophy as well as current educational reforms. In The Child and the Curriculum, Dewey (1902/1990) advocated the importance of teachers paying attention to their students:

> What we need is something which will enable us to interpret, to appraise, the elements in the child's present puttings forth and fallings away, his exhibitions of power and weakness, in the light of some larger growth-process in which they have their place. (p. 192)

Dewey argued that teachers learn to learn about their students and to interpret what they learn so that they can promote each student's development in a "larger growth-process."

This argument has been supported by recent research literature and standards documents describing current views of good teaching. The National Board for Professional Teaching Standards, whose standards represent "a widely shared consensus about state-of-the-art practice" (National Commission on Teaching and America's Future, 1996), include "commitment to students and their learning" as the first standard. The authors claim that teachers must "adjust their practice based on students' interests, abilities, skills, and backgrounds. They understand how students develop and learn" (p. 75). The standards for the English language arts (National Council of Teachers of English, 1996) are founded on the principle that teachers must place learners at the center and to provide "ways in which students participate in their own learning, acquire knowledge, shape experience, and respond to their own particular needs and goals" (pp. 12-13). In the lead article of Educational Leadership devoted to the theme of individualizing instruction, Theodore Sizer (1999) argues that "I cannot teach students well if I do not know them well" (p. 9).

When I observed and interviewed the four teachers who participated in this dissertation, I expected to identify a common set of practices which allowed the teachers opportunities to pay attention to their students. I observed each teacher once in her classroom and had a conversation with her about what I had observed that day as well as other practices that I had not observed. My goal was to identify practices that were the outcome of meaningful professional development experiences. Once I identified the practices, I expected to focus my primary attention on the learning that had helped the teachers develop those practices.

However, while I wrote about the teachers' practices and continued to read literature about teachers who pay attention to students, I began to realize that paying attention to students is not a straightforward task. The teaching practice of each participant and the teaching practices described in the literature were different.

I began to realize that teachers make decisions about how to gather information about individual students, especially when that information is locked inside children's heads. Should teachers gather information about students' home lives and family situations? Should they learn about the communities where their students live, and how students are influenced by the culture they grow up in? Should teachers instead be attentive to students' emotional responses to day-to-day classroom events? What kinds of written tasks should they assign? What kinds of opportunities should teachers provide for students to express their thinking--in whole class discussions, in conversations with one another, or in private conversations? These questions together make up the first research question of this study:

> **What teaching practices enable elementary language arts teachers to pay attention to their students?**

Even though the four teachers taught in ways that promoted their ability to attend to their students, I began to realize that they had different expectations about how information about students helped them teach. I began to ask a whole new set of questions: When and how often did teachers listen to what students say? What are they listening for? Are they trying to understand what students are able to do, what they are thinking about, or what interests them? Do teachers use their observations of students to make inferences about what they know and are able to do, or do they pay attention to their emotional

responses to classroom events? What do teachers try to learn about students by looking at their written products? Obviously, teachers cannot pay attention to all of these things for all the students they teach. For elementary teachers working with less than twenty students each day for the entire year, this is a monumental, if not impossible, charge. For secondary teachers the task would be even more mind-boggling.

If teachers make choices about what to pay attention to, they must also make choices about how to use the information available to them to answer the questions they pose. When the questions are about what is inside students' heads, Ball (1997) argues that the task is very difficult:

> Understanding better what makes knowing students--a central task of teaching--so complex creates an opportunity. It can seem daunting to think that the very thing for which teachers are most centrally responsible is so fundamentally impossible. Yet, its difficulty is also at the heart of what can make teaching intellectually challenging and engaging work, and what makes teaching so professionally demanding. (p. 812)

Students may not always be able to express what they really think, or they may be hesitant to share everything they know for a variety of reasons. Students may even choose to say things they do not believe or do things that do not reflect their true abilities. How do teachers manage the amount of information they could collect about students, and how do they make sense of the mass of data they collect?

By the time I posed these new questions, I had already gathered my data and was preparing to write. Although my data did not allow me to answer these questions completely, I was able to see a connection between what teachers felt it was important to know about their students, what teaching practices they engaged in, and how they

interpreted the information that they gathered about individual students. This connection became the focus for the first half of the dissertation.

Using the remainder of the data, I still faced my original questions about the kinds of learning experiences that promote teachers' changed practices. If it is important for teachers to develop practices that allow them to attend to students, how do teachers learn to develop these practices? This question became more complicated when I realized that there are different teaching practices that facilitate teachers' attention to students. In the second half of the dissertation, I take up the issue of teacher learning with the following question:

> **What kinds of professional development opportunities, broadly construed, support teachers' abilities to change their practices in ways that facilitate their attention to students, and how are these professional development opportunities incorporated into the lives of teachers?**

Recent literature suggests that the research community is developing an unprecedented consensus regarding effective forms of professional development. One recommendation that has appeared in every recent statement about professional development is that teachers should have greater opportunities to talk with one another and collaborate in their work. While this recommendation is appealing, I argue that the empirical warrants for this claim are not solid enough to justify the fervor with which the educational community has embraced it.

I originally intended to collect the teachers' stories of memorable and influential professional development experiences and examine the features of those experiences. I wanted to learn whether most of those experiences were collective, involving other teachers. If there were instances of individualistic learning, I wanted to find out how

those experiences helped the teachers change their teaching. There were two problems with this plan. First, when the teachers told stories of their learning experiences, it was difficult to tell whether the experiences were collective or individual. For example, is going to a conference a collective or individual experience? There are many people at a conference, but the teacher goes to the events alone and uses what she learned when she goes back to her school without any of the other conference participants. If she goes to the conference with another teacher at her school, and they talk about the events of the conference in their room that night, is the experience individual or collective? When a teacher reads a book, is that an individual experience? What if she shares what she learns in that book with a group of other people? Many of the experiences these four teachers shared involved colleagues in some way, but I decided not to categorize experiences as collective or individual.

Second, instead of being able to isolate instances of powerful professional development, the teachers told stories of intertwined experiences. It was impossible to understand the nature of any individual experience without understanding how the experience had been influenced by other previous and simultaneous experiences. In the second half of the dissertation, I describe and analyze the experiences that the teachers nominated as most influential in their career-long professional development. I tried to understand how the experiences were significant in themselves as well as how they connected to and were influenced by other professional development and personal experiences.

Narrative-based Biographical Study of Four Teachers' Career-long Development

> The presence or absence of mechanisms to address the ongoing problem of meaning—at the beginning and as people try out ideas—is crucial for success,

> because it is at the individual level that change does or does not occur. (Fullan, 1991, p. 45)

Researchers must ask, as Fullan suggests, how learning experiences support individual teachers' learning in ways that lead to changes in practice, especially more profound changes involved in paying increased attention to student thinking and understanding. Such research should adopt a questioning stance toward the possibilities of collective forms of professional development, and seek to answer the question of how group contexts for learning, as well as more solitary experiences, stimulate and/or support teacher change. This study addressed the questions of how teachers pay attention to their students and how they develop their abilities to do so by examining teachers' own stories of change across their careers.

I elicited stories and learned about the practices of four teachers who changed their teaching across their careers to attend to their students in new ways. I focused on three things: a) the different ways that each of these teachers attend to their students; b) the kinds of changes they have made throughout their career to facilitate their attentiveness; and c) the nature of experiences that contributed to those changes.

Using observations and biographical interviews, I learned about teachers' current teaching practices and how those practices differed from their previous practices. I sought to understand teachers' individual predispositions about paying attention to students that may have resulted from childhood experiences. Finally, I asked which experiences--collective and individual, formal and informal, professional and personal--helped promote their learning, and how the experiences functioned in the context of their careers.

The teachers were chosen through nominations by educational researchers and teacher educators who were asked to identify teachers they had worked with or met who had established practices that enable them to attend to their students. Each of the four teachers has been a pioneer in her own district, as she struggled to teach in ways that differed dramatically from modal practices of other teachers. The journey of changing her practice has required each teacher to overcome obstacles and to face hostility. Even so, their journeys have not always been painful. All four teachers feel fortunate for the experiences they have had, and they have all been resourceful in learning as much as possible from the opportunities that were available to them.

The four teachers were very close in age, and they all began teaching between 1973 and 1977. None of them entered teaching with an incredible passion to teach; all described teaching as a natural fit for them which was far superior to other options they knew of for women at the time, e.g. nurse, secretary, or stewardess. All four teachers spent a large part of their careers teaching early elementary students, and all have stayed in the same small, non-urban districts for their entire careers. Below, I introduce each of the teachers briefly.

Carrie

Carrie has been an elementary teacher at Dale Elementary for her entire teaching career of twenty-seven years. Dale Elementary is a small elementary school mostly white students located in a middle-class suburban community on the outskirts of a mid-sized Midwestern city. The school is set in a quiet residential neighborhood and is surrounded by a large yard and baseball fields. The hallways of the school are carpeted, and students walk through the hall in semi-straight lines to get to the playground or

cafeteria. Even though the community is mostly middle class, there are some poor students in the school. Over the years, Carrie says that there has been an increase in the number of disruptive students coming into her classroom, which she blames partly on the number of children coming from single parent homes.

Carrie began her career in Dale as a fourth grade teacher in a different elementary school. She moved to Dale Elementary, where she began teaching first grade during her second year of teaching. In 1995, she began teaching second grade. Currently, she teaches in a second grade room which is connected to a first grade room taught by Linda, another participant in the study.

Carrie and Linda began teaching at the same time. Within three years of when they began, they started talking together about their teaching, and they have worked together closely ever since. They have participated in nearly identical sets of professional development experiences throughout their careers, including the Teacher Learning Group (TLG), a group of teachers and researchers who met together for three years during the mid-1980's. Both Carrie and Linda considered their participation in the TLG to be the most important professional development opportunity of their careers.

While she was participating in the TLG, Carrie moved away from the use of basal readers and began to incorporate creative writing into her classroom. The changes which Carrie remembered most vividly were those which helped her create classroom conditions that enabled her to be more responsive to student differences, and changes which influenced her relationships with her students.

Carrie is energetic and enthusiastic about her teaching. She loves to talk about her teaching, and came to each interview with new revelations about her past

experiences. She spoke animatedly about changes she has made over the years and is still planning to make over the next five years.

Linda

Linda is Carrie's partner in the multi-age classroom. She began teaching third grade in 1973, and she has taught at Dale Elementary School for her entire teaching career of twenty-seven years. After teaching third grade for two years, she switched to first grade, which she has taught ever since.

Like Carrie, Linda attributes her involvement in the TLG to many of the changes she has made recently. Since her participation in the TLG, Linda has been busy working on new teaching ideas. Carrie and Linda teach in a professional development school (Holmes Group, 1990), which has close involvement with university researchers. Since their participation in the TLG, Linda and Carrie have initiated and led a series of study groups targeted at different teaching issues, e.g. integrating curriculum, increasing parental involvement, devising new ways to assess student work.

The features of Carrie and Linda's classrooms are very similar; Linda stopped using the basal series and instituted creative writing at the same time as Carrie. Recently, Carrie and Linda went to a district-sponsored workshop to learn about New Zealand literacy practices (Fountas & Pinnell, 1996) which they are both implementing in their classroom. Linda also looks for changes which will affect the environment of her classroom. In particular, she tries to provide opportunities for students to experience success with the subject matter so they will feel greater self-esteem and become more self-motivated learners.

Linda is quiet and thoughtful. During our interviews, she considered every question carefully before offering her answers. She spoke strongly but with great conviction.

Vera

Vera is an eighth grade language arts teacher with twenty-one years of teaching experience in the Flat Creek school district. Flat Creek is a rural/suburban community of approximately 10,000, located twenty miles outside the nearest city. Flat Creek has a small town center, but students also commute to school from farms, nearby subdivisions, and newly constructed houses built on secluded country lots. Some students travel as much as one hour by bus to get to school. Students come from a wide range of socioeconomic levels. Most of the students at Flat Creek Middle School are white, although there has been a slight increase recently of students of color.

Vera currently teaches eighth grade language arts at the Flat Creek Middle School, as part of an interdisciplinary team. Each day, Vera teaches five sections of approximately twenty-five students apiece. Students at the middle school are grouped by ability, and the highest academic performers are placed on the High-Potential Youth (HPY) team. Vera works with the team that is *not* labeled as High-Potential Youth, and she feels that her students are treated at the school as the "have-nots."

Vera finished her undergraduate degree at the same time as Carrie and Linda, and she is the same age as they are. However, she began teaching third grade in 1977, five years later than they did, when her first child went to school. She taught third grade for three years before moving to kindergarten. She taught kindergarten for five years and

then switched to fifth grade for five years. Since then, she has taught sixth and eighth graders.

Writer's workshop is a feature of her classroom that Vera has worked hard to develop. The writer's workshop in Vera's classroom has gained her recognition in Flat Creek as an outstanding language arts teacher.

Unlike Carrie and Linda, Vera has made many of the changes in her classroom as a result of workshops she has attended or books she has read. Even though she spoke of the support of other teachers and principals at different times in her career, the decision to try something new in her classroom came from a combination of an internal decision to do something new along with some specific practical ideas she heard about through a workshop or a book. In this respect, Vera's learning has been more individualistic than Carrie or Linda's.

Vera talked animatedly and enthusiastically about her classroom, and this energy was also apparent in her teaching. In addition, she appeared to be very thoughtful about her teaching. During each interview, she eagerly shared thoughts about her own classroom and about teaching in general. She anticipated my questions and often posed questions to herself that she proceeded to answer. Although she seemed confident in her teaching, she also acknowledged puzzles and frustrations she was facing--some which seemed to stem from her newness working with eighth graders, and others which reflect genuine teaching dilemmas.

Michelle

Michelle has been teaching for twenty-five years in Riley, a small rural community. Riley Elementary, where she teaches, is one of two elementary schools in

town. The school is near a grocery store and a gas station located adjacent to an exit on the interstate highway. The nearest city is over twenty miles away. Almost all of the students at Riley Elementary are white, and they come from a range of socioeconomic backgrounds.

Michelle began teaching kindergarten in 1975, when she realized that her intended career of working at a day care center would only pay minimum wage. With a degree in child development, she had also been certified to teach, so she began teaching kindergarten at Riley Elementary. After the first year she was asked by her principal to switch to first grade, which she taught for eleven years before switching to second grade. This switch cost her seniority in the district, so the following year she was asked to take a first and second grade split classroom to accommodate a bubble in the student population. The following year she was asked to take a second and third grade split. Rather than continuing upward in grades, she opted to take a kindergarten position when it became available the following year. She taught kindergarten for five years, and since 1994 she has been the sole teacher in a first and second grade multi-age classroom.

An important feature of Michelle's teaching practice is her efforts to listen to and scaffold students' talk about books. She has also incorporated more opportunities for her students to write original text-sometimes around topics of their own choosing, sometimes around particular prompts. Reading and writing activities are part of thematic units of study built around science or social studies topics.

Michelle's most profound period of learning has been in the last five years of her career. During this time, she established a close partnership with one other teacher in her school. She went to graduate school to get a master's degree in literacy teaching. Her

graduate studies launched her into a series of connections with professional organizations outside her school, and she began to draw from available resources outside her school. Although the partnership with the other teacher was important, Michelle's greatest learning came from external sources, not from within her own school.

Dissertation Outline

The dissertation is divided into two parts. In the first part, I take up the question of where to look for attention to students in teachers' practice. The second part addresses the question of what kinds of experiences have helped the teachers learn to develop new practices in ways that reflect new kinds of attention to their students.

In Chapter 2, I situate this study within a wide array of literature. Drawing on literature about social foundations of teaching, stories of teaching, and other statements about good teaching, I examine what can be learned from the research literature about how teachers pay attention to students. I illustrate the differences in what teachers pay attention to about students, how these differences appear to influence teachers' practices, and how teachers collect different kinds of information about their students.

In Chapter 3, I use the conceptual framework and analytic questions from Chapter 2 to examine how the different aspects of attentiveness function in the four teacher participants' classrooms. Drawing from observation and interview data, I offer images of the four teachers' current practices and the thinking behind their practices to highlight features of their teaching which demonstrate attention to their students.

In Chapter 4, drawing on the teachers own accounts and analysis of typical basal reading materials from the time they began teaching, I contrast the four teachers' current practices with a reconstruction of the teachers' earliest teaching. Examining differences

between the teachers' current teaching and their earliest practices, I describe the nature of the changes that each teacher has made across her career.

Given these "outcomes" of the teachers' career-long professional development, in Part II of the dissertation, I take up the question of what kinds of formal and informal experiences fostered the teachers' changes. Chapter 5 draws on literature about professional development which describe current conceptions about how to promote "significant and worthwhile change" (Richardson, 1990) in teaching practice. This chapter outlines a set of ideas within which the four teachers' stories of their careers can be situated.

In Chapters 5 and 6, I construct the career histories of the four participants focusing on the "critical incidents"--incidents that left strong impressions on the teachers and which stimulated sustained changes in their teaching practices. In each teachers' history, the combination of formal and informal experiences, contextual factors, and personal factors created "constellations" of experiences that combined to stimulate and support these changes. Chapter 5 tells the histories of Carrie and Linda, two teachers whose experiences map more closely onto currently popular ideas about effective professional development. Chapter 6 tells the histories of Vera and Michelle, whose stories offer contrasting examples. In the discussion of each chapter, I examine the distinguishing features and recurring patterns in the teachers' histories, and I connect their stories to the findings from Part I.

In Chapter 7, I summarize the conclusions of the study and offer possible implications for professional developers, for principals and other school administrators,

and for teacher educators. I describe the limitations of the study and suggest directions for future inquiry.

The methods of the study are described in a methodological appendix, which details participant selection methods and criteria, theories underlying the methods of narrative data collection and analysis. I also describe some of the methodological considerations necessary for conducting narrative-based biographical research.

Chapter 2

Attention to Students as an Agenda for Teacher Learning

Attention to Students: A Problem of Meaning

> As every teacher knows, children have an inner and an outer attention. The inner attention is the giving of the mind without reserve or qualification to the subject in hand. It is the first-hand and personal play of mental powers. As such, it is a fundamental condition of mental growth. To be able to keep track of this mental play, to recognize the signs of its presence or absence, to know how it is initiated and maintained, how to test it by results attained, and to test *apparent* results by it, is the supreme mark and criterion of a teacher. It means insight into soul-action, ability to discriminate the genuine from the sham, and capacity to further one and discourage the other.
>
> --John Dewey, Relation of Theory to Practice, 1904

The notion that teachers should attend to their students is neither revolutionary nor new. At the turn of the century, Dewey argued that good teachers need ways to understand students' "mental play," i.e. what is going on inside their students' heads. Dewey claimed that teachers must use external signs to "test" genuine engagement, but attention to external signs is not enough. Dewey called for teachers to do three things: a) distinguish between true inner attention and signs of outer attention which may or may not indicate that inner attention is present; b) use available signs to "keep track of [students'] mental play, recognizing that results may be only "apparent" and not genuine; and c) develop ways to "initiate and maintain" students' ongoing active engagement with the material. Dewey imbued these ideas with an almost religious sense as he argued that teachers need insight into their students' "soul-action."

Though Dewey's actual words and near-religious sentiment have not been prominently featured in current educational rhetoric, the underlying ideas have. Notions of constructivist teaching call for teachers to "help students discover what [their] strengths and interests are" (Falk, 1996, p. 27). Language about attending to students has emerged in current standards documents as well. The National Board for Professional Teaching Standards states that "Teachers adjust their practice based on students' interests, abilities, skills, and backgrounds. They understand how students develop and learn" (National Board for Professional Teaching Standards, 1994). Similar language appears in standards for subject-specific teaching (National Council of Teachers of English, 1996; National Council of Teachers of Mathematics, 1991). In educational literature there have been widespread calls for teachers to be attentive to their students, especially their students' understanding (Ball, 1997; Ball & Wilson, 1996; Buchmann, 1993; Cohen, McLaughlin & Talbert, 1993; Heaton & Lampert, 1993; Lampert, 1985; Rhine, 1998; Sizer, 1999). Arguments for smaller class sizes and lower teacher-student ratios are founded on the argument that teachers can gain more knowledge about their students when they work with fewer of them. Increased knowledge not only leads to teachers' abilities to individualize instruction (Sizer, 1999), but also to the creation and maintenance of "a caring, family-like atmosphere" (Zahorik, 1999, pp. 50-1). Calls for teachers to be more attentive to their students come under many names--student-centered teaching, progressive education, focusing on students, loving students as learners, shifting the emphasis from teaching to learning, developmentally appropriate instruction. Collectively, these words become mantras that the educational community recite over and over until they become embedded in collective thought.

On the surface, convincing prospective and practicing teachers of the value of attending to their students is not a challenging task. Intuitively, it makes sense. To teach something *to someone*, teachers should know not only the subject being taught, but also about the learners being taught. Many undergraduates in teacher preparation programs express a desire to develop close relationships with students, to go beyond a focus on students' academic ability, and to meet a variety of students' learning styles by individualizing instruction (Ball, 1988).

At the same time, there is a convincing body of research which describes many prospective teachers' underlying beliefs in teaching as transmission of established, accepted knowledge from teacher to student (Bird et al., 1992; McDiarmid, 1990). In this view, students are seen, not as thinking individuals with prior understandings and beliefs about subject matter, but as *tabulae rasae* upon whom knowledge is imprinted. These authors also highlight the intractability of this belief. They argue that the transmission view of teaching is shaped during people's experiences as students--what Lortie (1975) calls the "apprenticeship of observation"--and reinforced by the entrenchment of this view in Western notions of teaching and learning (Cohen, 1988). If teaching is a transmission of information, teachers' attention to students may be limited to an assessment of whether students have received and internalized the expected curriculum. Teachers who believe in a transmission view of teaching may never wonder how students understand and make sense of what they are learning. This raises a question about what information teachers think they need to have about their students.

The idea of "attending to students" may be, like many educational ideas, a popular idea that many people embrace without sharing the same idea of what it means.

Though not revolutionary, how different teachers think about attending to students may reach "into the heart of the practice" (Hansen, 1999) to reveal individual teachers' aims of teaching and practices they develop to accomplish their aims. The danger with terms that have widespread appeal but widely different interpretations is that people may come to believe that everyone else's understanding of the idea is the same as theirs. When people use phrases like "attending to students" to describe a feature of their teaching, they may assume mistakenly that others share the same understanding. When the educational community begins to believe that certain language has an objective referent in the world, we may stop questioning our use of the language and miss the possibilities for informed discussion and potential disagreement. What does it mean to "attend"?

The Oxford English Dictionary offers the following definitions for "attend":

I. To direct the ears, mind, energies to anything.
II. To watch over, wait upon, with service, accompany as servant, go with, be present at.
III. To wait for, await, expect. (p. 765)

These definitions portray attending as an act of careful observation that is at once active *and* passive: active listening and passive watching. When teachers pay attention to students, they must devote mental energy to the task of attending as they decide which aspects of students to notice. Teachers must also be passive, as they wait patiently for students to volunteer useful information about themselves. Although two teachers may both attempt to pay attention to their students, what they actually notice and how they make sense of what they notice may differ considerably.

These definitions provide a starting point for what it means to "attend" in general, but what does it mean specifically to "attend" to students? David Hansen (1999) directly

addresses this question. Starting from Rousseau's (1762/1979) call to "Begin, then, by studying your pupils better" (p. 34), and Kant's (1949) moral imperative to treat others as ends in themselves rather than as the means to some end, Hansen posits two types of attentiveness to students: intellectual and moral. Intellectual attentiveness is "getting as close to students' responses to subject matter as time and opportunity afford" (p. 175). Teachers need to know students' understandings and misunderstandings as well as their "strengths, interests, and capacities" about the subject. In addition, he says, intellectual attentiveness "involves teachers' being alert to aspects of student conduct that influence students' engagement with subject matter" (p. 175). Moral attentiveness, Hansen says, "has two components: alertness to the development of their students' character, and awareness of their own regard for and treatment of students" (p. 180). Hansen argues that teachers need to be attentive in *both* ways, but he does not describe how teachers can manage both types of attentiveness.

Hansen's distinctions begin to dissect the complicated and problematic notion of teachers' attentiveness to students. His distinctions suggest that teachers may raise different kinds of questions about their students, depending on whether they are more inclined toward intellectual or moral attentiveness. However, Hansen does not provide enough specificity to examine how different teaching practices or views of teaching represent or enable different sorts of "attention to students."

I adopt the perspective that moral and intellectual issues are inextricably intertwined. Ball and Wilson (1996) argue that "Teachers do not separate their knowledge from the moral aspects of their work. The two are interwoven, necessarily inseparable in the moment-to-moment challenges of teaching" (Ball & Wilson, 1996, p.

188). Any consideration of moral attentiveness in teaching inevitably involves questions about intellectual attentiveness, and vice versa. Since I am primarily interested in how teachers use knowledge about their students to contribute to their teaching of academic content, I focus my energy on understanding what Hansen calls "intellectual attentiveness."

In The Child and the Curriculum, John Dewey (1902/1990) offers an idea of what intellectual attentiveness might look like. He argues that teachers must

> . . . abandon the notion of subject-matter as something fixed and ready-made in itself, outside the child's experience; cease thinking of the child's experience as also something hard and fast; see it as something fluent, embryonic, vital; and we realize that the child and the curriculum are simply two limits which define a single process. Just as two points define a straight line, so the present standpoint of the child and the facts and truths of studies define instruction. (p. 189)

From Dewey's perspective, children's "experiences," i.e. their current understandings, misunderstandings, interests and observations of their world, contain the seeds of important curricular concepts. For Dewey, the primary task of teaching is to arrange experiences for children which tie into their natural desires, but carry them forward to their logical conclusion in the curriculum. Teachers must see the end in the beginning, the seeds of organized subject matter knowledge in the experiences and attitudes of children. A key purpose of intellectual attentiveness is devising ways to use knowledge of specific children to support the teaching of subject matter. In the following sections, I examine three perspectives on how to accomplish this.

Intellectual Attention

In this study, I have sought a deeper understanding of Dewey's claims that teachers must "keep track of [students'] mental play" and have "insight into [their] soul-

action." I have seen the challenges that teachers and teacher educators face in trying to put these ideas into practice. These challenges have led me to ask several questions:

- What questions do teachers ask about their students? In other words, what are individual teachers' ideas about what it means to "keep track of mental play" and have "insight into soul-action"?
- What opportunities do teachers create in their practice to gather particular kinds of evidence to answer the questions they pose?
- How do teachers make use of the information they gather about students to inform their teaching?

The first question is about teachers' goals in attending to their students. What questions do they ask about their students? What do they want to know, and how do they think they can gather information that will help them learn these things? The second question is about what teachers *do* to learn about students. What tasks do teachers set for students, and what kinds of products are students creating that give teachers some information about their students? The answer to this question describes what I call the "windows of the practice" which provide opportunities for teachers to learn about particular aspects of their students.[1] Windows allow us to see something on the opposite side of a wall; they simultaneously enable us to see certain things while hiding certain things from view. Similarly, teachers' choices about what they do to learn about their students enable them to learn some things about students while preventing them from learning other things that might be learned if they gathered different information. Finally, the third question is

[1] See Edwards (1993) for a different view. He argues that children's talk or other expressions cannot be interpreted as "windows on children's minds" because it is impossible to know what a child is really thinking. Instead, all such "windows" are situated, really only getting at what children think here, in this context, at this time. This is not incompatible with my perspective. I am not claiming that these windows offer clear, immediate perspectives on children's absolute thinking processes; rather I argue that these windows are simply aspects of practice that provide opportunities to learn something about children that teachers using other forms of practice would be unable to discover.

about how teachers *make use of* the "windows" by making sense of the evidence they gather and using their understanding of students to inform their instruction--either through advance planning or through daily modification of their teaching.

In the remainder of this chapter, I will describe and compare how different authors have described what it means to "attend to students." Since there is no body of literature explicitly devoted to exploring this concept, I have chosen literature by teachers who illustrate different perspectives on attending to students. These stories are drawn from general literature about teaching (Ayers, 1993; Kohl, 1984), subject-specific pedagogy (Ball, 1997; Calkins, 1993; Duckworth, 1996), and early childhood education (Paley, 1986). From this review I identify three main perspectives on how teachers attend to their students: a) attention to compatibility between learners and contexts; b) attention to student understanding; and c) attention to student interests. I summarize each section in a chart using the three framing questions as headings.

Attention to Compatibility between Learners and Contexts

One type of attention to students emphasizes teachers' knowledge of students' emotional issues, cultural contexts, language abilities, or behavioral patterns which may affect their ability to engage with intellectual content in particular classroom settings. This brand of attention has close connections to moral attentiveness, for as teachers pay attention to these things they constantly make decisions about what kind of people they want their students to become and how to foster positive group interaction. Teachers who attend to their students in this way must struggle with questions about the value judgments they implicitly or explicitly impose on students and their families, and ask themselves whether these judgments reinforce or challenge societal norms. This type of

attention is also a form of intellectual attentiveness since its aim is to create more effective environments for children to learn subject matter, especially when they are not succeeding.

For example, Herb Kohl (1984) says:

> The release from ego that the careful observation of students involves on any level of teaching makes it possible to learn their needs and strengths and consequently to help them use these strengths to meet their own needs. (p. 68)

To illustrate, he shares the story of James, a kindergartner who was having serious problems in school, whose teachers were recommending that he be classified as retarded and be put in a special class or institution. Kohl convinced the school authorities to keep James in kindergarten while he tutored him over the next few months. At first, Kohl was worried that he made a mistake; he describes James as "barely verbal, he showed no affection, and wasn't responsive" (p. 69). However, after taking James on a walk to the grocery store, Kohl met two of James' friends on the block. One girl told about how James had fixed her tricycle for her. Another boy told about how James had helped his family when they moved into their new house. In the grocery store, Kohl discovered that James could name many of the items in the store and knew his colors. He began to understand James' unconventional use of language. When he discovered James' intense interest in his father's softball games, he designed a "softball-centered" curriculum to teach the required kindergarten concepts. Kohl attributes his success with James to his stance that "What [James] didn't know was not relevant; one has to find strengths first and then help the learner use these strengths to nurture growth" (p. 71). By observing James naturally in his environment and by suspending judgment, Kohl learned information about James that helped him see beyond the limited verbal ability that made

it difficult for James to succeed in his kindergarten classroom. By observing James' strengths in a different, more compatible environment, Kohl was able to offer more effective learning opportunities that helped James succeed.

Vivian Paley, an early elementary teacher at the University of Chicago Laboratory School, has spent many years learning to observe her students and writing about her learning. She records her students during class discussions and in their dramatic play. She asks herself questions about what her students are passionate about, what they are thinking, how they view the world, and how to teach them better. In the process, she recognizes, occasionally with discomfort, some of her own "hidden attitudes" (Paley, 1986a, 1986b). In "On listening to what the children say" (1986b), she explains how her early teaching looked extremely different:

> In my haste to supply the children with my own bits and pieces of neatly labeled reality, the appearance of a correct answer gave me the surest feeling that I was teaching . . . I still wanted most of all to keep things moving with a minimum of distraction. It did not occur to me that the distractions might be the sounds of children thinking. (p. 122)

A few years later, she was captivated as she watched an adult visitor in her classroom listening carefully as he talked with students about a show-and-tell bag filled with ordinary items. When she remarked on how well he was able to elicit students' ideas and incorporate them into the discussion, he replied that he was using skills he had learned as a Great Books leader and that he was really curious about what the children were thinking. Struggling later to imitate his open-ended questions, she realized that she was still searching for the "correct" answer, and the children knew it.

Paley began to realize that her teaching lacked curiosity about her students' thoughts, and she came to believe that

> The key is curiosity, and it is curiosity, not answers, that we model. As we seek to learn more about a child, we demonstrate the acts of observing, listening, questioning, and wondering. When we are curious about a child's words and our responses to those words, the child feels respected. The child *is* respected. (Paley, 1986b, p.5)

As a result of this stance, her teaching changed dramatically. Rather than expecting or hoping for correct responses from students, Paley tried to listen harder to what her students said. She began to tape record in her classroom so "that I could become my own best witness" (p. 2). She began to see connections between the children's free play, as they created their own stories, and she learned about the subjects they responded to most eagerly. Noticing this connection led her to pay greater attention to these stories.

She began to recognize her students' passions, fears, and joys in their fantasy play and stories. The children's construction and mixing of elements from popular culture, events in their lives, relationships with their peers, and other issues of concern for them were blended together and woven into stories full of powerful clues about who her students were. Through this act of heightened listening and a newfound sense of curiosity, she learned that "the three F's--fantasy, fairness, and friendship" were the most engaging topics for her young students. Simultaneously, she began to realize how much influence she had over children's talk and play.

By paying attention to children in these ways, Paley structured her classroom around children's most pressing concerns. By attending to their fantasy play and their talk surrounding dramatic play, she gained insight into what her students cared about, what worried them, and how they interacted socially. She learned how individual children and groups of children included and excluded particular students, and she discovered why some students had difficulty interjecting themselves into the life of the

classroom. She developed the ability to ask questions and create situations which built on what the students cared about while also helping them develop new social skills. Paley's attention to students helped her create a classroom environment which was safe for all students but which also forced them to face the challenges of dealing with peers.

A different version of attending to compatibility between learners and contexts is described by Heath (1983), who helped a group of teachers study their students' natural language using ethnographic methods. In her graduate courses, Heath helped teachers discover unconscious biases they held about black and white students. She encouraged teachers to review their past evaluations of students. Frequently, the teachers discovered that many of their evaluations and observations had been around "patterns of responding to and using oral and written language" (p. 269). They began to realize they had often attributed lack of student achievement to lack of ability or motivation, when some of the problems may have been the result of a mismatch between home and school uses of literacy.

This realization led many of the teachers to seek new ways to acknowledge different versions of literacy and create opportunities for those differences to be valued. One group of teachers began to record students' speech and studied the audiotapes to understand structures and uses of their students' language. Using what they learned, the teachers examined standardized tests and discovered that the tests were biased against children, both black and white, who used Southern dialects. Other groups of teachers prepared new tests and curriculum materials using language patterns and drawing on examples which would be more familiar to their students. Heath describes these efforts as "organizing and refining many of the intuition based practices of observation and

teaching [the teachers] had occasionally used with particularly difficult individual students in their past years of teaching" (p. 272). When schools became desegregated, teachers were faced with diverse groups of students who adapted differently to the demands of school. Teachers were forced to spend more time observing individual children and "adapting materials and methods to help bring all children closer to a realistic chance for school success" (p. 273).

An extremely comprehensive and systematic form of student observation for the purpose of reducing the mismatch between learners and contexts is the Descriptive Review Process devised by Patricia Carini and her colleagues at the Prospect Center in Vermont (Carini, 1986), Carroll & Carini, 1991).[2] Carini believes strongly that "those of us deeply concerned with children and childhood learn to be attentive to, and to draw upon, children's strengths (and our own) in order to modify and counteract the adverse influences [of neglecting human potential]" (Carini, 1986, p. 16). The Descriptive Review Process is a formal structure for conversation among a group of teachers to discuss one student, often because that student is not succeeding in class. Drawing on samples of student work, informal notes, and other observations, the student's teacher presents what s/he knows about the student, using the following set of analytic categories:

- Physical presence
- Connections with other children and adults
- Strong preferences and abiding interests
- Modes of thinking and learning (cited in Featherstone, 1998, p. 71)

[2] Carini's methods have been adopted by other long-standing study groups of teachers such as the Teacher's Learning Cooperative in Philadelphia (Kanevsky, 1993, Philadelphia Teachers' Learning Cooperative, 1984).

The leader then summarizes, raises possible patterns, and other participants raise questions and offer comments. The full process takes approximately one and half hours. The goal of the process is not to "fix" the student or find quick teaching solutions, but to understand the particular strengths and learning modes of the child. The new knowledge about the student may convince the teacher to attempt some alternate teaching methods that make use of the student's strengths.

Carini gives the example of Joel, a student who had suffered with meningitis at the age of 2. Many experts predicted that he would have to be placed in special classes. Through the descriptive review process, his kindergarten teacher recognized that Joel often enjoyed "arranging and re-arranging" toys that he used. Recognizing this preference and strength, the teacher tailored Joel's instruction to provide opportunities for engaging in those kinds of tasks, and Joel was able to remain in the regular classroom.

Table 1 summarizes the questions the teachers in this section ask about their students, the kinds of "windows" they make available to learn about their students, and the evidence they gather to answer their questions.

	Questions About Students	Windows of Practice	Evidence Gathered
Kohl	What are children's "energy sources"? What are children able to do? What do they enjoy doing? How can I "tap into children's energy sources or remove impediments to their flow"?	**Tasks:** Observations may occur during any activity, but situations which are less constrained provide more opportunity for learning **Interaction:** Minimal. Teacher	Informal observations of what students are able to do, what they say, what they notice, and what their friends say about them

		observes and asks questions to clarify what the child says.	
Paley	What topics of discussion during free play and class discussions are particularly engaging for students? What ideas and questions surface through the students' conversations?	**Tasks:** Opportunities for free play and expression **Interaction:** Dramatic play staged for other classmates Teacher stays out of children's conversations and listens to their interactions. When necessary, the teacher may ask questions such as "Is [restatement of child's utterance] what you mean?"	Tape recording children's conversations Observations and field notes
Heath	How do students use oral and written language in natural settings? How do students' natural uses of oral and written language compare to expectations in school settings?	**Tasks:** Any naturally occurring conversation among students **Interaction:** Any	Records about students
Carini	What is the child's physical presence? How does the child connect with other children and adults? What are the child's strong preferences and abiding interests? What are the child's modes of thinking and learning?	**Tasks:** Any, but tasks where children have opportunities to make choices and pursue their own interests are most revealing **Interaction:** Any	Observations and informal field notes Samples of children's work

Table 1: Questions, Windows and Evidence Gathered by Teachers Who Pay Attention to Compatibility Between Learners and Contexts

From the table, several common features emerge among this set of teachers. First, they all ask questions that focus on the strengths of their students. What do they care about? What are they good at? How do they prefer to share their ideas? These questions are based on the assumption that problems occur when particular learning contexts do not draw on these strengths and interests.

In each case, the implication for teachers is that they must have this information to understand why some students struggle in particular settings, and where possible, devise ways to correct mismatch between learner and learning context. Even though the "windows of practice" vary significantly, a common feature is that each teacher offers opportunities for students to choose what to do from several alternatives. As Carini (1986) says:

> When the child's environment is rich with human resources and opportunities for children to express their interests and thought, teachers and child caretakers have a unique opportunity to learn about several fundamental human potentialities while these are still in their formative stages. These potentialities can be summarized as follows: a) the human urgency to make sense of the world; b) the human impulse to give form and shape to events and materials; and c) the human predisposition to tell stories and thereby to lend continuity to experience. (Carini, 1986, p. 17)

Opportunities for choice enabled these teachers to learn about students' strengths and interests as they observed and sometimes recorded what students chose to do and what they talked about when their talk was not constrained by typical school tasks. Another reason for providing opportunities for choice was that they hoped to alleviate the mismatch between the school setting and struggling students. These teachers believed that when their students had an opportunity to work on things they were comfortable with

and confident about, they were bound to be more comfortable and to succeed in that setting.

Attention to Student Understanding

A second type of teachers seek to learn how students make sense of a particular subject matter. Deborah Ball (1997) explains how prior work on teacher knowledge emphasized the need for teachers to know about students' prior knowledge and experience to gauge their likely understandings and misconceptions of the subject matter. This knowledge helps teachers plan lessons that will build on current understandings and remedy misconceptions. Ball extends this idea by arguing that teachers must do more than use information about their students to plan lessons:

> In order to know if they are effective, and to make adjustments as they go, teachers must assess how students are making sense and what they are learning. . . .To do this, teachers must do more than *use* knowledge of their students. They must observe, listen, and make conjectures. They must test and revise these conjectural understandings, from moment to moment and week to week. (p. 774)

To illustrate the challenges involved in this, Ball uses examples from her own teaching in a third grade mathematics class. Third-grader Mei offered a conjecture that 6 + (-6) was equal to 9. Unable to understand Mei's reasoning, Ball asked her to demonstrate using a paper model of a skyscraper with floors above and below ground that the class had been using. Mei responded:

> And then I, and then you plus six below zero, and six below zero is below zero, so I add three to that three, because when you go three and three is six, so I went up three more, and one, two, three--there. Oops, went too far. Yeah, and then I got nine, so I think it's nine. (p. 777)

Still confused, Ball and the other students continued to ask Mei questions and encouraged her to represent her ideas in other ways. Ultimately, Ball says, "despite everything I

knew, I could not quite hear in what she was saying a glimmer of anything familiar" (p. 779). After conferring later with her research group, she constructed some plausible explanations, but she was never satisfied that she understood Mei's thinking. Instead, she says:

> Not knowing what Mei was thinking, what I did to understand her is what mattered. I let her continue to try to explain her interpretation. Betsy, a classmate, worked along with her, doing what children will often do, engaging in their peers' ideas even when they did not agree. . . .Together, we assumed that Mei's thinking made sense to her, and that our challenge was to figure out what that sense was. (p. 780)

Ball argues that the importance of her interaction with Mei was that she continued to question Mei even when she could not understand Mei's reasoning. She proceeded with the belief that Mei's idea "made sense to her." Even when Ball moved on to another topic, she continued to wonder what Mei meant, and she discussed it afterwards with her research group. Rather than dismissing Mei's line of thinking because it did not fit with what she knew about adding positive and negative numbers, Ball created many opportunities for Mei to express herself.

Duckworth (1996) shares a similar orientation. Working with practicing teachers, she encourages them to develop Piaget's belief that children's ideas have internal sense and to adopt his technique of using open-ended questions to understand children's understandings, even when they are unconventional or mistaken. One observer of Duckworth's group says, "You aren't teaching teachers *about* Piaget, you're teaching them to *be* Piaget," which Duckworth interprets to mean that she was teaching teachers "to probe children's thinking, to appreciate how they are making sense of a situation, to understand their understanding" (Duckworth, 1996, p. 84).

As part of her seminars, Duckworth invites teachers to share puzzling statements or responses from their students. Teachers watch videos of children engaged in tasks. Duckworth conducts Piagetian clinical interviews with children while seminar participants observe. After each experience, the teachers raise questions and discuss different interpretations of what they see. As the teachers try to understand how the children think, they describe their work as trying to "give reason" to the children, even when their statements do not make immediate sense.

During one session, Duckworth asked the teachers to watch a videotape of one boy unsuccessfully trying to guide another boy behind a screen to reconstruct a block pattern with only verbal instructions. After a first viewing of the tape, most teachers perceived the instruction-giver as very orderly and clear, while they perceived the other boy as "unable to follow directions." One participant disagreed, remarking that the instruction-giver had asked for something to be done with a "green square," of which there were none in the pile. After watching the video a second time, the teachers noticed that the direction-follower substituted a green triangle when the direction-giver mistakenly described an orange square as a green square. The resulting difference in the two patterns made it difficult to follow subsequent directions. The direction-follower tried valiantly but unsuccessfully to reconcile his figure with the directions he was being given. From this new perspective, the teachers saw the direction-follower as trying creatively to make sense of what now appeared to be senseless directions.

In this example, paying attention to a new piece of information (the direction-giver's mistake) enabled the teachers to see how the responses of the direction-follower made sense. Duckworth encourages teachers to use elements of Piaget's clinical

interviews as "wonderful probes for revealing a child's thinking" (p. 87) to try to understand students' thinking about subject matter. Rather than categorizing children according to particular stages of development, Duckworth argues that teachers need to use tools like clinical interviews to understand students' intellectual activities and to decide on appropriate next steps. As one of the teachers in her seminar writes:

> As always the task is to be *really* invested in understanding what a child is thinking. And in the very process of unearthing that, learning, growing, changing is going on. I feel closer to being able to do that after watching [the work with the children] than ever before. I feel closer to changing the vested interest in *my objectives*--or at least believing that the process alone is valuable. I guess for the first time clearly I saw children learning--the process of learning without the answers fully intact. (Duckworth, 1996, p. 96)

This teacher focuses on the investment in understanding children's thinking on their own terms. She subjugates her own objectives, i.e. the learning of "fully intact" answers, to the process of understanding children's thinking and letting them learn without providing "fully intact" answers.

Table 2 illustrates that the questions that Ball and Duckworth pose are closely tied to their windows of practice, which lead them to gather particular types of information.

	Questions About Students	Windows of Practice	Evidence Gathered
Ball	How does this student's expression of her ideas about content make sense to him or her? How do the students' ideas about content compare with disciplinary ideas, i.e. what do students understand (or not) about important disciplinary ideas?	**Tasks:** Posing meaningful mathematical tasks for students to work on alone or together **Interaction:** Students demonstrating their thinking for others in whole class discussions while the teacher and other students ask questions, e.g. "Is this what you're	Writing ideas in a notebook Tape recording children's conversations

		saying? Why would that work? Conferring with others	
Duckworth	How do these children go about solving this problem? What are they thinking? How do they understand the task they are working on? What tasks can I set for the student that will help him/her re-examine his/her thinking?	**Tasks:** Setting tasks likely to expose how children think about specific mathematical or scientific concepts, or tasks which raise challenges for students or are likely to provoke dissonance **Interaction:** Asking children questions about their thinking while they working (e.g. How did you figure that? Why do you say that? Is [this condition] still true? What happened when you made that adjustment?) Children conferring with others	Videotaping interviews with children

Table 2: Questions, Windows and Evidence Gathered by Teachers Who Pay Attention to Student Understanding

Ball and Duckworth's versions of attentiveness call for them to listen carefully to their students' words, and both exert substantial mental energy to understand students' ideas. Both teachers wait patiently while students express their thinking, often multiple times and with continual questioning from themselves and fellow students. Both teachers adjust their questions according to the students' comments, without being overly concerned about whether students arrive at a final, correct answer. What makes these two so similar is that both Ball and Duckworth attend primarily to students'

understanding--both how they make sense of a subject and how their understanding compares with the substance and structure of existing disciplinary knowledge. With this type of attention, the teacher has a well-developed set of ideas, grounded in disciplinary knowledge, about potential student responses. Paying attention allows them to learn what their particular students understand well, what they are still struggling to understand, and what they are ready to learn. They use this information to assist them in setting new tasks and posing new questions that will help students develop more sophisticated conceptions of the subject matter.

To gather information about their students, Ball and Duckworth both provide students opportunities to work freely on one or two tasks. Students work alone or together, and the open-ended tasks allow for multiple solutions and disagreements. Ball and Duckworth watch students complete the tasks, and then ask questions to understand their thinking more completely (even when it is quite divergent). They compare the responses they receive with the responses they expect given their knowledge of the subject matter. Both authors highlight the need for teachers to: a) find ways to uncover children's sense-making about things they are learning; and b) how their ideas compare with what they want them to learn. The challenge of this sort of attention is to develop a repertoire of strategies for finding out what students are thinking about and how they understand a subject. Once they gather this kind of information, the teachers must engage in the tricky business of drawing inferences about students' understanding based on their written and verbal comments.

Attention to Student Interests

A third type of intellectual attention, which I call Attention to Student Interests, occurs when teachers gather information about students' experiences, interests, and skills and use this information to shape the curriculum. These teachers may begin with a general structure or overarching theme, but the teacher seeks opportunities to personalize the curriculum in response to children's interests.

William Ayers (1993) adopts this approach. For example, Ayers describes his efforts to help Jose La Luz, who was frustrated by school, often behaved inappropriately and often got in trouble. Ayers assumed that his behavior stemmed partly from his humiliation at school and subsequent hatred of it. Rather than trying to "fix" Jose's behavior, Ayers set for himself the task of "find[ing] something of value in Jose that we might build on, something which he knew how to do, something he cared about or longed for" (p. 3). He noticed Jose skateboarding one day after school, and he asked Jose to teach a mini-course on skateboarding to the class. Though Ayers admits that Jose made no miraculous turnaround, he remembers that, for Jose, there was a "moment of possibility"

Ayers hypothesizes that many students like Jose are unsuccessful in school because the traditional school curriculum is designed not to build on their existing strengths, but to remediate deficiencies in areas that are uninteresting or intimidating to them. To illustrate further, Ayers lists a number of things he himself cannot do well, e.g. fish, speak French, golf, fix a car. In a hypothetical school where the curriculum was designed to remediate his deficiencies in all these areas, he would probably feel humiliated and alienated. Not only would he be likely to fail, but he would probably be

inclined to leave school altogether. In addition, the curriculum would prevent the teacher from learning much about what he enjoys, like baking or riding bicycles, or what intimidates but interests him, like computers. Though he acknowledges that there are some skills that all children must learn, he ultimately believes that teachers need to discover the strengths of their students and find ways to teach "that builds on strengths, experiences, skills, and abilities; a way that engages the whole person and guides that person to greater fulfillment and power" (p. 32).

When teachers focus on children's deficiencies, they end up labeling their students in unhelpful ways. Instead, Ayers says:

> The problem is this: in the human-centered act of teaching, all attempts to define categories lower our sights, misdirect our vision, and mislead our intentions. Labels are limiting. They offer a single lens concentrated on a specific deficit when what we need are multiple ways of seeing a child's ever-changing strengths. All the categories are upside down--they conceal more than they reveal. They are abstract, when what we need is immediate and concrete. The focusing questions for effective teachers must be these: Who is this person before me? What are his interests and areas of wonder? How does she express herself and what is her awareness of herself as a learner? What effort and potential does she bring? These are the kinds of questions we need to figure out how to attend to. (p. 29)

To gain such understanding, Ayers believes that teachers must "afford children multiple opportunities to choose, to initiate, to create during some part of classroom life" (p. 39).

Lucy Calkins' description of writer's workshops is another example of an attempt to center children's school experiences around personally meaningful and important topics. In a writer's workshop, students are invited to become deeply invested in their writing. Teachers offer large uninterrupted blocks of time for students to write in journals about things that are important to them. Eventually, teachers help children choose particularly poignant entries that they would like to develop further into poems,

stories, or other written products. Two crucial features of the workshop are the opportunities for students to write on topics of their choice, and the one-on-one conversations, or conferences, that teachers have with individual students to help them develop their writing further.

Calkins tells one story of a writing conference she had with Anna while a group of teachers were observing. Anna had written many journal entries, and she was trying to choose an entry to develop further. Calkins invited Anna to leaf through her journal and choose one entry with particular emotional importance. Anna returned, pointing to the following entry:

> Yesterday I was in a restaurant and I saw my friend Luisa. I said "Hi" and she said "Hi." Then I finished eating and I played with her. I said I have to leave and then she said "OK." When I got home I was looking at TV then it was time to go to bed. So I brushed my teeth and went to sleep. (p. 44)

After reading the entry, Calkins wondered whether Anna would be able to go far with this selection. Though she was tempted to call Anna's attention to other entries that Calkins thought were more powerful, she held herself back (in part because there were other teachers observing the conference).

Instead, she said to Anna, "It's big, isn't it?" and watched with surprise as Anna's eyes filled with tears. After re-reading the entry aloud and asking Anna directly what was so big about this entry, Anna replied that she had gone into a restaurant to find her "one and only friend in the country" sitting with someone else. In desperation, Anna said, "Hi," and, to her great relief, her friend said "Hi" back. They played together after eating, and the friendship was sealed.

Calkins demonstrated attention by trusting that Anna had chosen a significant entry. Withholding her inclination to say, "Why don't you choose another entry," she tried to pay attention to what was so emotional for Anna about that entry. As Calkins says, "Writing begins with a leap of faith, with a decision to make meaning from a chosen thread, and the truth of the matter is that anything can start us on the road toward significance" (p. 45). Recognizing this, Calkins asks questions to learn more about that thing which starts her students on the "road toward significance."

Calkins (1991) claims that writing teachers need "to fall in love with [their] children, and to do so quickly" (p. 11). To accomplish this, teachers must create classrooms where children can share their lives and in the process, live more fully. She writes:

> If we're going to teach reading and writing well, our classrooms must be filled with our students' voices and their lives. We don't need to be Superteachers to teach children to write, but we do need to love and respect our children and to help them love and respect each other--and themselves. (p. 14)

For Calkins, classroom activity should be inseparable from the rest of living. In such classrooms, knowledge of students means more than just understanding what interests them or how they relate to others in the class. Knowledge implies understanding many parts of the children: their joys, their fears, their activities in and out of school, their dreams and fantasies. This knowledge would offer more than just one more tool to help teachers hook students into the school curriculum; in such a classroom, children's lives would actually *become* the content of instruction through the sharing of stories aloud or in writing.

In one sense it is not fair to group Ayers and Calkins together. Ayers integrates students' experiences across the curriculum whereas Calkins focuses on language arts, writing in particular. What makes the two authors similar is that they create supportive classrooms where students can choose what to work on and where student experiences provide the foundation for the curriculum.[3]

Table 3 illustrates the opportunities that Ayers and Calkins make available to shape their curriculum around student interests.

	Questions About Students	Windows of Practice	Evidence Gathered
Ayers	Who is this person before me? What are his interests and areas of wonder? How does she express herself and what is her awareness of herself as a learner? What effort and potential does she bring?	**Tasks:** Opportunities for creative expression Building whole class curriculum on student-generated themes or interests **Interaction:** Noticing students outside of class as well as during class	Informal field notes used for descriptive reviews
Calkins	What personal experiences are particularly meaningful to this student, and why? How can I as a teacher help this student represent the significance of personal experiences through writing?	**Tasks:** Predictable structures in place so students can choose their own tasks **Interaction:** Teacher consultation is about trying to identify what is most important to the students themselves, e.g. "What is in your notebook that catches your heart, that matters to you especially?" (Note:	Writing ideas in a notebook

[3] A variation of this is to build curriculum on topics that are *familiar* to students on the assumption that the familiar will be less intimidating and more interesting (e.g. Heath, 1983; Stumbo, 1989; Wigginton, ??).

		NOT "Do you really want to write about this entry? Could I look through your notebook again?") Conferring with other students Sharing writing publicly and publishing work	

Table 3: Questions, Windows and Evidence Gathered by Teachers Who Pay Attention to Student Interests

Both Ayers and Calkins seek to learn about the things that their students care about, and they extend their concern about students beyond the boundaries of the classroom and beyond the boundaries of a particular subject matter. They seek ways to tap into the "joys" and "fears" of their students, who they are, who they would like to become, and what stands in their way, and how they can help their students live better lives. To be attentive in this way, they offer opportunities for students to choose among a range of options, and pay careful attention to what students choose.

The Recursive Cycle of Attention

> Objects are concealed from our view not so much because they are out of the course of our visual ray as because there is no intention of the mind and eye toward them. We do not realize how far and widely, or how near and narrowly, we are to look. The greater part of the phenomena of nature are for this reason concealed to us all of our lives. Here, too, as in political economy, the supply answers to the demand. Nature does not cast pearls before swine. There is just as much beauty visible to us in the landscape as we are prepared to appreciate,--not a grain more. The actual objects which one person will see as from a particular hilltop are just as different from those which another will see as the persons are different. The scarlet oak must, in a sense, be in your eye when you go forth. We can not see anything until we are possessed with the idea of it, and then we can hardly see anything else. (Thoreau, 1858/1982, pp. 214-216)

As the passage from Thoreau suggests, what one is looking for is influenced by what one expects to find, which in turn affects what one is able to see. Attention is not just a state of receptivity to students, or listening carefully to student comments. Attention necessarily involves teachers adopting a stance about what they hope to learn about their students and developing a set of practical and analytic tools that enable them to learn these things.

I return to the three questions posed at the beginning of the chapter:

- What questions do teachers ask themselves or one another about their students? In other words, what are individual teachers' ideas about what it means to "keep track of mental play" and have "insight into soul-action"?
- What opportunities do teachers create in their practice to gather particular kinds of evidence to answer the questions they pose?
- How do teachers make use of the information they gather about students to inform their teaching?

All of the teachers from this chapter exhibit aspects of the OED definitions of "attention," and there are some features common to all of the teachers. Each teacher provides tasks which require students to work while the teacher plays a side role. Each teacher provides opportunities for students to express their own ideas--through writing, whole group sharing, or interaction with peers--and they listen carefully and completely to their students. Each teacher exhibits patience by allowing students time to express complete thoughts. They do not try to speak for students, or lead discussions where students are only expected to "fill-in-the-blanks" (see Ball, 1997 for examples). Each teacher demonstrates features of good listening, as described by Beatty (1999):

> The fundamental project is *understanding* the other and so achieving a kind of fidelity to the meaning or intention of the other. Other projects or purposes must recede, during the listening, to the periphery, purposes such as solving the other's problem, morally appraising the other's behavior, counseling the other, gaining the approval of the other, or reducing the other to an emotionally manageable object. (p. 282)

Listeners are responsible for trying to understand the experience of the other as much as possible in its fullness. This means that means that listeners must consider their own biases, continually construct hypotheses, and test them against what the speaker is saying. The goal is not to fit another's experience into one's own way of thinking, but to try to see things from the other's perspective. Using what they learn, the teachers try to build on and integrate student ideas meaningfully into discussions rather than treating the solicitation of student opinions merely as a required formality.

The analysis also reveals some significant differences between writers. One striking difference is in the nature of the tasks set for students to work on. There is the obvious distinction between teachers like Paley, Ayers, Calkins and Kohl, who allow greater freedom for students to set their own tasks, and teachers like Ball and Duckworth, who work very hard to construct authentic, meaningful and revealing tasks. For some teachers, like Ayers, the personally chosen interests of the students drive the whole class curriculum. Others, like Calkins, devise ways to allow students to pursue independent projects that are personally meaningful for them. The goal of setting tasks like these is to attend to "choices made and approaches to work, play, and relationship" (Ayers, 1993, p. 39). Duckworth's ideas are similar to Paley's in that both place the teacher's objectives as secondary to understanding what children are thinking about. However, the difference is that the kind of attention to thinking seems to be intended to uncover how the children think *about a particular topic,* whereas Paley and Ayers hope to uncover what their students care about and want to learn more about. Duckworth and Ball's perspectives

seem to be more diagnostic and more targeted, although they also allow opportunities for class discussions to shift according to new ideas that students raise in class discussions.

All the teachers in this chapter advocate the need for skillful questioning and careful listening, but they seem to hold different perspectives about the expected nature of their interaction with their students--in particular their questions of students. For many of the teachers, it is important to know how to ask what they consider the "right questions." However, what these questions are differs greatly. Paley and Kohl ask questions designed to help them understand how a child responds to a particular environment. Duckworth and Ball ask questions that attempt to reveal students' understanding or misunderstanding of content. Ayers and Calkins ask questions in one-on-one conversations about what students will choose to work on next. Kohl's questioning of James and Calkins' writing conference with Anna were situated in private interactions with students. Duckworth asked students questions while a group of teachers watched. Ball and the other students in the class asked Mei questions while she was standing in front of the classroom. The different types and settings of questions are bound to influence what students are willing and able to say, and so they affect what teachers are able to learn.

Since the tasks and the questions are both determined by the teacher, Ball's and Duckworth's techniques are ill equipped to learn what *kinds of things* children in a classroom are thinking about or puzzling about. Paley offers a different perspective, where her skills seems to lie not in *asking* the right questions, but in trying as much as possible to stay *out* of children's conversations and become a curious listener. Paley, Ayers, and Kohl rely primarily on their observations and questioning strategies to get an

indication of what interests them. Lucy Calkins' entire technique is geared toward figuring out what is important to children, but her conversation offers little insight into what children understand about their writing.

Each perspective raises a unique set of dilemmas regarding the nature of the tasks posed and the interaction required. In a classroom based primarily around student choice and interest, teachers will face a dilemma in trying to balance required curriculum with allowing students to pursue topics of interest. Another tension arises as teachers try to balance individual projects and pursuits with whole-class activities. These tensions point to the fact that even when teachers build their lessons around student choice geared to different student strengths, there must be some accountability for making sure their students encounter some established disciplinary notions. Teachers who attend to student understanding by choosing tasks designed to elicit students' ideas about subject matter must face dilemmas about when to pursue divergent student ideas and when to disabuse students of their misconceptions.

Finally, a third difference is how different teachers make use of the artifacts that are created by the students or gathered by the teachers. Kohl, Paley, and Carini devise interventions that will create more positive environments for particular children in their classrooms who struggle. Ball and Duckworth try to understand what students understand so they can raise new questions. Ayers and Calkins determine how to provide the greatest opportunities for students to pursue projects of individual choosing.

I am not arguing that the three categories of intellectual attentiveness are mutually exclusive, nor that these categories can be applied as labels to pigeonhole teachers as particular types. Good teachers, including those cited here, regularly use and combine

multiple approaches. As William Ayers structures class lessons around skateboarding, he builds on Jose La Luz's interests, but he is also trying to break down conditions which have contributed to Jose's hatred of school. I do not believe, either, that the people I cited have only one perspective. Lucy Calkins does care what her students understand and Eleanor Duckworth probably cares what interests her students. What does seem to be true is that each of these authors has a dominant orientation to the question of what they attend to about students in classrooms.

This analysis of the different teachers suggests that the answers to the three questions posed at the beginning of the chapter may influence one another in an iterative or recursive fashion. The cycle is represented graphically below in Figure 1:

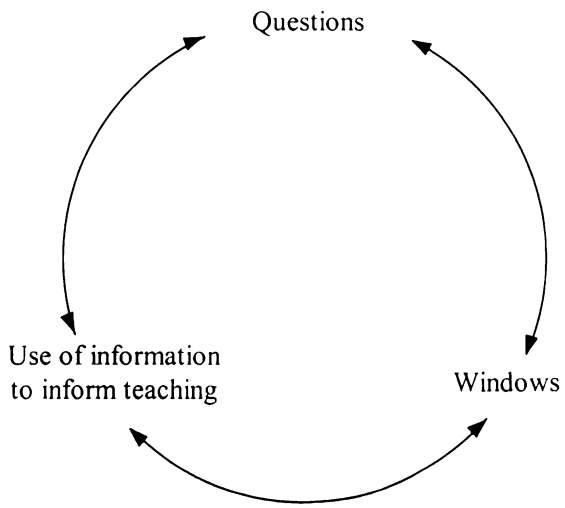


Figure 1: The Recursive Cycle of Attention

Each teacher appears to have a set of questions that s/he asks about students which, if answered, would help the teacher accomplish his/her objectives. In turn, there is a connection between these questions and the kinds of opportunities, or windows, teachers make available for gaining information about their students. The windows provide opportunities for teachers to gather specific types of information about their students--

through observation, conversation, or in written form. The tasks may be open-ended or closed, teacher- or student-directed, private or public, depending on what the teacher hopes to learn. Once the information is gathered, teachers make choices, consciously or unconsciously, about how to digest the information and how to use it to influence their teaching. The questions posed affect choices about what information to gather, and the information gathered affects what teachers do in their classrooms. In turn, new teaching practices or the creation of new windows may raise new sets of questions for teachers. In the next chapter, I examine the questions, windows, and implications of practice in Carrie, Linda, Vera and Michelle's current classrooms.

Chapter 3

Teaching Practices Which Provide Windows Onto Students

Introduction

In this chapter, I examine Carrie's, Linda's, Vera's, and Michelle's current teaching. To get an overview of each teacher's practice, I conducted one formal observation as well as shorter informal observations on the other days I interviewed them. I observed lessons that the teachers felt were typical of their language arts teaching practices. In one instance, I observed a lesson that was atypical, so I observed a second time. During these observations, I was trying to figure out which aspects of their practice opened up possibilities for paying attention to students. I watched for the kinds of tasks that the teacher and students were engaged in, evidence of opportunities for students to express themselves, and the kinds of interactions that occurred between the teachers and their students.

After the first formal observation, I conducted an interview in which I asked each teacher about her language arts teaching goals. I asked each teacher to walk me through the activities I had observed so that she could explain their purpose and how they fit into the larger picture. I also gave the teachers the opportunity to describe other activities I had not observed.

After analyzing my observations and interviews, I realized that each teacher engaged in different teaching practices which provided windows that enabled teachers to

learn different things about their students. When I interviewed them, each of the four teachers said that her teaching at that time was significantly different from her earlier practice. Each teacher said that the changes in her practice had enabled her to pay attention to students in ways that would have been impossible earlier in her career.

The analysis is guided by the three questions posed at the end of the last chapter:

- What questions do teachers ask themselves or one another about their students? In other words, what are individual teachers' ideas about what it means to "keep track of mental play" and have "insight into soul-action"?
- What opportunities do teachers create in their practice to gather particular kinds of evidence to answer the questions they pose?
- How does the information teachers gather about students inform their teaching?

The chapter describes one teacher at a time. For each teacher, I begin with a snapshot image of how her classroom looked on the day I visited. In the sections that follow, I examine the answers to these three questions, as well as the ways that the different answers to these questions are interrelated. The analysis reveals distinctly different practices that provide different opportunities for the teachers to learn things about their students. These practices appear to be linked to the teachers' different reasons for wanting to pay attention to their students.

Carrie: Attending to Affective Dimensions of Students

Above all, Carrie focuses on the affective dimensions of schooling for the children she teaches. There is an easy rapport between Carrie and her students. Students and teacher move comfortably around the room with little or no friction. On the day I observed, when Carrie informed her that school would not be in session next Monday, one student said indignantly, "That's not fair!" When students interrupted our interviews to show their work to Carrie and explain what they had done, Carrie was extremely

patient and seemed interested in what they had to say. When each child left, she commented to me about recent progress the student had made or challenges s/he was facing.

Over the years, Carrie said that she has grown in her ability to understand children's emotional states and develop a repertoire of behaviors that help her calm students down when they are distressed. Her focus on these issues seems rooted in the belief that when she attends to students' emotional readiness to learn, she is more successful at motivating the students and getting them engaged in classroom activities. When she keeps her students emotionally satisfied, she is also able to attend more carefully to her class as a group and spend more time on academic tasks than she would be able to if she upset children were behaving in a way that regularly distracted her attention.

Snapshot of Carrie's Classroom

Carrie's classroom resembles many early elementary classrooms with its collection of student furniture, file cabinets, storage shelves, computers, block sets, whiteboards, and sight word lists posted around the room. One notable difference is in the back corner of Carrie's classroom where there are six or seven plastic tubs filled with picture books, and there are many more tubs sitting on a large storage shelf near the back of the room. Each tub is marked with a letter, a symbol (e.g. a heart for Valentine books), or a label (e.g. Mercer Mayer, Eric Carle, Scholastic Science, jokes and riddles). In the same corner of the room, there is a collection of "My Published Writing" books--stapled collections of typed stories pasted onto pages with accompanying illustrations--neatly displayed on a display shelf. Inside the books are some similar stories, such as a

page beginning "I am thankful for" and other stories that seem to have originated from the author, e.g. stories about bikes, presents, and soccer games. Standing in front of the classroom is a "pocket board," a soft canvas board with plastic slots into which oaktag pieces with words and pictures can be placed. Each line of the pocket board lists a different subject (Math, Science, Social Studies), and next to each subject there are two or three cards in the pocket indicating different activities.

One mid-February morning, Carrie's second grade students distribute Valentines to one another before school begins. At 9:00, Carrie rings a chime. While she takes attendance, she informs the students that after they finish delivering their Valentines they should work on one of two projects: a Valentine card to be delivered to veterans (a project that Carrie read about in an Ann Landers column and decided to do with her students), or a thank-you note to the parent of one of the students who brought an iguana into school. Many of the students begin to work on cards for veterans that they have illustrated with a range of colorful pictures. One girl draws a picture with different crayons, covers the whole page with black crayon, and then begins to scratch away the black to reveal the colors underneath. Many of the cards are inscribed with handwritten messages, such as "Thank you for saveing are life's," and "Thank you for helping in the wred wor 1 and 2."

Twenty minutes later, Carrie rings another chime, and as she calls the names of the students, they assemble in an open space in a front corner of the room. For 15 minutes, there is a morning meeting. Carrie sits on a chair and directs their attention to the schedule of the day printed on the chalkboard. Nearby are several circled items, indicating events that vary daily--the visitor of the day (me), the progress on the CD-

ROM storybook on the computer, and the thank-you notes to the parent who brought in the iguana.

Carrie puts up an overhead titled "Daily Data," with columns for the day, the date, money, weather, temperature, and time. As she moves through each of these, she writes the information on the overhead. She asks the whole class what day and date it is, and they respond in chorus. She asks one girl to do the "money," and the girl goes over to a whiteboard and circles a dollar bill and four pennies ($1.04) indicating that if they had the same number of pennies as the number of days of school, they would have 104 pennies, or $1.04. Carrie asks students the weather, and all agree that it is cloudy. For the temperature, she notes that it is currently 42 degrees, and she draws an arrow going up to a 60 with a question mark next to it. Finally, she looks at the clock, and asks the students to read the time: 10:00. She remarks that this is the latest they have ever done the time, and that this is the first time they have ever done the time exactly on the hour. "Is it warm enough to go swimming?" asks one student, and Carrie informs him that it is not.

After this brief meeting, Carrie sits down and picks up a book filled with stories of Abraham Lincoln's childhood experiences, which she had begun earlier. In the story, Abe watches with surprise and horror as a family of slaves is separated and sold off. Carrie asks the students to imagine what it would be like to be taken in the night, chained up and have their family sold off. One little girl raises her hand and says, "I saw a show with a story about a little girl who was missing for 2 years." Carrie continues to read the story. Some students raise their hands and offer comments on the story: "If I was Abe and I had money, I'd make them not slaves." "I saw that same story about the missing

girl." "On the page you were reading, the kids were playing in the tree." Carrie listens to each comment and offers a response before moving on. As Carrie finishes part of the book, she informs the students that they should finish their thank-you cards, and then they can read three choice books.

The students disperse to the tables in the room, while Carrie gets five copies of a book called "Where Are the Babies?" She asks loudly, "Does anyone else want to come to this reading group?" One student joins the group of four students gathered around the table. The group begins to discuss the animals on each page and guess where baby animals of that sort might live. Meanwhile, the remaining students engage in a variety of activities. One student reads an Eric Carle book while another one gathers a pile of "My Published Writing" books which he reads. Several other students are drawing pictures that seem to go with stories they have written. Others are busy writing more numbers on their "math scrolls"-- sheets taped together and rolled up on which the students have written ascending numbers in sequence in rows of 10 columns. "I'm all the way up to 6,000" says one student, "and I'm going at least up to 10,000."

Carrie's Attention to Students' Attitudes and Emotions

Questions. Carrie constantly asks questions about whether her students have the right "attitude" for learning. Is there anything about this child's attitude that is going to prevent him from learning today? Will this child's attitude lead her to behave in a way that makes it difficult for her or her classmates to engage with the material? Is this student motivated to learn today? If not, what might be preventing him from learning? Are there any emotional problems that I can help individual students with before I try to teach the academic curriculum to the whole class?

When Carrie goes out to the playground to pick her students up, she scans the children's faces and makes guesses about whether they look ready for the day:

> I can tell by the look on somebody's face when they walk in that . . . they are going to have a bad day. Oh, God, they are just going to have a horrible bad day when I pick them up outside. And I've learned a lot more how to calm them down and give them a chance to vent and make time for them. (4/8)[4]

Carrie notices her students' gestures and facial expressions that provide clues about the attitudes students bring with them to school. She believes that she has become more proficient at being able to read this non-verbal language to detect problems early. When she sees a student who she knows is going to have a "horrible bad day," she tries to figure out how she can calm that child down.

Carrie believes that it is equally important to spend time dealing with students' emotional needs as it is to spend time getting students ready for learn. Sometimes dealing with emotional issues forces her to sacrifice some time for more academic work. However, she places top priority on calming children who do not come to school ready to learn:

> That means that I'm not around asking those kids what their doubles are, because that's what I want to be doing. It's like I've got to hit those kids every day on those doubles or on those letter sounds or something. But I've got to calm this kid down instead. (4/8)

Carrie believes that "life skills" and a sense of emotional well-being in school are just as important for students' ultimate success as their success with academic work. She has made "life skills" an explicit part of her curriculum, which she teaches during the first month of the year.

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[4] Unless otherwise noted, quotes are taken from the interviews and cited according to the date of the interview. In cases where it is ambiguous about which teacher made a statement, I include the name of the participant and the date of the interview.

Carrie believes that promoting these attitudes in her students is the greatest challenge she faces as a teacher. She describes this challenge throughout her career:

> [The greatest challenge in teaching] wasn't curriculum and academics, it was emotion and attitude. And I still feel that by far is the major factor in successful teaching: the kids' attitude. If I can get them motivated with a desire to learn and a love for learning and a belief in themselves, then I'm not really too worried about academics. I'm not worried if they didn't learn doubles this year because with that attitude they are going to be successful. But if I can drill them on their doubles and get it, but they don't have any self-confidence, they don't have desire to learn, they aren't motivated, they aren't going to be a successful kid. (4/8)

Carrie believes that when students develop the right "emotion" and "attitude," they feel a "desire to learn," a "love for learning," and a "belief in themselves." Emotions and attitudes are important conditions that influence students' intellectual development. She believes that if she can promote these attitudes, her job of teaching academic content will be much easier. Without the proper attitudes, she believes students will be unable to succeed and may interfere with the learning of other students in the class. She believes that without self-confidence, students are not likely to succeed.

Over the years, Carrie has had experience with students who have not come into school with a positive attitude about school. Too often, these students act in ways that do not foster their learning or allow for other students' learning:

> About every two, or three, or four years you were going to get a kid that would just totally throw your classroom off. Their behavior would be they would be wild and they'd be disrespectful. They'd be upset and angry and violent. And they threw the whole dynamics of your class off. (4/8).

Carrie asks herself what causes these disruptive behaviors. Carrie believes that one source of these problems is in the unstable home environments that more and more of her students come from. Describing recent trends in the type of students in her classroom, Carrie said, "There's more kids like that coming into your classrooms all the time than

those kids that are secure and have had a good breakfast and a good night's sleep and have a well-rounded life with loving, two loving parents." (4/8)

Windows. Carrie's emphasis on the emotions and attitudes of her students can be seen in the way she structures her classroom and her language arts block in particular. One decision she has made is to make "life skills" an explicit part of her curriculum. Another decision is to offer frequent opportunities for student choice, which she believes create conditions for students to develop positive attitudes toward school that will result in improved learning. The better fit between students' interests and the class structure lead to better student attitudes which lead to fewer disruptions that Carrie has to address. This orientation aligns Carrie with teachers who are attentive to the compatibility between learners and the learning context.

Carrie tries to foster positive attitudes among her students by building "life skills" explicitly into the curriculum:

> [The number of kids who come in with good attitudes] makes a big difference in how much time you have to spend on life skills-- . . . about showing friendship, being patient, being responsible, solving problems, using common sense, making effort--and how much time you can spend on the second grade curriculum. Because if I've got kids that are constantly, I mean these are like four, five, six, or seven kids constantly angry and upset and crying, I'm not going to teach all my reading groups that day. (4/8)

Carrie has made "life skills" part of her second grade curriculum, not because it is expected by the district, but because she believes these life skills make it possible for students to be constructive members of a classroom community who do not disrupt the learning of other students.

Carrie believes she has become very effective at noticing signs of impending trouble and stopping problems before they start:

> I think I'm pretty good at dealing with kids . . . I think I'm probably better at addressing those needs of kids than sometimes this whole complicated curriculum needs, academic needs they have . . . I think I'm as good at meeting their emotional needs as their academic needs. I think I'm pretty good after this many years of teaching and working with this many kids. I think it's all from experience, too. And it's from experience of watching other teachers do it well. Listening to other teachers, hearing other teachers' stories and what they did and just absorbing that and adding that to my repertoire. But also caring about the kids a lot. (4/8)

At different points in her career, Carrie has wondered whether any students' disruption may have been related to the way her classroom was structured. She and her partner Linda changed their teaching dramatically in the mid-1980's when they began to wonder whether their teaching methods were causing problems for these students. She said, "This was like a golden rule of ours for years: if kids don't learn the way you teach, then teach the way they learn" (4/8).

An important result of this "golden rule" is that Carrie offers her students many opportunities to choose their own tasks. Carrie's classroom is a busy place where activities shift rapidly, and where student and teacher activities occur simultaneously. Within this buzz of activity, students are almost always given choices--in reading, writing, and other activities. Students have access to all of the books in the classroom. Class time is structured to give students choices about what to do while Carrie meets with small reading groups. Later in the day, Carrie uses the choice pocket board to give students options during center time.

In reading, there are several places where students make choices. First, there are a plethora of books available for students to read, organized by authors (Dr. Seuss, Mercer Mayer, Tomie DePaolo), subjects (space, mammals, reptiles, joke books, poetry books), or difficulty level (by color). In addition to commercially published books, there

are "published" stories written by students in the class. During my visit, I noticed at least one student choosing a pile of student-written stories to read. When Carrie abandoned her use of the basal readers in the mid-1980's, she moved to a "reader's workshop" approach, during which she assigned some books and left a large portion of time for individual students to choose from all the books in the room. To keep track of individual student progress, she held one-on-one reading conferences with students about the books they were reading.

Carrie believes that the availability of all these books contributes to her students' confidence in themselves as readers:

> The advantage of [the reader's workshop] was everybody felt like a reader. They could all read the same books. They all felt confident. They all, and I think as the year went on and some of the kids . . . who weren't learning to read as well, um, maybe that image of themselves changed a little bit.

In addition, she creates opportunities for students to share their favorite books with one another. She said, "I want them to think there are treasures hiding in there that you kids just haven't dug up yet." To promote this idea, she asks students to hold up their favorite book of the day and invites everyone to look around the room. She tells them that "These are the best books in the room." The next day, students seek out those books.

A second place where students have choices is in their writing. Carrie runs her writing program using a "writers' workshop" model (Calkins, 1994; Graves, 1983). She described the standard features of a writing workshop:

> With writers' workshop . . . there are five posters on the wall that show the writing process, so they've learned different ways to brainstorm and plan. Then they do a first draft in their spiral notebook and then they have the revision conference with either the teacher or a friend and that is strictly to focus on ideas and concepts and quality. And they talk about how could I make my story more interesting . . . Then they have an editing conference and I give them a little check list and they have to read through it and use this check list and check their

> capitalization, their ending punctuation and their spelling. And they circle any words that they think might be that they need some help on to the best of their ability. And then they sit down and a friend or a teacher does that editing conference again. When they have gotten to that point then I publish for them. (2/11)

On the day I visited, the students' were working on Valentine's Day cards for veterans and thank-you notes for a parent visit to the classroom. These tasks were somewhat different than the writer's workshop that Carrie described, but they provide examples of students composing and writing their own text, using what literacy researchers have called "invented" or "approximated" spelling (Calkins, 1994; Fountas & Pinnell, 1996). These activities and the prominent display of "My Published Writing" books along with the rest of the class library show how elements of writer's workshop have been infused into daily life in Carrie's classroom.

A third opportunity for student choice happens during "center time," which Carrie told me takes up much of the afternoon. Although I did not observe center time, Carrie described it as a time when students work with first graders in the adjoining room to choose different activities in several subjects. "Center time" is orchestrated using the pocket board. When she first began centers, Carrie used to require particular activities, and if students finished the work she required of them, they were free to choose among the other activities. Recently, she decided that the students' activity during choice time was at least as serious as the work she assigned, so she increased the amount of choice time.

> I just started giving the kids a couple of options that I was interested in and then I got to the point where I had this, I just made this blue poster that said, "Choices." And what they could do when they got all their work done was read anything in the whole room. Like the science books or they could write anything. They could go to the writing centers and get cards or anything. So for the first couple of weeks that was it. You could read or write anything in the whole room. That

> was your only option. . . .You had to finish what I assigned and if you got that done you could have choices. The balance has now shifted to where I've seen kids doing such wonderful, wonderful things in their free time that I've cut back on what they're assigned. And it's almost half and half now. I only assign enough to fill up about half of their time. And the other half they get these choices cause I see them doing, they are practicing their spelling words, they're writing letters to somebody who moved away. It's like this is real learning. This is real, this is the real stuff. (4/8)

For a time, Carrie placed a priority on the work she assigned to students. Students were allowed to choose their own activities only when they were finished with the teacher-chosen activities. When she watched what her students did during periods of choice, she was so impressed by her work that she shifted the balance to allow for longer periods of student choice.

Carrie also believes that having first and second graders work together helps her students, especially those who struggle more, to develop greater confidence:

> [Some] kids, who if they stayed in a typical grade level situation year after year, they'd never be a leader. They'd never be able to help anybody. They are the lowest kids in the room and they know it. But in this [multi-age] situation they can teach somebody how to read. They can spell a word to somebody. They are smarter than somebody else. They can take a leadership position. And I think that does incredible things for their self-concept and their confidence. (4/8)

Since Carrie and Linda share students in the multi-age classroom, Carrie also gathers evidence about her students from her own interactions with them as first graders and from what Linda learns about them as their first grade teacher.

> And, too, we know their parents. I know their pets' names, their brothers' and sisters' names. That I think they're more comfortable and welcomed and feel more at ease . . . . I think they already feel like they belong. (4/8)

Having her room connected to Linda's creates opportunities for Carrie and Linda to have informal "descriptive reviews" (Carroll & Carini, 1991) when they are having difficulty with students.

> Just spontaneously Linda and I will find ourselves sitting back during centers or something and saying, "Have you noticed David this week?" And like she had David last year. She had these kids last year. So we talk about, we have two people figuring a kid out. And figuring out what, what's going on. She knows what was going at home last year. Or she'll say, she'll notice something that I didn't. One of us will notice something that the other didn't . . . That's just an incredible experience. (4/8)

Carrie's Attention to Student Abilities

As part of her concern about the attitudes students have about school, and whether they are conducive to continued learning, Carrie asks another series of questions about her students' abilities with respect to the subject matter content. What is this student capable of reading/writing? What tasks or materials will help this student at this point in his/her development?

During the past year, Carrie has begun reading strategically chosen books with small groups of students of similar reading abilities. This approach is what Fountas and Pinnell (1996) call "guided reading." Rather than using homogeneous groups as she was encouraged to do in the past, Carrie treats these groups as open and flexible, such as when Carrie invited other students in class to join the reading group she was starting. She is working on grouping students flexibly according to different reading skills. This flexible grouping is one method of guided reading, as developed in New Zealand (Fountas & Pinnell, 1996), which Carrie has recently been learning about through a district-sponsored seminar.

During this guided reading, Carrie's is responsive to student concerns and questions. Carrie described a portion of the reading group she ran that day:

> There was baby fox in a den and one little girl said, "Now would those baby fox that young be able to bite you and hurt you?" . . . I said, "I'm guessing that the baby fox's teeth are kind of like baby puppy teeth, really sharp. Well, let's go to

> the library, when we go to the library we'll check out a book." Then somebody else [noticed a] picture [that] didn't show inside [the Kingfisher's] nest. It was just like a hole on a cliff. And the kids said, "Well what does it look like inside?" (2/11)

From Carrie's description, the students are not simply reading the text of these reading books. They are raising questions that Carrie invites them to pursue further.

Carrie also collects evidence directly connected with her students' academic learning through different types of assessment. Recently, Carrie has viewed assessment as a formative tool for students' development rather than merely a summative tool for documenting students' learning. She said:

> Before our [study group focused on] assessment, assessment was always kind of a necessary add-on. You know, after you did this wonderful teaching you had to be able to be accountable to other people that you really had done all this wonderful teaching. . . . But as we started, we realized how much that assessment informed our instruction and our planning and our teaching. So that's what led to the shift, when we began to really value assessment for the effect that it had on our planning and our teaching. And so we started to see them instead of . . . teach this great big unit, then assess, we started to see the two as really intertwined. . . . So that assessment then became ongoing, constant. (4/8)

One example of this new kind of assessment in her reading program is her use of "running records" (Fountas & Pinnell, 1996) to match books strategically with readers according to their abilities. Carrie uses running records, not as an evaluation of student ability, but as an analytic tool to determine which books will provide the appropriate level of challenge for her students:

> [Running records are] really a specific analysis. You analyze the mistakes they made . . . . It's like learning how to take shorthand. . . . They make a little mistake and you've got all these different symbols that you scribble down and write down. Like if they repeated it, or if they substituted a word, or omitted a word, or if they self-corrected, or if the teacher told them. There are all these miscues. But then over at the side you have to analyze those miscues. Whether or not the error was made due to meaning, or a visual error, a meaning error or a syntax. Then you analyze those. So you go back and, "Oh, this kid's making mistakes 'cause he's not looking at the word." He's not looking at the word clearly. He reads right

> through and is not even and he's not thinking about meaning . . . Or sometimes he'll make a mistake that, you might say, "this" ball and really it said "that" ball. So meaning was OK, it fit the meaning, they got meaning from the passage, but they aren't visually looking carefully. So for that child you focus on, you know, "You're missing some words because you aren't looking clearly enough." "So you really need to not just guess after you look at the first letter, you need to look at the whole word." And you just, you just work with that kid on that one. You know, for another kid, you'll say, "Does that make sense? Read that again. . . . OK, when you read, you've got to really think about did that make sense." So it gives us ways to do that. (4/8)

The purpose of running records, as Carrie says, is that they "give you kind of that window into their brain to see how [students are] thinking about this whole secret code of writing. Where are they, where are they messing up in there? So you can get in there and kind of tinker and you know what to focus on" (2/11). Carrie's use of "running records" to assess students' reading abilities and select appropriately challenging reading materials for them is designed to ensure that students are working on appropriate tasks. By working on appropriate tasks, students are less likely to become frustrated and more likely to stay engaged.

In some ways, Carrie's use of the New Zealand methods for teaching reading seems to run counter to the "reader's workshop" model in which all students can choose from any of the books in the room. With the New Zealand approach, the teacher selects books for the students to read, and students are grouped according to specific skills--both reminiscent of Carrie's instruction before the reader's workshop. However, Carrie does not see these two methods in tension. She says she is offering *both* types of opportunities--opportunities to read books that are specifically chosen to challenge students at their reading level, and opportunities to choose from all the books available in the room. These different types of documentation and evidence that Carrie collects about

her students align with her orientation to fostering a productive attitude toward school in her students.

In her writing program, Carrie described how her current assessment method differs from previous methods:

> Instead of just kind of getting to the marking period and say, "Oh, look where they were in September." And, "Oh, look where they are now and look where we can see improvement." We tried to develop, not really a check list, but a way of looking at their writing so that we could assess it on a weekly basis and see where do they need to make changes, where have they made changes. How can I support the kids in taking the next step? So that instead of just me modeling and them practicing and model, practice, model, practice, you know, and publish and things. It was more assess and instruct, assess and instruct, assess and instruct. (4/8)

Carrie's new method of assessing student writing on a continual basis and using assessment as a formative tool for students' writing is another way for Carrie to support her students throughout the process of writing. Her description of her earlier method of assessment focused on children's growth in writing ability over long periods of time, like each marking period. Assessment was divorced from Carrie's attempts to keep students engaged. With a formative view of assessment, the assessment is a constant tool that Carrie can use to keep students engaged and foster continual growth. As Carrie said above, "How can I support the kids in taking the next step?" Assessment as a formative strategy is another way to provide conditions that are likely to maintain student engagement and interest in the tasks.

Carrie Discussion

Carrie's intellectual attention to her students centers around a primary set of questions about what prevents students from engaging in academic content. She believes that student feelings about school have a profound effect on students' interest and

willingness to engage with school work. Some students may bring emotional baggage with them from home that prevents them from engaging. Other students have difficulty staying involved because the work that is being required of them is so far removed from what they would prefer to be doing that they simply cannot stay on task, not even out of respect for the authority of the teacher, who may be busy trying to convince them to stay on task. Finally, some students simply do not bring the kind of "life skills" that help them keep sustained attention on a single task or following directions.

Carrie's questions about understanding prerequisites for students' engagement and her views about likely influences on students' engagement have influenced her classroom teaching practices. For example, Carrie watches children's faces and body language and tries to help students deal with problems before school starts. In her classroom, students have many opportunities to make choices. These choices provide two benefits for Carrie. First, they provide a greater possibility that students will stay engaged since they are working on tasks they have chosen for themselves. She does not need to coerce them to do things she thinks they should do. A second benefit is that Carrie has more time to watch what her students are doing, since less of her time is spent making sure they are doing the expected assignment. In the past, she spent time keeping students on task, especially when the assignments were not aligned with student inclinations.

By offering tasks consistent with students' preferences, Carrie creates an environment where she hopes students develop a better attitude about their work. When students have a better attitude, Carrie feels less tension between her and her students, and the students complete the same amount of work. The reasons Carrie gave for providing

so many opportunities for choice is reminiscent of the perspectives of Paley, Kohl, Heath, and Carini--who attend to the compatibility between learners and contexts. She discovered the increased time for choice activities was not sacrificing student learning; in fact, she has come to believe that the time students spend on freely chosen activities may be their most productive learning time.

Recently, Carrie has developed a secondary set of questions about assessing students' abilities in reading and writing. Using running records and engaging in continual formative assessment of student writing, Carrie tries to learn about what students are currently able to do so that she can decide what kind of tasks would pose a manageable challenge for them. She believes that by tailoring tasks to specific student abilities, she is helping them learn as much as possible from a task without becoming frustrated. Matching tasks to student ability is consistent with Carrie's dominant orientation about trying to engineer a close fit between the students and the classroom environment.

Carrie's questions about whether students come with attitudes and emotional conditions necessary for school success shape the kinds of opportunities she provides in her practice and the kinds of information she chooses to collect about her students. By offering a wide array of options for student choice, Carrie tries to instill in her students a sense of belonging and comfort which comes from doing things that they want to be doing. These choices help students build productive attitudes toward school, even when external circumstances make this difficult. By observing students as they engage in freely chosen activities, Carrie has more opportunities to monitor the compatibility between her students and the learning environment she has created for them. By

developing and using new forms of assessment, Carrie is continually learning new ways to engineer conditions for student satisfaction, and ultimately, success.

Linda: Helping Students Develop Self-Efficacy Through Engagement

Due to their partnership, their close working relationship, and the similarities of their professional development experiences throughout their careers, Linda's teaching and beliefs about teaching are very similar to Carrie's. Like Carrie, Linda pays a great deal of attention to the affective dimensions of her students, and she believes that this focus ultimately pays off in terms of students' academic achievement. However, she does differ from Carrie in some subtle but striking ways. Rather than seeing a positive attitude *alongside* for instruction, something she needs to attend to that may sometimes prevent her from teaching other things, Linda sees the instruction *itself* as a tool for bringing about better attitudes in her students. Providing experiences for students to succeed academically, Linda believes, helps students develop greater feelings of self-efficacy. When students experience success, they feel a greater sense of self-efficacy--feeling confident that they will be able to succeed in the future. Linda feels that this foundation is important for fostering her students' ability to succeed academically over the long range.

Snapshot of Linda's Classroom

On Groundhog Day before school officially begins for the day, Linda's eighteen first graders are busy at work, moving about the room engaged in a variety of activities. A number of children are working on small stapled booklets entitled "Groundhog Day." Another child goes to a set of slotted shelves with each student's name on one box and pulls out a rolled up sheet of paper. He unrolls the sheet and shows the numbers to me.

"I'm further along on my 'Math Scroll' than anyone else at my table." Written on the paper are the numbers from 1 through 700 in rows of 10. When I ask how far he intends to continue, he informs me, "At least to 1000." Other students go eagerly to another corner of the room, where a set of plastic bins containing picture books of all shapes and sizes are located. One student takes out a "Spot" book and begins reading.

The walls of the classroom are covered with words. Against the back wall are large pieces of chart paper titled "Valentine's Day," "Winter" and "December," and filled with words associated with these topics. On another wall hangs a large piece of paper titled "Sight Words" filled with small words arranged alphabetically. In another corner is posted a set of criteria to earn recognition for the "Home Victory Reading-Writing Program." It shows that after every two hours spent at home reading or writing, students get a shape to decorate and place on the class mural hanging outside the door of the classroom.

After the pledge, Linda calls the students to gather around her and a whiteboard easel to begin language arts. After students are seated in a semicircle, she asks them if anyone has heard news about the groundhog. One student replies that his mother told him the groundhog did not see his shadow. She asks, "How would I write that?" Together, the students call out the letters as Linda slowly sounds out the words of the sentence and writes the collective responses on the easel. When she is finished, the following sentence is written on the easel:

The grownd-
hog didn't see
his shadow. spring
is soon.

She leads the class through an explanation of why she puts a dash at the end of the first line and not the second line. She remarks that there are still some mistakes, and gives them a hint: "It has something to do with the word "spring." At this a girl raises her hand and says that S should be capitalized since it is the first word in a sentence. She then holds up the book she is about to read, "It's Groundhog Day," and another student notices that "groundhog" is spelled incorrectly. Finally she calls students' attention to "oo" in "soon" and asks students to name other words that have that same sound. She concludes this portion of the lesson by praising the students for "good learning, listening, and discussion."

After briefly introducing the story of the day with a groundhog finger puppet, she begins to read the story of an malicious raccoon who owned a ski lodge and attempted to kidnap the groundhog to prevent spring from coming early. As she reads, she stops throughout and asks questions and offers commentary about the story and the pictures. "What is a burrow? The illustrator must have had fun drawing this picture. Why does the raccoon hate spring?"

After she finishes the story, Linda passes out the home reading-writing awards and announces that they will be dividing into three groups which will rotate every 15 minutes to a different activity: reading, writing, or listening. She calls the names of the students at each group and the students move to the appropriate part of the room.

At the front of the room, Linda works with a group of students who read short picture books which are chosen to be at a challenging reading level for this group of students. In the back of the room, a group of students listen to a cassette recording of a story book. At another table, a group of students takes out their "journals," white lined

paper covered with blue construction paper and stapled together. Using crayons or pencils, students are drawing pictures and writing in their journals. One girl draws a picture of a dress with a caption underneath: "A dress I like." Another girl is busy writing a two page story about an ice skating trip she had recently taken with her dad and his girlfriend. She told me that she had to show the girlfriend where the bathroom was since she had never been there before. A boy is writing underneath a picture of a kite. "I like to biy kites and fly them." Another boy had just finished writing, "No! Go! Joe! Mojojojo!" At the other side of the table, a group of boys practice making five pointed stars without picking up their pencil. When Linda rings the bell for recess, the girl writing the ice skating story reads me a "Clifford" book and alerts me to all the "funny parts."

Linda's Question

Linda shares many of Carrie's ideas about students and teaching practices. Like Carrie, Linda seeks to understand how her classroom environment influences students' potential for academic success, and how their experience in her class is likely to influence their future academic career. However, rather than focusing on the conditions that affect students' willingness to work and creating opportunities for students to do work they choose, Linda believes that students' experience of success is contagious. She tries to set challenging tasks where students will succeed so that they will feel increasing confidence in their abilities to learn on their own. Linda questions whether her students feel confident in their ability to work independently, and whether the activities they do promote or hinder the development of feelings of self-confidence.

An early example of this commitment is in her rationale for pursuing a Master's degree in educational psychology. As she described it, her reason for choosing this particular degree came from a desire to understand why some of her third graders were losing their motivation to succeed:

> I remember I really wanted to focus on . . . why all of a sudden it seemed like a lot of times third graders are just, you could just see the apathy start. You know, already that young . . . . I was wondering why and what was happening in their lives or what was happening in school or the combination of things. (3/10)

This attitude exemplifies Linda's consistent focus on conditions--including a combination of events both inside and outside of school-- that might explain why some students develop apathy.

Linda believes that students need to feel a sense of self-efficacy: that with effort, they have the ability to succeed. She believes this feeling will help her students continue to work hard and learn even when the work is difficult. When she started to think that her classroom was not designed to help students feel this way, she began to develop a nagging feeling that there must be a better way to teach.

After the lesson described above, I mentioned to Linda that none of the students wrote stories about the groundhog in their journals for the day. She explained that at the beginning of the year students often used the material on the white board as a safety net: "Earlier in the year [the students] would have all been looking at that story I'd written on the white board, and copied it. 'Cause they were just feeling insecure" (2/2). Linda takes the fact that students pursued their own projects as a sign that the students "are feeling more secure, more confident I guess in their own abilities. That's what I want. . . . My

goal is to have them feel like they can, can do it" (2/2). She believed that her students had internalized the confidence to make their own choices and stick to them.

The question of how to promote students' sense of self-efficacy has recently become more prominent for Linda. Like Carrie, Linda has been trained in the New Zealand Literacy Framework. As she was deciding about whether to use the running records or the ability grouping with books matched to students' levels, Linda felt torn. On one hand, she remembered why she abandoned homogeneous ability groups in the 1980's:

> They didn't have equal opportunity or equal access to whatever they wanted to read. It was like . . . you were stifling the kids. Or just telling them, no, you can't. You really weren't. I mean you didn't say it, but that's kind of the message everybody got. (2/2)

She believes that providing access to all the books in the classrooms sends a message to all the students that if they want to read a particular book, they can.

On the other hand, Linda believes that students need opportunities to experience success in reading and writing. For this reason, she said that "It's really important to put the kids together so that you can teach them things that they are ready to learn at their level" (2/2). Choosing books for students to read may ensure that students experience success, but the danger is that students may be uninterested in reading the books she chooses for them.

The fact that Linda feels this dilemma so poignantly highlights the importance that she places on providing opportunities for students to feel successful and experience success. By providing students access to all the books in the room, she promotes the feeling among students that they can read anything they choose. When students maintain

complete control over their own reading selections, they run the risk of choosing books that are far too easy or too difficult. Either situation results in less reading development, so she also recognizes the importance of selecting books more strategically according to student abilities. She resolves the dilemma by providing opportunities of both types: working with groups of students in books at their level, and offering students access to all the books when they choose books to read at home or during independent time.

Linda's Windows

Linda described the day I observed as a fairly typical day for language arts instruction in her first grade classroom at Dale Elementary School. First, the classroom is a relatively unrestricted environment. When the whole class is not expected to be in a single place (e.g. on the floor just before whole group reading time), students choose from a set of acceptable activities. Some students choose to work on math scrolls, others complete activities related to groundhog day provided in their daily packets, others choose from among the bins of books to read. As they go about their tasks, students are free to move to other seats or leave their seats to get materials or supplies.

As reading instruction began, Linda appeared to be listening to what students said and thinking about how she could use their statements to teach particular skills. Each day, she takes one student's sentence and writes the sentence on the whiteboard. She explained:

> If something special happened to somebody the night before or they might be coming in bubbling, we might write about that. Or if I went to the basketball game the night before, you know, I come back in and I'm excited. I might write about that. (2/2)

She listens to the students call out letters to spell the words in the sentence. Then she uses this sentence as the starting point for a short lesson. On the day I visited, she called students' attention to the "oo" combination. The students voices influence what happens in the class.

As Linda read the picture book out loud, she demonstrated the feature of modeling, which she has come to value, especially because of the New Zealand workshops she has been to recently. She said:

> I want the kids to experience some modeling as far as seeing me read, seeing me write. I think that's really important that they see that. I try to do that every day. I want to give them experience where they're doing that on their own independently or with some guidance. I believe they need to do that every day. (2/2)

When the class broke into smaller groups, students had the opportunity to write about topics of their own choosing. Linda said:

> They get to choose their own topics. . . . They can continue a story from the day before or they can start a new one. . . . Sometimes they need to write a picture, draw a picture first to kind of spark their [ideas]. . . . Sometimes as they're drawing then they are thinking of the story as they are drawing.

When they write, Linda allows students to use invented, or approximated, spelling so that they write more without worrying whether their spelling is correct. As she said: "When they aren't worried about whether the word's spelled right or not their ideas flow a lot more" (2/2). As students write pictures and stories of their own choosing, she wants them to feel like they have the ability to express what they want to say. Even though it is sometimes scary to write with invented spelling or to write pictures only when other students are writing words, she expresses genuine interest in whatever students are working on.

When Linda talks to students about their writing, she tailors her conversations to particular students' abilities, and she uses the conversations to determine how much she can push her students:

> There's a few kids, that's about all they can do is tell about their picture. And getting them to even express a story verbally is hard for at least one of my students. . . . And other kids, you just know who needs to be moving along and what kind of things they need to working on and maybe adding more detail. [For example], "I don't think you need to say, 'I like my cat' anymore. I think you can say why you like your cat." (2/2)

Linda's students have choice, and the way they express themselves varies, e.g. drawings or writing stories about their drawings. She recognizes that they do so in very different ways depending on their levels of ability. For some students, being able to draw and talk about a picture is fine. For others, she tries to get them to go beyond simple descriptions to use richer language. These ideas are consistent with how Lucy Calkins (1994) describes writing workshops for early elementary students.

Even though many of Linda's students have not learned how to put their ideas in writing, Linda encourages them to find other ways to express themselves. As described in Chapter 3, Calkins (1994) talks about how helping students write is about helping them lead "writerly lives." Writing teachers do not simply lead students through the writing process; they must also be attentive to students' lives: what they think and care about. The range of student writing in Linda's students' journals shows their freedom to choose topics for writing. Some of the students seemed to be writing personally significant entries, e.g. the girl's story about a trip to the ice skating rink. Other students seemed to be experimenting with language, e.g. "No! Go! Joe! Mojojojo!"

Linda Discussion

Linda's teaching practice is very similar to Carrie's. Her students have multiple opportunities to choose books to read, and they write in journals on topics of their choosing. Like Carrie, Linda has recently begun to group students to offer them books that are appropriate for their reading skills.

This examination of Linda's practice reveals that even though two teachers' practices may be similar, the rationale underlying those practices may differ. Linda's dominant orientation toward attending to her students is similar to Carrie's. She strives to run a classroom where students feel positive about their schooling experiences. However, instead of posing questions to herself about whether students come into school ready to learn or whether the students come to school with the necessary life skills, Linda asks herself whether the opportunities she provides to students help them develop a sense of confidence in their own abilities to take on challenging tasks and succeed. For example, when she moved to a reader's workshop format, she believed that allowing the students to choose what books they read inspired her students to believe that they had the ability to read any of the books in the whole room.

Vera: "What You Want to Know Is What Does a Child Know"

Like Carrie and Linda, Vera is attentive to whether or not her students are engaged with their work. However, she does not seem to pay as much attention as Carrie or Linda to emotional conditions that influence students' engagement. Instead, she looks to the nature of the tasks she sets to understand students' engagement (or lack of engagement). When she assigns tasks that are developmentally appropriate and that allow some possibilities for individual student choice, Vera believes the students are most

likely to stay engaged. She also believes in providing flexibility and choice so that her students will take more ownership of their written products.

Snapshot of Vera's classroom

Vera announces to the class, "Get out your pieces of writing. We are doing Writer's Workshop today. We will start with status-of-the-class." She pulls out a clipboard and proceeds to call out each student by name. As each student responds, she marks the response on her clipboard. "Derek?" "Topic search." "James?" "Draft 1 'Up in Smoke.'" "Amy?" "Topic search." "Melissa?" "Final draft." "John?" "Teacher conference." "Paula?" "Final draft." After all the names are called, Vera announces, "Remember, when you turn in a final draft into the box, I need to see the final draft on top with all the other pieces underneath."

She walks quietly over to a small radio and turns on soft, almost meditational, music. At one set of desks, one student reads another student's writing and passes it back to the author: "Looks good." Two other students, paper in hand, saunter to a group of desks away from the rest. One student begins to write while the other dictates from across the table. Periodically, the writer hands the paper to the other, who reads it and affirms, "Yeah, that's probably what he would do." The student informs me that the two are working on dialogue for a play titled "Up in Smoke" featuring the characters "Chich" (sic) and "Chong" visiting a party and deciding not to smoke. Some other students wander to a whiteboard and place their name under the words "2nd hour" to indicate that they are ready for a conference with Vera about their writing.

Meanwhile, Vera spends a few moments sitting at a desk at the front of the classroom shuffling through student papers. After a short while she circulates around the

classroom and talks quietly with several students. One girl reads over a purple sheet containing a list of different genres for writing. Pointing to one, the girl asks, "What does this mean? How would I do that?" Vera offers a short explanation and concludes by saying "You would decide what you wanted to say and where you would want it to go. Then you'd go through the whole writing process, with several drafts and a finished copy. It would be different than writing another story. You could give it a try and see if it works. If not, then you could try something different." At another table, a girl is working on a concept map entitled "Being a Twin." When the student raises her hand, Vera looks over the concept map and offers, "You have some main points and details. Maybe you could move these parts over here. This other part looks sketchy. I know you have a lot more in your mind than you have on your web, so just jot those down and don't worry about the format for now."

Vera returns to her front desk where she is joined by a student who has brought a paper to the front. Vera looks somewhat frustrated. "I'm confused because I haven't seen this piece of writing yet. I'll go through it now, but do you have any specific questions or concerns that we can talk about?" The student looks through while Vera asks two other students to quiet down. " I don't have any questions right now." Vera responds, "I'll look through this as a final draft and we can conference again tomorrow."

This description gives a brief, but representative, glimpse into Vera's classroom during writer's workshop. Vera's classroom varies widely in content and structure from day to day, although the primary focus is always on writing.[5] Some days consist

[5] In Flat Creek, "language arts" and "literature" are separate classes, so literature is not part of her curriculum.

completely of writer's workshop in which students work on writing of their own choice; on other days the class uses the writer's workshop model to work on essays about subject matter from other classes. Sometimes the students work on formal writing assignments, like composing a business letter, in the computer lab. Interspersed among all these things are units in which the students research different careers, grammar lessons, and lessons on learning styles.

Vera's Questions

Vera asks two types of questions about her students. The first type of question deals with students' writing ability. What are particular students able to do in writing? Given what they are currently doing, what are some areas where they need to develop? Vera always faces the nagging question of whether students are prepared for the next grade level, based on what she knows about the teachers and curriculum at that level. The second type of question deals with writing as a tool for tapping into students' understanding of subject matter. In her self-described role as "pinch hitter" for her interdisciplinary team, she uses some of her writers' workshop time to help students to work through the writing process to prepare essays that will count as part of their tests in math, science, or social studies classes. During these times, she primarily asks herself what students know about these subjects.

During the majority of writer's workshop time, students write about topics they have chosen. Using a process called "Topic Search," the students look through a set of materials Vera provides for them at the beginning of the year. These materials include lists of genres for writing (short story, personal narrative, haiku poem, magazine article, etc.), and questions to be used as story starters. In the vignette above, two students were

writing dialogue while another was preparing to write an expository piece about being a twin. According to Vera, most students choose to write "personal experience narratives."

As Vera guides them through the writing process, Vera always asks herself, "What is developmentally appropriate to work on with this particular student in his or her writing?" As she said, "I think it's real important with kids to look at developmentally what is appropriate for them" (2/24). For Vera, a large part of what constitutes developmental appropriateness in writing is recognizing which skills students have mastered and which skills they still need to master.

This focus on writing skills is driven by the another question: "Will my students be well prepared to enter ninth grade classrooms, given what I know about the teachers and the curriculum?" Vera is conscious of the fact that, as 9th graders, her students may encounter classrooms very different from her own, and she feels an obligation to ensure that they do not enter high school feeling unprepared. She said:

> As an eighth grade teacher I am told that I obviously need to have my students ready for ninth grade, and ninth grade is very traditional from the standpoint that they use a textbook, they do grammar, they do parts of speech. (1/26)

She hopes that the workshop experience will help students master skills of language mechanics, but she worries that they may not be learning all they need to about "the basic parts of language." She believes that writer's workshop is a good way to learn about language mechanics, but she worries about whether the grammar learned in the process of writing will transfer to the more traditional methods used by the ninth grade teachers. She knows that the ninth grade English teachers expect a level of grammatical competence as demonstrated in "traditional" ways that may not include revising a piece of writing through multiple drafts. Since she wants her students to feel like they have

been properly equipped to succeed in these classrooms, she feels that she must emphasize the development of the "very basic writing skills."

Vera's concern about preparing students for ninth grade is a factor of her students' attitudes toward school. Many of her students already struggle with school. She teaches the group of students that have *not* been identified as "High Potential Youth," and she feels that students recognize that they are the "have-nots." She also believes that many of her students do not have a strong support system to help them succeed:

> They don't have a lot of parent support, a lot of them, so I don't want them to go out not being prepared and feeling overwhelmed. So, that's a piece of the puzzle I'm trying to put together right now. How do I get them there without making it, and make it meaningful so it lasts instead of just being redundant? (1/26)

Vera asks whether her students have internalized what they learn so it "lasts" and is more "meaningful" to them. One reason behind the current workshop structure in Vera's classroom is that students are working on ideas they have chosen for themselves so that they will take greater ownership for their written products. Vera hopes that this increased ownership will lead to more lasting and meaningful learning.

Besides teaching grammatical skills through writer's workshop, Vera uses writers' workshop to help students write essays for other classes:

> What you want to know is what does a child know, but sometimes they don't know how to get that answer out. So by taking them again through the writing process which they're familiar with and brainstorming and all that kind of stuff, whether it's Venn diagrams, timeline, whatever, to get their ideas down, it helps. The teachers are very surprised at the quality of answers. (1/26)

In Vera's view, helping children work through the writing process provides teachers with a better window into what students actually know than teachers would get if they simply

asked or gave a test. She believes that "sometimes [students] don't know how to get that answer out," and that the writer's workshop offers a process to help students express their thoughts.

For example, Vera used the writers' workshop process to have students write essays for test questions in science and math. Before students took the statewide proficiency test in the spring, she helped them prepare for the essay portion of the social studies test. In these examples, the other subjects provide the content of what they are to write about, and Vera helps them with the process of writing their thoughts down. During these times, she asks herself, "What does a child know (in this subject area)?" She feels that helping students with the writing process enables them to express ideas that they might have difficulty doing under the timed pressure of an in-class test.

Vera's Windows

The primary window for Vera to gather evidence about her students' is through the products they produce in writer's workshop. Vera is passionate about the value of writer's workshop for helping students develop as writers:

> [Writer's workshop] is what I typically would like to do the majority of the time in language arts . . . I believe that [the writer's workshop is] what kids need and how they learn all how to write, how they learn the language skills, the, everything there is. They learn it best through what they do, and the peer interaction is also a real positive learning factor especially with, well for all students but eighth grade I think even more so because they're so socially involved with their friends. (1/26)

Vera's statement suggests some of Vera's beliefs about teaching and learning. First, Vera's statement that students learn "through it best through what they do" reveals a belief that students' active engagement in a task is the best way to ensure learning. Second, she said that writer's workshop serves multiple purposes, including the

development of "language skills" which include writing, reading, speaking, and listening skills (National Council of Teachers of English, 1996). Since she did not elaborate on her statement that students can learn "everything there is" through writer's workshop, it raises questions about what she means. Does she believe that the workshop is a way for students to learn all of the language skills there are, or was she suggesting that writing is also a tool for learning subject matter? A third idea that seems to be important to Vera is the opportunity for students to interact with one another. More than simply providing opportunities for students to learn particular subject matter, the workshop creates a classroom context which also keeps students engaged through something extremely important to them, connections to their friends.

There are several main components in Vera's implementation of writer's workshop, each of which provides Vera with a particular type of information about her students. These include:

- Status of the class report
- Topic search
- Prewriting activity
- First draft
- Peer conference
- Second draft
- Teacher edit
- Teacher conference
- Final draft (published)

Each of these components is described in greater detail below.

The snapshot above illustrates how Vera begins each workshop day with a "status-of-the-class" report. As she calls students' names, they call out their planned task for the day, such as "topic search," "teacher conference," or "final draft." Each day, some students may be engaged in working on drafts of their writing while others

conference with one another or with Vera about their work. When possible, Vera prefers not to have specific due dates for student writing since she wants to encourage them to produce quality work rather than trying to rush something to be finished by a particular date.[6]

When students are ready to begin a new piece of writing, they do a "topic search," as described above, to decide what they want to write next. Once they decide on a topic or genre, they engage in a pre-writing activity, such as the student's concept map about "Being a Twin," to list and organize their ideas. Then they write a first draft.

After writing a first draft, students consult a fellow student for a "writing conference." Vera describes her vision for how these conferences would be conducted:

> In the peer conference that person is to read their piece of writing aloud to that student. And they talk first of all just about content. And that's a problem, sometimes because they get so caught up on the mechanics versus did I stick to the topic, is it interesting, is my voice clear, all those things. . . . . Another scenario is someone is just meeting with someone for the mechanics. They've peer edited. The other person edits back in another color and they talk about it. (1/26)

After one or more peer conferences, the students revise their piece. The process of drafting, conferencing and redrafting continues until students produce something close to a final draft, at which point they turn their work in for Vera to edit.

When students are ready for a teacher conference, it signifies that they produced the best writing they are capable of without Vera's help. Vera takes the pieces of writing

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[6] This year, Vera has felt the need to impose some due dates since they do not do writer's workshop every day of the week, and also since she feels that if she did not have some due dates, there would be students in her class who would never turn in any work. As she says, "It doesn't agree with my philosophy, but it was a management skill" (3/9)

home and edits that evening to prepare for a teacher conference the following day. She described her preparation for a teacher conference:

> I go through and make corrections, and then decide . . . what skill do I need to talk to this student about right now? And I generally don't pick any more than two or three at a time, depending on what they are. If it's something as simple as you still have run-on sentences, that may be one of the three I choose. If someone's having a difficult time with writing dialogue, that may be the only thing I do, and we record that skill, and that's what we focus on. However, I do correct everything, so that the final piece is supposedly in perfect form, to be what we call "published." I'd like to say we publish more but we don't. (1/26)

As she looks over these drafts and edits them, she strives to recognize both the abilities that each student brings as well as difficulties each student faces. Based on her assessment of these abilities and difficulties, Vera plans a conference to call attention to the skills the student has mastered and to support their learning of a new skill.

The following day, she holds a teacher conference with the student:

> I have the piece all ready and we talk about just in general, I like how you stuck to the topic . . . Always something good about it. Specific. Not just it's a good paper but this is what's good about it. I like how you, I could feel what you were talking about instead of just telling me. Those kinds of things. And then I'll get into, we might even look at the skill list and say, "Gee, last time we worked on putting commas in between compound sentences. I see you've done that. This is a skill let's add to your list." So I approach it from that perspective. And lots of times they'll go, "Oh, yeah I know that." So it's something we write down and they, and we try to reinforce. (1/26)

Vera's conferences with each student provide opportunities to focus on individual pieces of student writing and to speak one-on-one with each student about writing skills that Vera believes that student most needs to develop.

Vera's descriptions place the emphasis for student improvement on skills rather than the content of students' writing. Being recorded in the students' writing folder as well as Vera's records elevates the skills to a certain level of importance. This type of

record keeping may send a message to students that the goal is to master as many new skills as possible. On one hand, this may appear to limit Vera's ability to listen very carefully to what students think about their own writing or to ask them about the content of their writing. Vera is aware of this tension:

> [Restructuring] really is more what we should be focused on than grammatical skills. But we seem to be having still a lot of problems with run on sentences and sentence fragments. . . . Right now that's what I'm focusing on which is a pretty sad thing to say in eighth grade. But I mean with the majority. . . . [Some] kids that are beyond that, like for instance, Lisa who wasn't writing today, we would talk more about structure and how could you, how to maybe add description, how to, you know, get someone to feel it more than just tell them about it. Um, endings are a big thing. Do you have an ending? How are you going to tie this all up? Those kinds of things. So, yes, that's really what we focus more than the grammatical errors. The grammatical errors I hope in draft two, when draft two comes to me, those should be taken care of, but they're not. And I really should be focusing more on [things besides grammar]. I do with maybe about a third or them and the other two-thirds I don't. Because you can't read it, it's so poorly written. (3/24)

At any point before the mandatory teacher conference before the final draft, students can sign up for conferences with Vera:

> Now at any time during that process they can sign up on a conference to come and see me about what they're working on, so if they have questions or if they're working on a piece and they just don't know how to say it, they're always able to conference with me. . . . I'm constantly walking around when I'm not conferencing. To be honest, most of my time is spent conferencing. (1/26)

In the classroom snapshot above, Vera was frustrated because the girl had signed up for a conference without a particular concern or question to discuss.

Vera has also built in opportunities to assess and teach students' understanding of grammar:

> I've taken them through some parts of language, just basic parts of language because they don't know them and I've tried to do that through mad libs. We did

> Halloween mad libs[7], put them in a book and the kids probably learned more from doing that than anything. And I will be working on parts of speech more. That's a big part of the ninth grade curriculum. My problem is, I don't know how to do it and make it interesting, other than through writer's workshop. I don't. I really don't. It's a puzzle for me. And I don't believe I should waste a lot of time on it. However, I don't want them to go up [to the high school] and fumble either and feel inadequate. . . . I don't want them to go out not being prepared and feeling overwhelmed. So, that's a piece of the puzzle I'm trying to put together right now. How do I get them there and make it meaningful so it lasts instead of just being redundant? (1/26)

She feels obligated to her students to ensure that they are prepared for their upcoming school experiences, and she is not convinced that they will be best served by more time in writer's workshop. However, she expressed a belief that students learn best in settings like writer's workshop, where students have greater choice and ownership, greater opportunities to interact with one another to sustain their engagement, and more possibilities for learning language skills in the context of writing that they for which they take ownership. Vera's current way of managing this dilemma is to intersperse grammar exercises with extended periods of writers' workshop.

Occasionally there are other parts of the workshop, such as "mini-lessons," and sometimes she has her students offer "mini-lessons," where they might reenact a writing conference that Vera had seen between them the day before.

Vera's Documentation

Vera is very efficient at collecting documentation to answer the questions she poses about students. In particular, she keeps detailed lists of what students have learned

[7] Mad libs are comical word games composed of stories with missing words. Under each missing word, a part of speech is indicated. One person reads the story and asks another to provide a word for that part of speech. When all the blanks are filled in, the story is read as a whole.

how to do and what they are still working on. She has a genuine interest in being able to look at student work to determine whether they are making progress.

Vera primarily relies on the written documents her students produce. The students in Vera's classroom produce a wide array of written material including short stories, plays, nonfiction essays, magazine articles, and brochures. Vera informed me that most of the students choose to write "personal experience narratives." Since I did not talk directly to most of the students, it is unclear how much ownership they feel for these writing tasks.

When they turn in a final draft to her, they must also include all of the previous drafts as well as the pre-writing activity. When she asks for the status of the class report at the beginning of the period, she writes down what each student is working on, so she has a record over time of what students are doing from day to day.

At the beginning of the year each student receives a writing folder which contains photocopied pages listing story starters, possible writing genres, reference materials on writing style and language mechanics. Students keep drafts of their current writing projects in this folder. At the back of the folder students record the skills and spelling words that they have mastered or are developing.

Vera Discussion

Vera asks questions about what her students know and are able to do. She tries to understand what they are capable of in their writing as well as what they know about topics in other subject areas. The opportunities she makes available in her practice give her windows that enable her to get insight into these questions.

To make sure she gets an accurate portrait of what her students know, she provides them opportunities and time to work on projects of their choice. By allowing her students to choose their own topics, she creates opportunities for students to take ownership for their work. She acknowledges that different students work at different paces and that authentic writing does not often happen on a particular schedule. Implicit is the notion that students will work harder on a piece of writing in which they feel invested.

As students pursue individual projects and work at their own pace, Vera uses one-on-one conferences to gauge their progress as writers and to tailor her instruction and conversation with each student more than would be possible by teaching writing lessons to the whole class. Using her system, Vera can help one student learn how to punctuate correctly while working with another student on developing voice and using more interesting, descriptive language to convey ideas. Individual conferences enable her to deal with students' difficulties as they are encountered in the process of trying to write something personally meaningful.

Her confidence in the efficacy of this approach is strengthened by her belief that students learn things when they are ready to learn. She says:

> I guess my philosophy's changed that schools shouldn't be set up for schools; they should be set up for where children are at. And I don't think we did enough of that years ago. I still think that's a problem now. We don't look at what children need, [and in the past I realized], "Wow, we're asking these kids to do something that they're just not ready for." And I guess an example I give is, kids learn to walk, crawl, talk, when they're ready and I think we need to look at that throughout a child's career in education a little bit more. Doesn't mean you can't challenge them, you do sometimes . . . (1/26)

Since most of the workshop time is devoted to individual conferences, Vera is able to help students work on particular skills when they are ready to learn those skills. Readiness is, in part, dictated by students' choices.

Although Vera seeks to aid in her students' development by providing appropriate tasks, she does not simply "follow the child" (Lensmire, 1994) without taking any direct control of the process. In the passage above, Vera hinted at her control over the process when she said "doesn't mean you can't challenge them." Her structuring of the writer's workshop, her control over the conference, and her imposition of due dates this year are places where she directs significant parts of the students' work. She believes there is such a thing as being "too developmental." Describing some of her fellow teachers in the past, she says, "Some people were much more developmental than I felt and didn't take kids far enough" (2/24). In other words, Vera thinks that people who are "too developmental" rely too much on their sense of what children are ready for that they run the risk of not pushing them hard enough to learn new things.

For many of her students, Vera's directiveness means focusing on mechanics. Vera's focus on language mechanics and grammar may come from ideas about stages of writers' development or from her sense that this is what they most need to be prepared for high school English classrooms. Since many of Vera's students struggle with writing, she finds herself paying attention more to the flaws in the language mechanics and spending more time helping students improve those skills. This view holds writing skills separate from the content of what is written. Though students are free at any time to sign up for a conference when they have a specific question, Vera only focuses the teacher

conference on the content of students' writing after they have produced a piece of relatively error-free writing.

Like any teacher, Vera makes choices about how to spend her time in class and out of class. The logistical task of managing twenty or more students engaged in different tasks with different timetables for completion during a single class period presents a formidable challenge. Working with over 120 students each day makes it impossible for Vera to hold extensive individual conferences with students about the content of their writing. Like Lipsky's (1980) "street level bureaucrat," the demands of the students (i.e. to correct spelling and mechanics, to revise content, to restructure their writing) will always rise to meet the supply of assistance she can offer.

To manage this tension, Vera has developed a set of systems that allow the workshop to function automatically while she works with individual students. Students all seem to know exactly what is expected of them, what they need to do next, and at what point they are in the "writing process." This smooth functioning is facilitated by the familiar patterns and vocabulary of each workshop day. When Vera tells the students they will do "status of the class," students understand that they are expected to use a set of shorthand words, or codes, to tell her where they are in the process of working on a current piece of writing. The predictable patterns of what it means to be "topic searching," "drafting," "conferencing," or "editing" give Vera and her class a quick way to communicate what they are doing to one another. The steps in the process and the procedures that the students follow seem well rehearsed and internalized by all the students in the room. Lucy Calkins (1994) argues that predictable and simple structures, as in researcher's laboratories or artist's studios, produce the most creative environments.

Vera's choice to focus her attention primarily on individual pieces of student writing and the one-on-one conferences place greater responsibilities on students to help one another. By stipulating particular steps that students must go through before a teacher conference, Vera ensures that students will have progressed through more than one draft of writing and had some conversations with fellow students about the writing. Vera can then decide whether to talk mostly about mechanics or content. By taking student papers home, editing them and choosing a conference agenda, Vera ensures that the limited time she can spend with each student will be tailored to individual writers' difficulties.

Vera places great faith in the ability of students' written work to tell her something about what they understand or do not understand about writing or about a particular subject area. The written products in Vera's classroom have gone through multiple revisions and the student has devoted significantly more time to it. Vera accepts these polished pieces of writing as a more valid measure of what her students actually know and are able to do.

Vera's decisions come with costs. Like Carrie and Linda, Vera juggles attention to individuals with attention to the whole class. By spending the bulk of her teaching time holding conferences with individual students, Vera misses any chance to initiate or facilitate conversations among the whole class about their writing. Except through peer conferences, there appear to be few opportunities in her class for students to share their writing with one another or with a broader audience. Vera provides an instance of how spending so much time individually with students limits her ability to work on the development of the whole group or moderate the interactions among students. It is

unclear how much this focus on individuals inhibits Vera's ability to launch students on what Lucy Calkins calls "important endeavors" (Calkins, 1991), or pieces of writing that students are deeply invested in.

Vera's questions about what her students know and are able to do lead her to a particular structure for her writer's workshop. She creates structures that she hope will stimulate students to embark on writing projects they care about. The structures automate the flow of the workshop while allowing her to spend time doing what she believes is most productive--conferencing individually with students about their near-final drafts. The primary information she gathers about her students is in the form of their final drafts, early drafts, and pre-writing activities. While these provide her with one view of her students, they inevitably limit her ability to spend time doing other things that would help her answer different questions.

Michelle: "I need to teach the whole child"

Michelle considers it significant that she took her undergraduate degree in child development as opposed to the straight elementary education major that many of her peers received. This background helped her focus on the importance of paying attention to the "whole child," not just the curriculum she was expected to teach:

> I was not happy just teaching curriculum. I was never happy teaching curriculum. I said this is whole child. I need to teach the whole child . . . I need to teach the curriculum but I have to teach it in a way that matches with the child I'm working with. And maybe in high school you can say this is the curriculum and these kids are all ready to learn it and I'm going to give them this information that they need to know. But when you are working with five and six and seven year-olds, who they are makes such a big difference in how you approach them (3/30).

For Michelle, teaching the "whole child" is different than just teaching the required curriculum. Teaching the "whole child" requires that she be responsive to the things her

students themselves want to learn, and what they are thinking about. In keeping with this perspective, she said that what she notices about her students and how she uses the knowledge she gathers have evolved over the years. In particular, she has improved her ability and inclination to figure out what her students are interested by listening more carefully to what her students *say* in whole class discussions and in conversations with one another (as opposed to inferring things based on their behavior). Like Carrie, Linda, and Vera, she has discovered that increasing opportunities for students to make independent choices and to work on projects connected to their interests has reduced many management-related concerns.

A prominent feature of Michelle's class are integrated units of study, neatly woven quilts stitched from a combination of her own and her students' ideas. She provides a wide range of opportunities for student expression as they write stories of their own choosing, pursue questions of their own asking, and make personal connections to literature they read.

Snapshot of the classroom

Michelle's multi-age class of first and second graders is in the middle of a two month geography unit. On one shelf in the room there are rocks, sandwich bags filled with dirt and sand, and books about the desert landscape. Next to each item is a piece of paper with a handwritten description of the item nearby. In another corner of the room there is a book display shelf filled with books, some reference and some fiction, about caves. Their difficulty level varies from easy readers to "adult-level" reference materials.

Michelle walks to the back of her classroom and sits in a chair next to a podium, surrounded by a circle of child-sized benches. She begins clapping, snapping, and

chanting the names of the children in the room. Students around the room move to the circle, and as each new student joins the group, those already seated call out the name of the student. Eventually, all students are seated around Michelle, snapping, clapping, and chanting.

After all the student names have been chanted, Michelle asks, "What happened the last time we talked?" The students eagerly raise their hands to explain that Papa had discovered a set of prehistoric cave paintings, but the professor from a nearby town had refused to come and look at them. Michelle continues with a series of questions about Maria's Cave, the story she has been reading aloud to them. She asks, "Why didn't the professors believe Papa?" referring to the fact that the professors initially refused to investigate the cave paintings, believing they were a hoax. Students offer possible answers: "They didn't think the paint would last so long," "They didn't think people back then could have painted that," "Um, um, um, it's hard to change your mind. The professors already thought they knew a lot."

Michelle thinks aloud, "I'm still wondering why the professors wouldn't come." A student responds, "Why would the professors say they didn't believe Papa when they don't even know what happened?" Unprompted, one student announces that last night, he had watched a movie where two boys who had been digging in their back yard found a caveman frozen in ice. Michelle responds, "Someone made up a story like the one we're reading. Do you think someone frozen would wake up? That could be your next research question."

Michelle reads the few concluding pages from the short chapter book. As she reads, she shows students that there is a space between two parts of the text, indicating

the passing of time. On the few pages with pictures, she shows students the picture. When she reads the word "skeptic," she types it into a hand-held electronic dictionary and reads the definition for the students. As she reads the story, students frequently stop her to offer comments and raise questions. After she concludes, she tells students how the caves have now been closed to the public to preserve the paintings.

She announces to the class, "Now, I want you to talk in your book clubs about what you would do or how you'd feel if you were Maria and they had learned that the caves were real. Take about 5 minutes." Students quickly move to four corners of the room in groups of three to five. As students talk, Michelle moves around the room asking them questions related to her original prompt.

After about five minutes, the students gather again in the back corner. Michelle displays a sheet on the overhead with eight different boxes labeled reading book box, handwriting, listening post, guided lesson, writing draft book, spelling, poems, and blank. She circles "writing draft book," "spelling," "book response," and "guided lesson," and writes the words "have-to" underneath them. Underneath the remaining ones she writes, "choice." She tells their students how long they should spend on each "have-to" activity, after which they can work on "choice" activities.

Michelle's Questions

The primary question that Michelle asks about her students is, "What are my students thinking *about*?" She tries to understand how her students make personal connections to the topics of class study, and what further questions are stimulated for them. She seeks this information not just to determine whether the content she teaches is engaging or to learn whether what her students understand, though these are important to

her. She relies on this information to construct a curriculum around the interests of her students while simultaneously covering the required district curriculum. As she said:

> I want my kids to have ownership. And if they are going to have ownership in this, the ideas have to come from them. So now it's to the point that the ideas flow from them. (3/8)

Michelle considers it important to know "who her students are" to decide how to teach them. Although this has always been her position, she has changed her teaching over the years to learn more about "who her students are" and to base her teaching on this knowledge.

A second type of question Michelle asks is "what are these individual students ready to do?"

> Once you're no longer following somebody's teacher's manual, you have to look at the kids and say, "OK, these are my kids, these are what they know, this is what they don't know and how can I best meet that?" (2/22)

Michelle maintains different expectations for her students depending on their current ability levels, as in the case of her writing instruction:

> I ask more of the older kids. Knowing what they are going to go on to . . . At the beginning of the year I'm just wanting [a particular first grader] to get a picture down and be able to tell me about it and then adding words to it. And as they go on, then I expect more out of their stories. And the second graders I'm struggling with them right now because I see them being able to very sufficiently being able to put down their thoughts on paper. . . . But some of [the students] have gone beyond that and have been able to show that voice and variety in a story that I'm looking for. So I guess I'm struggling with what can I do as a teacher to make them be able to take that step. (2/22)

Michelle's modification of expectations may be in part due to working in a multi-age classroom, especially at the first and second grade level, where children's literacy abilities develop at different times.

Finally, Michelle asks questions about how different classroom structures influence students' abilities to learn. For example, she says that she did a "little experiment" in which she allowed students the option of whether or not to study their spelling words during choice time. She had thought that "the time they spent practicing at school was mainly chat time" rather than productive learning time. She discovered the following week that most of the students' did much worse on their spelling tests. As a result, she has decided to make studying spelling words a requirement during independent time in her class.

Michelle's Windows

Michelle described herself as "a whole language teacher that does a whole lot of explicit teaching" (3/8). She said that she has turned a lot of the "work of learning" over to the students while she has adopted more of a facilitator role.

> The big switch from [the beginning of my career] is [the students] have taken over a lot of the work of learning . . . I was complaining about that I was doing all the work. Now I'm am doing all the organizing and facilitating and it takes me tons of time getting everything ready so that when they step in they can go to work. But when they're in here, they aren't just, they aren't doing things like for me, I mean for me in the aspect of, "OK, I've got to fill out this worksheet for teacher, got to do this worksheet for teacher." And they don't care what they get on it. They are just, "I got to do it." . . .[Now] they take a lot of ownership in it which has alleviated a lot of that management type behavior, naughty behavior, as kids are trying to get out of doing work.

Getting her students to take ownership and being ready does not mean that they do whatever they choose all year long. She structures her classes to create conditions that facilitate student ownership of their work. Michelle adopts what Lytle and Cochran-Smith (1999) call "inquiry as stance" by experimenting with different methods of

assessment and other forms of data collection. She uses this information to determine what works and what needs to be changed in her classroom.

Thematic Units. Michelle's year long curriculum revolves around a number of large themes in science or social studies integrated across all the subject areas. In the vignette above, Michelle was in the middle of a geology unit, which had taken the form of a class inquiry into the structure of caves. To launch the unit, she read aloud the book Maria's Cave, about a young girl who discovered cave paintings. This provided students with the experience of listening to a book unfold, chapter by chapter. Michelle made this a whole class activity since most of her students are not competent enough readers to read a whole chapter book independently.

Throughout her reading of this book, Michelle had whole group conversations about the book, and the students were also assigned to small groups to discuss particular questions about the book, such as the question she posed at the end of the vignette above: "How do you think Maria would have felt?" These small group discussions are modeled on "literature circles" that Michelle has studied (McMahon and Raphael, 1997).

As her students listened to and discussed the book, they became more interested in caves. Michelle filled the classroom with books about caves--including fictional stories as well as reference materials at a range of difficulty levels. The students pursued independent research projects according to topics of interest to them. For example, some students learned about temperature zones in the caves, the geological formation and structures of caves, and the animals that live in caves.

As a culminating project, the class built a large-scale model of a cave system using refrigerator boxes to illustrate what they learned. The model illustrated the various

habitats within the cave, the types of animals that lived in the cave, and the geographical structures inside the cave. To show what they learned, Michelle's students gave tours to the rest of the classes in the K-5 school.

Michelle has developed a method for helping students keep track of information they gather in books, even though they may not have acquired great proficiency in writing. She calls this method the "Double-I M Strip," which stands for "Individual Investigational Model Strip." These are strips of paper on which students write facts or information they find interesting in the books they read.

> The book I read I always put a magnifying lens in it with a color and a number. And so when they are writing down their information, they put that same coded magnifying lens and number on their strip. So then when we get together to view their strips, we'll know their information came from this book because we'll do that all through our unit that we are investigating. So there will be, you know, a dozen different books that they'll be gathering information on.

This coding system for taking notes allows students to refer back to their original sources of information when they are working on individual projects. It also becomes useful when disputes arise about the accuracy of information. Michelle gave an example of this:

> I remember [one student] writing about a wasp that was stinging some other bug. And the kids were, "That's not possible." And he says, "It is too." . . . So he went and got that book and then he showed us the page he had gotten the information on. (2/22)

As Michelle's students gather information about a specific area of interest and take notes in this way, they reveal something about what interests them. Allowing students to gather this kind of information, and providing the resources necessary for this research, enables Michelle to learn about what interests each child. In whole class meetings,

Michelle provides a forum for students to discuss what they have each learned individually.

In the example above, Michelle sets the general theme--geology--and uses literature to direct her students toward a particular topic--caves--which she has learned through experience will be engaging for first and second graders. Within these structures, she leaves great leeway for the students to pursue areas of interest to them and to decide as a class what the culminating project will be.

The relationship between Michelle's goals and student interests is quite complicated. She said:

> Now it's to the point that the ideas flow from them. But I can't really, I wouldn't really be honest if I said they just popped out of the blue. I definitely set the stage so if I want them to notice something, I have orchestrated it ahead of time so that they are going say, "Ah, can we do this?" . . . . The ideas came from them, but I definitely gave them hints along the way. . . . So it's that orchestrating that's all behind the scenes so that they feel that this was their idea, their ownership that they wanted to do it. They asked to do it. But I was expecting it to go that way. (3/8)

Based on previous students' interests, Michelle knows that her students are likely to be interested in caves when she begins the geology theme. Half of her students each year are returning to her classroom, and most of the others have seen the kind of large-scale projects she has done in the past. Students know that they will create large-scale projects in Michelle's class, so they offer suggestions similar to what they have seen in past years. This may sound as though Michelle is just deceiving her students into believing the ideas come from them. However, this is not true; in theory, the students could have chosen other types of large scale projects, like a life-size model of something else, a mural, or a

play. Michelle allows this weaving of her own planned curriculum with the student interests through a careful structuring of the daily language arts time.

Daily Structure. Michelle's language arts block is divided into two portions: a "focus lesson" and "independent time." In the example above, Michelle used the focus lesson to finish reading Maria's Cave because she wanted the students to do book responses during independent time. Michelle thinks of the focus lesson as a time to do something that is applicable to all of her students.

> It's usually not some real small finite skill. It's usually a focus lesson on something broad enough that it's appropriate for all of my kids from six to nine years of age. Something that all of them can use. (2/22)

Some examples she gave included students demonstrating a peer conference for the whole class, talking about descriptive words, or discussing a particular strategy in writing like how to do a story map or a book response. On other days, she reads an informational book and asks students to fill out a "Double-I M Strip" with a piece of information they learned.

The second, much longer part of the language block is the "independent time." To structure this time, Michelle goes through "the plan" with the whole class:

> The plan is so that they organize their time because otherwise they might spend all their time on their favorite thing to do and never get to the other things. So we make the plan so they'll know what my expectations are for them that day. (2/22)

Components of the plan include writing responses to books they are reading (individually or as a whole class), writing in journals, studying spelling words, publishing, or doing an activity of their choice. Students are expected to complete the required activities ("have-to's") first, and if they have time, they can work on optional activities.

Writing is included in many of the available activities during independent time. Many students choose to write in a "draft writing book," in which they write stories in a marble composition book. In part, Michelle uses the writer's workshop to develop students' spelling abilities. Even though she has been told at recent district in-service programs that she should teach all the spelling rules and all the exceptions, she feels skeptical that these methods will be effective:

> I had this whole in-service on phonemic awareness and how we are supposed to be teaching these hundreds and hundreds and hundreds of isolated spelling skills and phonics skills which I realize that in order to read well, you need to know those phonics. You need to have that phonological development. And that's a key component to reading well and being a strong reader. But yet I'm torn with this in-service thinking, "Yes, that's important, but by presenting and teaching isolated skills on sounds or isolated skills on phonics is not going to make sure your learners are learning it." I know from my experience in order for learners to learn it they've got to be engaged with what we are doing. And they've got to see this is meaningful and the reason for them to do it. (2/22)

Her current approach to spelling is to ask the whole class if anyone had trouble writing one word during their draft writing time. Together the class will break up the word into sound chunks and spell it. Similar to Ashton-Warner (1963), who wrote about her system of "organic writing" by structuring children's earliest literacy experiences around words with intense meanings, Michelle feels that her students care about spelling these words because they are "somebody's word." Other students know that might be a word they'd want to spell some day. Individually, she chooses words from their writing projects that they have difficulty spelling, and then she chooses other words which have similar "sound chunks."

However, writer's workshop is not for spelling alone. This large theme is also integrated into other areas of her language arts instruction:

> Everything is so integrated within the big theme that we are working under so that . . . a lot of them are writing about cave stories right now. Because we are talking about caves or adventure stories. (2/22)

Since many students write about a similar topic or a similar genre to the class theme, these draft writing projects give Michelle additional insight into her students' ideas about the subjects they study.

After students draft and revise, they are ready to publish. Michelle asks them to edit for capitalization and punctuation and the next day the class is in the computer lab, students type their stories on a computer and run spell checks on them. They print the stories and place them into a book, which they illustrate. Using wallpaper samples and cardboard, Michelle binds each book separately and places them on a bookshelf in the classroom library. After publishing a story, each student reads it aloud to the class from the "author's chair."

Reading and Responding to Literature. Reading and responding to literature in a variety of ways is another main component of Michelle's classroom. Students have four different opportunities for reading literature: a) through listening to Michelle's reading of the chapter book that goes along with the large theme; b) through at-home reading and discussion of shorter picture books that also go along with the theme; c) through independent reading time where they read books of their choice by themselves or with a partner; and d) through guided reading where students of similar reading ability meet with Michelle in small groups to read books that Michelle has strategically chosen.

As described above, Michelle reads longer chapter books to accompany and stimulate student interest in her larger units. Michelle also wants her students to

experience literature designed to be read in a single sitting as well as longer chapter books:

> What I have discovered with the picture books that my kids can read with their parents, and what I can offer them through a chapter book are different. Because when you are reading a picture book . . . the experience is real short with that picture book. Because it's not very big. And one sitting you are done. And the relationship you develop with a book that you come back to over and over and over again because it's a chapter book and the story builds and builds and builds is a lot more powerful at investing in a conversation than a picture book. (2/22)

By offering chances for her students to read the shorter books on their own and with their families, students can read and respond to something short. Even though most of her students are not yet ready to read chapter books, she provides them the opportunity to be invested in a story that "builds and builds and builds" by reading it aloud.

To prepare students to read short chapter books at home with their families, Michelle chooses a set of five different picture books that match in some way with the overarching theme of the class. One day she introduces all five books briefly to the class, and students rank the books according to what they would like to read the most. Michelle looks at their lists and divides the students into groups. She tries to give students their first choice, and she guarantees that they will not be assigned to their lowest choice.

She sends the children home with a large ziplock bag, in which she places a copy of the book, a pack of sticky notes, and a list of suggestions to parents about how to discuss the book with their children. Students are expected to read the books with their families and use the sticky notes to mark places that were interesting, where they made personal connections, or things they would like to share with their friends. Sometimes the parents write on the sticky notes to remind the student of the connection.

Another reading opportunity occurs every morning when students read books in their book box. Every student has a shoebox-sized plastic box which holds books they are in the middle of reading as well as familiar books they have read many times. During book box time, students read by themselves or with a partner. Michelle described the importance of partnering students for this reading time:

> I like to partner them up with somebody who is a little bit better reader than they are . . . . When they're reading with their partners a lot of times they will read a book that is a little bit hard for them. It will be at their frustration level. But the fact that they are reading it with a buddy who can read it easily allows them to read a book that maybe they couldn't successfully read by themselves. (2/22)

The last type of reading opportunity occurs during the "independent time" of each day's language arts block. While the majority of students are working on "the plan," Michelle meets with small groups of students to do "guided reading lessons" at individual instructional levels. Michelle describes what she did during one particular guided reading lesson:

> One group was doing "Noisy Breakfast." That was a picture walk through the story and then they worked on reading it to themselves. Now tomorrow when we come back, we will read out loud together. I don't do a lot of [round robin reading]. I do a lot of having them reading with me at the table so I'm there to support them. And a lot of chorus readings where we all read it together. Or we'll break it apart in parts and you read this character's part and you read the story teller part and you read that character's parts. The reader theater type thing. (2/22)

As Fountas & Pinnell (1996) describe, Michelle offers opportunities for students to read books at their comfort level as well as books that are more challenging for them. Sometimes they read alone, and other times they are assisted by a more able partner or by Michelle when she facilitates the small groups.

Like the opportunities that Carrie and Linda provide for their students to make choices, Michelle offers opportunities for student choice of reading books. Michelle said that the most important reason for offering such choices is to provide students with more opportunities to make personal connections to literature and to discuss these connections with one another:

> Part of book, of my literacy program is also responding to . . . literature. Because I love reading and I want them to understand that reading isn't just calling out words or isn't just learning the words. That you make a personal connection or response for books and so that's why the book club is such an important part. Because it goes beyond just the comprehension which is drilled in because of the [state proficiency test]. (2/22)

Michelle offers a variety of opportunities for students to respond to all the literature they read. In small groups, students discuss the chapter books that Michelle reads aloud. They also have book talks that accompany the smaller picture books they read with their families. They talk about books as they read them with a partner or in a guided reading group.

Michelle tries to help students talk about books in ways that go beyond plot description to making personal connections or raising questions about what they read:

> We talk about links a lot. So they might have links. This is where I made a link with the story. Or puzzles. The things that have puzzled them in a story. Or discoveries. New things they did not know that they learned in the story. And they share those, that with their book club in their book club talk. (2/22)

Michelle models and scaffolds student discussions. For example, sometimes during a focus lesson she uses a fishbowl technique, where she asks her second-year students to demonstrate a book talk for the rest of the students. She has also experimented with different ways of organizing the sequencing of activities for book discussion groups. Many descriptions of literature circles, or book clubs deal with students in upper

elementary grades (McMahon & Raphael, 1997). In these programs, students usually write some form of "literature log" or written response to a book before discussing the book.

Michelle discovered that when her students wrote book responses before discussions, they read exactly what they had written down and no more. The conversations were finished quickly as each student read what s/he had written. There was little or no interaction among students. Michelle believed that the students had such difficulty getting their thoughts written down that they became attached to it and only wanted to read it just as it was. This stymied any attempts to get fluidity of thought from them. Now, instead of having them write beforehand, Michelle has them write after their discussions.

The book clubs and the various types of response to literature are ways that Michelle invites students to share something of themselves, and to share something about what they are thinking in response to what they are learning. To make a personal connection with a story, it is necessary to bring in things that involve you personally, and find ways that they relate to the book.

Michelle's Documentation

Michelle gathers information about her students in a number of different ways, and she uses this information to draw conclusions about individual students and to make decisions about how to teach the whole class. This information includes audiotapes of student conversations, documentation of students' reading, and students' written products.

Audiotapes of Student Conversations. Michelle believes that what children say is a crucial tool for children to learn as well as an important way of understanding what they are learning. She wants to create opportunities for "good" talk in her classroom as a way to make sure they're learning things. As a result, one of her main forms of documentation about students are audiotapes of their conversations with one another. When she first began her developmentally appropriate kindergarten program, she began to use a tape recorder as a way of documenting students talk.

> I walked around with my little cassette player taping all their conversations all the time. And as they were building patterns or doing things, I'd ask them questions and it'd be all on my tape. And I'd go home at night and transcribe all my tapes and put them in their little assessment portfolios. (3/8)

With these early uses of audiotapes, Michelle used what her children said as evidence of what they were learning. The children's statements replaced their completion of worksheets; Michelle's transcription of them replaced her grading of worksheets. She had substituted one form of assessment for another.

Tape recording children's voices gives Michelle insight into what her students are thinking about as well as how their ideas develop in the company of other students in the room. She believes strongly in the importance of conversation for helping students build up ideas. However, she also uses what she knows about student conversations to guide her actions as a teacher. When students did not have the kind of literature discussions she thought would be the most productive, she began experimenting with different ways to improve their talk.

Reading Documentation. In addition to student conversations, Michelle keeps several types of records about her students' progress in reading. Michelle keeps a

reading folder for each of her students. Each folder contains: a) a list of books they have been reading; b) a checklist of skills that they feel confident in, skills they are developing, and skills they are just learning; c) a reading inventory; and c) running records.

These folders provide several different types of information. The book lists help students keep track of what they have read, and they also give Michelle a way to keep track of how much and what sort of materials individual students are choosing. The checklist of skills is mandated by the school as part of the report card.

The running records provide Michelle with specific information about individual students' abilities and difficulties:

> Part of the reading program is running records. But I do that in the morning when the kids are doing the partner reading or the silent sustained reading. I will pull I couple of kids apart every day and do running records. So I can see how they are moving along. When they are trying to decode and work their way through the text and what strategies they have.

Michelle uses these records as a way to figure out what strategies she can use to help the students develop new reading skills.

> And other ways I can support them. Because I start right at the beginning of the year talking with them about reading strategies they can use when they are trying to decode a test. So that have you got your mouth ready? Have you looked for a sound chunk you know in that word? Read ahead and see if the rest of the words help. Go back and re read. So that they know when they come to a word they don't know that there are a lot of things that you could try. And I coach their partners, so that when they are reading together and somebody stopped at a word, you don't just tell them or you don't just stop with them. You say, "Well, what's your plan to figure it out?"

Another use of these records is to teach students how to be more effective for one another as coaches.

Student Written Work. A third type of documentation Michelle has available are copies of her students' writing. Since students write in different ways for different purposes, each piece of writing offers a unique perspective.

Michelle reads their draft writing books regularly. When students finish working on a piece, they publish it for the classroom library. These books provide evidence for Michelle to learn what her students are thinking about and what words her students are trying to spell. Frequently, students work on stories in their draft writing books that accompany her thematic unit, so they also give her the opportunity to see how her students are making personal connections with the class theme.

Michelle collects the students' independent projects that are related to the class theme. Leading up to these independent projects, Michelle looks at their "Double-I M Strips" to see what kind of information the students are gathering about a topic. When she audiotapes small group discussions, she can learn about how the students are making connections to the class theme.

Finally, Michelle has access to the students' book responses which help her understand how her students are making connections to literature, an important part of her literacy program. The different types of book responses--making links, listing a favorite part, what puzzles you, or a favorite character--all provide Michelle with insight about how her students respond to the short books the students read independently or with their families, and to the longer books she reads to the whole class.

New Types. Michelle is always on the lookout for opportunities to gather different types of information about her students. She is playful and inquisitive, ready to try something to see what she can learn from it. During my observation, she tried an

activity sheet with one reading group that she had been encouraged to use at a recent in-service workshop on phonemic awareness. The worksheets asked students to identify words according to vowel-consonant combinations. When she asked one group to do this, she realized that one of the students in the group did not know what vowels were:

> So today, we were just playing around. I wanted to see what they would do with those [worksheets] I noticed Amelia didn't recognize the vowels. The other ones could all name how many vowels were in those words and Amelia, she's going "a, e, i" trying to figure out what the vowels were. (2/22)

This is just one example of how Michelle is willing to use ideas that have been recommended to her to figure out new things about her students. Although she may not have been deeply invested in the worksheet as a tool for her students' learning, she wanted to see what she could learn from the worksheet.

Michelle Discussion

When Michelle said that she needs to "teach the whole child," she meant that she needs to find ways to establish connections between her curriculum and the children's experiences. She asks questions about what students care about and what interests them. Using a variety of windows to answer these questions, she offers multiple opportunities for students to express themselves--through their choices of books and independent research topics, through writing about books as well as topics of their own choice, and through conversations with the whole class and with one another.

Michelle tries to learn how students make personal connections to the curriculum, and she develops ways to strengthen those connections. She tries to balance her direction of the curriculum and class projects with her desire to be responsive to individual student ideas. After she uses a unit a few times, she learns more about topics that are likely to

interest students, and she engineers situations where students suggest ideas that she already has in mind. She is also responsive to students' different ideas. For example, during the cave unit, the students were studying bats and where bats lived in caves. As the students studied more about bats, the whole class began to wonder how bats use sound to navigate, and Michelle conducted a unit-within-a-unit on sound and how sound travels.

As with the other three teachers, Michelle faces the challenge of keeping all of the students actively engaged a majority of the time. In her class where students pursue projects independently or in small groups with little supervision from her (since she uses the time to work with reading groups), Michelle is constantly searching for ways to structure choice time. She goes through "the plan" with them and gives them regular updates on what they should be doing. She reads their written work and comments on it regularly. She explicitly tries to develop students' capacity for valuable conversations with one another and she teaches them explicitly how to be good coaches for one another.

Another cost that Michelle faces is that with so many different things happening in her classroom, there may be a trade-off in terms of continuity. As an outside observer, I had a hard time keeping track of all the different pieces of Michelle's literacy curriculum. Even though I was only in her classroom a few times and the students are there every day, they are also only first and second graders. I wondered how well the students were able to monitor their own progress and stay focused on the range of different tasks that Michelle's classroom demands.

Comparison Across the Four Teachers' Practices

When I observed in these four teachers' classrooms, I expected to find similar teaching practices which I could label as "practices in which the teachers pay attention to their students' understanding and use that attention as a guide for their planning and teaching." I discovered some similarities in their teaching practices, but I also learned that each teacher enacted "attention to students" in different ways which seemed to be rooted in a dominant personal orientation.

Each of the four teachers created "rituals and structures" (Calkins, 1994) in her classroom that made the day more predictable for students. In each classroom, students were busy working independently on tasks that they had often chosen for themselves. None of the four classrooms was chaotic as students always seemed to know what they were expected to do next. Each of the four teachers spent time explaining to the class what was supposed to happen next, and then they spent class time reminding students what they were supposed to be doing.

In each classroom, students were provided with opportunities to choose the tasks they wanted to work on. In Carrie and Linda's classrooms, students chose what they wanted to read and write about. In Michelle's classroom they chose what to write about, what to do for a small group project, and what to do during choice time. In Vera's classroom, students chose what they wanted to write. In every classroom there were some opportunities for the students to be engaged in creative writing using some form of writer's workshop. At different times, all of the students were offered opportunities to watch their teacher write, to have conversations about their writing with one another and

the teacher, and to revise their writing through several drafts into a finished piece of work.

In spite of these similarities, each of the four teachers expressed different dominant orientations toward paying attention to their students in their practices and in their comments about their practices. This does not mean that the teachers only pay attention to their students in a single or narrow way; it means that, for each teacher, there were particular questions that they felt were the most important and helpful to answer about their students. In turn, their dominant questions led the teachers to create different opportunities during the day to gather information about their students that they believe will help them answer their questions. Table 4 provides some examples from the data presented in this chapter.

	Questions About Students	Windows of Practice	Evidence Gathered
Carrie	What problems are my students bringing to school that affect their readiness to learn?	Scanning the students' faces at the beginning of the day	Noticing students' expressions, whether or not they speak to her, or other signs of disturbance
Linda	How confident do my students feel in their abilities?	Providing students with opportunities for independent writing and readings books of their choice	Noticing what students choose to write about and what they choose to read
Vera	What are my students able to do and not able to do?	Careful reading of student work and preparation for writing conferences	Evidence of difficulties faced by students in their writing samples
Michelle	What topics interest my students, and how are they making personal connections to the curriculum?	Assigning independent research projects within the class theme	Tape recording of small group conversations

Table 4: Questions, Windows and Evidence Gathered by the Four Teachers

The table illustrates how a particular question appears to be closely linked to the kinds of opportunities each teacher made available to gather information about their students. In turn, the kinds of opportunities they create have implications for how they organize their classrooms and spend their time. I am not suggesting by this chart that each teacher only has a single question or that each teacher's orientation prevents her from asking other types of questions. However, each teacher's description of her teaching usually kept referring back to these dominant orientations that seemed to shape their teaching practices.

Even when two teachers' practices looked similar, listening to each teacher talk about her practice revealed that their rationale sometimes differed. For example, Michelle and Vera both incorporated a writer's workshop into their classroom. Michelle used the writer's workshop to learn about what students' cared about and to choose new spelling words, whereas Vera used writer's workshop to learn about students' writing abilities and to identify skills they needed to develop. Each one of them may have used the writer's workshop to gather other kinds of information about students as well, but in their descriptions of the practice, they gave answers which were consistent with their dominant orientations. Asking teachers to describe their practice gives a look beneath the surface of what classrooms look like to provide some insight into why the teachers organize their classrooms in a particular way and how they use the opportunities they created for themselves.

Chapter 4

Stories of Early Practice: Evidence of Change

This chapter works backwards from these teachers' descriptions of their earliest teaching experiences to describe what the teachers feel they have learned since the beginning of their careers. Although none of the teachers talked at length about her early practice, all described their current teaching practice as very different than their beginning teaching practice. All four teachers began teaching between 1973 and 1977, and the teachers' descriptions of their practice at that time share remarkable similarities. All of the teachers believe their current practice allows them to learn much more about their students than they could when they began teaching.

This chapter attempts to do two things. First, it provides a glimmer of how these four teachers' classrooms may have looked when they began teaching. Since the data is drawn from the teachers' current self-report, it is impossible to describe their early classrooms with any degree of certainty. To give the fullest possible picture, I use the four teachers' descriptions of their earliest practice with an analysis of excerpts from representative textbooks during that period of time. Second, since the teachers' descriptions of their earliest practice represent how they make sense of their past through the lenses of their current ways of thinking, the chapter also offers a glimpse into the teachers' current views of teaching. The differences identified by the teachers provide insight into what the teachers consider to be the most salient and significant things they have learned throughout their careers.

Features of Early Practice

Most prominent in the teachers' short descriptions of their early practice is the ubiquity of the basal reading textbooks and teacher manuals as a powerful shaping influence over each teacher's practice.

> Before when I taught reading groups, way back, . . . this was all basals. And it just was achhh. (Carrie, 2/11)

> Everything was taken out of a teacher's manual, and there were dittoes and dittoes and dittoes. (Vera, 1/26)

> [At the beginning of my career], it would have been a lot harder for me to look at and say I'm doing this well because it wasn't me. I was following the textbooks. (Michelle, 2/22)

One might wonder whether the teachers drew so heavily on these resources because of their inexperience. However, each teacher described how the reliance on textbooks and accompanying curricular materials was typical among the teachers in the schools where they taught. They felt that they were expected to use the materials faithfully; deviation from that mode would have been seen by their principals and colleagues as a shortcoming. Aukerman (1981) claims that "there is an 80 to 90 percent probability that an elementary teacher will be obliged to use [the materials and methods provided by a basal series] in some way or another" (p. 2).

All four teachers described how the basals structured their work with students and limited their creativity. Some of the features of their classrooms influenced by basal readers included: a) organization of instruction; b) students' work; and c) opportunities for student expression.

Organization of Instruction

One difference in the teachers' classrooms is in the way they organized instruction--in the choices they made in their planning, the way they structured the classroom environment, and in their interactions with students. All four teachers discussed the importance of the textbooks in their selection and organization of curriculum in their early teaching. This is consistent with Aukerman's (1981) claim about the role of the teacher's manual in basal reading series:

> The teacher's manual is the instructional heart of the basal reader approach to the teaching of reading. It has been called the classroom teacher's "Bible," because it contains all of the do's and the don't's. Moreover, the best routines and suggestions from countless scores of teachers and reading specialists are collected and distilled by the authors of the basal reader teachers' lesson plans, the result being a somewhat standardized collection of procedures . . . (p. 325)

Aukerman acknowledges that a common criticism of the basal reader approach is that "teachers repeated word-for-word mechanically the routine *suggested* in the teacher's manual" (p. 331). The available data does not allow me to describe how closely the participants followed the recommendations in the manuals, but all four teachers described pressure they felt to follow the texts closely. Linda said, "So that was how we taught. That was the model. That was the way it was" (2/2).

Planning was a much easier task during their early teaching, since teachers followed the sequence of the teacher's editions so closely:

> You had all these teacher's manuals. And you opened up the teacher's manual and you did page 35 yesterday so today you did page 36. And that's just how you taught (laugh). And if you really got creative, you might make some extra worksheet to go along with it or whatever, you know . . . . And you just had all these text books and you lined them all up on, you know, the end of the week and you made your lesson plans by listing what page was next. (Linda, 2/2)

The teachers' (and students') opportunity for creativity or deviation under such a system was restricted. One page followed the next, the teacher used the materials and suggestions provided by the textbook publisher, with an occasional burst of creativity to design a new worksheet. This situation made it more difficult for teachers to pay attention to their students' interests, except maybe to notice what kinds of tasks kept particular students more engaged.

Accompanying this strict sequencing of lessons taught by the teacher, there was also little opportunity for students to deviate from the expected daily assignment. Students' options were further constrained by the practice of ability grouping, which all of the teachers described as a prevalent feature in their classrooms:

> I had reading groups the first year I taught kindergarten. The do's and the don'ts. You know the blue grouping? How you hear the blue birds, the red birds . . . Well, I had that. (Vera, 2/24)

> You're the red group, you're the blue group and you have this basal reader and everybody kind of sat and went around the table and read round robin and it was ability grouped. (Linda, 2/2)

Vera talked about grouping as a structure that limited student choice and required her to move through the curriculum in rigid sequence without regard for what students were ready to do. By following the textbooks closely, she expected children to progress at the same pace through the same material. She was passionate in her description of the consequences of this system for teachers and students:

> I think we didn't, we didn't acknowledge that [children develop at different rates] and . . . we were kind of rude to children sometimes. We expected them to do what *we felt* they were ready for and not what *they were* ready for. We didn't look at them . . . enough as human beings . . . Kids were berated. When I first started teaching if they couldn't read or they couldn't write or, I mean, and it used to always, that was a soft spot for me because I was just never one of those teachers, you know, but I saw it. (1/26, italics mine)

Linda and Carrie also described the homogeneous grouping of their students by ability. They both explained how these grouping practices influenced students' self-esteem.

> What I didn't like about it before when I was [grouping the students by ability] was that kids didn't have opportunities to read other books. . . You're stuck in this reading level and those are the books you read . . . They didn't have equal opportunity or equal access to whatever they wanted to read. It was like you were almost like you were stifling the kids. Or just telling them, no, you can't. You really weren't. I mean you didn't say it, but that's kind of the message everybody got. (Linda, 2/2)

Linda said the restriction to a particular basal restricted what students were able to read in a class. This contributed to a feeling that they were not good enough to read certain books.

Critics of basal readers have commented on the lifeless nature of the reading material contained in many basal readers. Trying to use American-published literature to teach reading to Maori students in New Zealand, Ashton-Warner (1963) described the literature in these textbooks as emotionally flat, filled with nothing that students could relate to their lives or react to in any powerful way. She believed this made it difficult to use these books to learn to read since they cared little about the characters or the stories. She experienced more success when she used material the children themselves had written as reading material. Aukerman (1981) notes that this is a familiar criticism of basal readers that existed before the newly published basals of the late 1970's.

This concern is shared by all of the participants, who were skeptical that students were interested in reading literature from the basal readers, even though several writers claim that the quality of stories in basal readers of the late 1960's and 1970's improved from those in the 1960's (Aukerman, 1981; Chall, 1983/1967; Harris, 1972). These writers also claim that there was a "general effort to replace the middle class white

stereotype with ethnic and environmental pluralism" (Harris, 1972, p. 312). Aukerman (1981) harshly criticizes one basal series which he says still has the "dismal, uninteresting, uninspired" story lines and repetitious vocabulary characteristic of basal readers of the 1960's, unlike most basal readers of the 1970's.

One possible way to understand this disjuncture between the teacher's perceptions and the changes these writers describe is that there was an accompanying trend throughout the 1970's to move away from a meaning-emphasis approach toward greater code-emphasis, i.e. more explicit focus on direct synthetic phonics instruction (Chall, 1983/1967; Harris, 1972). In their current practices, Linda, Michelle, and Carrie have all adopted a meaning-emphasis approach in their reading instruction. Since Vera teaches only writing in her current language arts class, it is impossible to know what orientation her reading instruction might take.

During the 1970's, teachers bore sole responsibility for planning instruction. Students had little choice or freedom about particular topics of study or even particular projects within more broadly defined topics. Teachers chose pages for students to read, worksheets for students to complete, and topics to cover at each point. If they followed the teacher guides closely, as most teachers did (Aukerman, 1981), they dominated the discussion and limited the range of possible student responses for any given question. In turn, much of these decisions were already made for the teachers by the textbooks and teachers' manuals, which lay out all the expected "skills" to cover during each story, and at every point along the way. Both student and teacher choice were restricted, and there were few, if any, opportunities to pursue topics of personal significance to individual

students, to the class as a whole, or to the teacher, unless they coincided with the pre-established curriculum set by the basal series.

> Kids didn't really have any ownership in their l-, well I shouldn't say that. Kids didn't have a choice in their learning. Kids didn't have any input really into their learning, and as a teacher I didn't know any different. (Vera, 1/26)

Vera's distinction between "choice" and "ownership" acknowledges that even lack of choice may not have prevented some students from taking ownership. In her previous classes, students had little choice about what to do. Students who did take some ownership may have been successful, but many students obviously did not take ownership for their work.

Michelle described how students completed their work out of compliance or because they had been coerced by the teacher. In the past, she said, the attitude among students was, "'OK, I've got to fill out this worksheet for teacher, got to do this worksheet for teacher,' and they don't care what they get on it." In her current practice, Michelle said that the "work of learning" was taken over by the students:

> It was such a waste of time, it was such a waste of time. So I feel like I am doing things [now] that are much more meaningful for them. I feel like the kids are a lot more engaged in their learning and taking ownership in what they are doing. But it's a lot of work. (Michelle, 2/22)

One consequence of the earlier system for all of the teachers was that they struggled more to keep students engaged in their work and to do what was expected of them.

> Trying to keep the quality of that up and correct them every day, you know, to keep them motivated to think it was important. (Carrie, 2/11)

> [Now] they take a lot of ownership in [their work] which has alleviated a lot of that management type behavior, naughty behavior, as kids are trying to get out of doing work. So that has made life a lot easier (Michelle, 2/22).

Unlike previous days when their teaching was carefully dictated by a basal text, all four teachers currently take a much more active role in shaping the curriculum they teach. In turn, they allow their students more opportunities to exercise choice--in the literature they read, in the projects they pursue, and in the writing they do. These changes led to very different organizational structures, curricular content, and had dramatic implications for how these four teachers conceived of their roles. Some specific changes included allowing students to progress at different rates and re-thinking the ideas of homogeneous grouping.

Student Work

Another feature of all four teachers' early classrooms was the dominance of student work that stimulated no motivation in their students except to please the teacher. Carrie described the work that students were expected to do under the basal reader system:

> Here's a ditto and here's your big piece of paper, copy this off the board and draw a picture to go with it and when you get that done do the ditto. (Carrie, 2/11)

Carrie referred to two common types of seat work: copying things off the board and dittoes. I never asked her to elaborate on the sorts of things that students might copy, but in terms of attending to students, it would be difficult for a teacher to learn much about students' concerns, thought processes, or interests by watching them carefully copying something someone else had written. These tasks might have afforded an opportunity to learn something about a students' handwriting skills or manual dexterity and possibly something about the students' compliance in following directions (even for extremely boring tasks). Carrie also mentioned that she asked students to draw pictures to

accompany the copied work. This type of task allowed students some creative outlet that could have offered some insight into how her students understood what they were copying, but neither Carrie nor any of the other teachers said that they relied on students' pictures as a way to learn about their students.

The second type of work, dittoes, which Vera also mentioned above, might provide a different window on one's students. Ideally, reviewing worksheets and workbook pages completed by students ought to provide teachers with some knowledge of students' understandings and misunderstandings of the subject matter. Basal series also provide tests and other assessment tools to help a teacher identify areas of individual strength and weakness that may suggest ways to address particular difficulties.

In 1981, Aukerman (1981) offered a complete description of the fifteen American basal series being published at that time, which he says "provide a beautiful, varied, and interesting collection of reading materials, unequaled anywhere else in the world!" (p. 12). He describes the components and methods offered by each series, accompanied by reproductions from the instructional materials. Most of the materials are from teacher's manuals and readers, but some actual workbook pages are included. Aukerman (1981) says that basal series "provide pupil workbooks in which the skills are strengthened through practice" (p. 12). Aukerman's description raises the possibility that teachers could also use these worksheets as learning tools to help students develop skills through a cycle of practice and correction.

I examined the reproduced excerpts (which included all elementary grade levels) Aukerman provides from each of the basal series in search of instances where children

might be called upon to share what they knew with the teacher in writing.[8] What was the nature of the window that reviewing student-completed workbook pages or dittoes opened for these teachers onto their students?

The range of workbook activities included the following tasks for students:

- Trace over letters or words written using dotted lines.
- Draw a line through a maze showing all the places a character visited.
- Answer various multiple choice questions: circle pictures of words that begin with certain letters, fill in ovals to answer yes or no, underline sentences that describe a picture, choose the most appropriate dictionary definition for a word in context.
- Complete words accompanied by pictures by filling in a single missing letter.
- Choose which encyclopedia volume is likely to contain a particular topic.
- Complete sentences with a single word from a list of vocabulary words printed at the top of the page.
- Write the correct form of the verb "to be" in a sentence and list the tense.
- Draw a line through the silent consonants. Circle misspellings.
- Complete sentences to demonstrate comprehension of the story. In one instance, students are asked to circle the cause and underline the effect.
- Summarize information provided on the worksheet. In one example, students answer the question "What is the subject of this book?" using a picture of a card from the library catalog.

The majority of these tasks require students only to fill in single letters or single words. Choices are constrained and often provided directly in the form of multiple choice or at the top of the sheet. At best, students may have had to engage in some thinking to complete the worksheets (though this could be disputed); even so, these tasks provide no opportunity for students to explain their thinking or deviate from a clearly delineated set of expected, correct responses. If these tasks are representative of the tasks in the student

[8] Since I only had access to excerpts, this analysis is not comprehensive. However, considering Aukerman's enthusiasm for the basal series, I have proceeded with the assumption that he provided both representative and high quality examples from the textbooks. Therefore, I treat his excerpts as providing the best the basal series offered.

workbooks, the opportunities for students to express their understanding or their interests were severely limited.

This analysis is consistent with the teachers' stories about trying to use these worksheets in their early practice. Michelle described the challenge of learning anything about her students' thinking or understanding using workbook pages.

> I can remember having kids doing reading workbook pages and they'd do them and get them all wrong. So then I'd give them back to them and say, "Well, you've got to do them again 'cause they are all wrong." And they would turn them in again and they would be all wrong. And by then I was down to multiple choice, so it had to be that third one (Michelle, 2/22)

Even if the proper completion of the worksheets forced students to think, Michelle's description suggests that students did not view the worksheets as opportunities to demonstrate their understanding. Michelle hoped that students would learn from their mistakes by giving them the opportunity for corrections. Instead, she found that students, in an effort to finish the worksheet quickly, simply chose different answers until they ended up with a correct answer. Even if they took the assignments seriously, the limited range of responses made it impossible to take corrections very seriously; Michelle described how students could correct their mistakes using the process of elimination. The worksheets were neither powerful learning tools for students nor were they helpful windows for Michelle to attend to her students' understanding.

A similar problem was described by Linda. Linda shared a revelation she had about using a typical mathematics worksheet for students to practice the concept "One More," hardly a powerful mathematical idea. In each row there was one more of some type of vegetable than in the previous row. To complete the worksheet correctly, the children needed only to color in all the vegetables pictured in each row. The math

worksheet followed a predictable pattern that students could easily discern, and her ability to know what the students understood about the idea of "one more" was extremely limited.

Even if students took worksheets seriously, and teachers carefully corrected them to determine where students were making errors, the kind of information that teachers were able to gather from worksheets found in typical basal readers was very thin. In Michelle's and Linda's examples, the only information they could gather about their students was whether they chose the correct letter or colored in the correct number of vegetables. The type of response required of students was so limited that it was difficult to interpret meaningfully.

These four teachers may have had the inclination from the beginning of their careers to attend carefully to their students in particular ways. The basal readers alone did not prevent the teachers from attending to their students. Regardless of the student work assigned, the teachers could always demonstrate attention to the compatibility between their students and the context. All four teachers seem to have made well-intentioned efforts to assign, monitor, and correct large quantities of dittoes. By relying primarily on work designed and suggested by the basal series, the teachers constrained the range of possible student responses and thus limited the kind of information they could gather about their students.

Opportunities for Student Expression

The worksheets described above held little use as documentation for learning much about students' thinking or understanding. Whether or not they were intended for this purpose, Carrie said they were sometimes used primarily as "busy work" to keep

students occupied so they had little time to disrupt the class. This points to a third common feature of all four teachers' classrooms: students were given few opportunities to express themselves, verbally or in writing.

Linda and Vera both described how "good classrooms" were expected to look at that time:

> At that time, teaching basically was, and the good models . . . that everybody said, you know, aspire to this were the teachers that had very quiet classrooms, very. Everybody just sitting still and being quiet, and that was the model. (Linda, 2/2)

> You saw your nice little classrooms with people sitting quietly and working and not a lot of interaction. And [later] I guess I was comfortable enough in my classroom management skills that it didn't bother me to have kids being noisy, but actively engaged. (Vera, 2/24)

This image of silent students sitting still contrasts sharply with each of the classroom descriptions provided in the last chapter, where students contributed not only in whole group and small group discussions led by the teacher, but also as they wrote together, discussed books together, and worked together on common projects.

Keeping students silent and still may have allowed the teachers to learn something about the students, but the value of what they learned is questionable. For example, the teacher may have had more opportunities to watch students working independently. However, something was also lost. If teachers wanted to listen carefully to what their students say to them and their fellow students, there would be few such opportunities in the early classrooms that the teachers described.

All four teachers currently use writing as a way for students to express themselves and make choices about their own work. Without exception, all four teachers stated that creative writing was not included in their early teaching at all. Linda said she never even

considered asking her students to write because, as she says, "They couldn't spell" (2/18).

Even in a classroom where students work quietly without moving from their seats, reading what students write could provide one useful window on students' interests or understanding. However, since the only writing that happened in these classrooms was what students copied off the board, this opportunity did not exist for any of the four teachers.

Finally, even though students were expected to be quiet and still while working independently, there were times that students could talk, i.e. in small reading groups or in whole class discussions. Although none of the teachers talked in detail about these aspects of their earlier practice, if they followed the basal readers closely, one can imagine conversations that they might have had in their class.

In each basal reader series, the teacher instructional guide provides suggestions, often interpreted as a script, for teachers to use in discussing reading with the students before and afterwards. I provide one example from a teacher's edition that Aukerman (1981) describes as "very well done" (p. 41).

> When students have read the entire story, choose questions from the following to guide a discussion:
> Why was it easy to kill passenger pigeons? (Traveled in huge flocks) (cause and effect, factual)
> Why did people kill passenger pigeons? (Food and sport) (cause and effect, factual)
> What do grizzly bears and passenger pigeons have in common? (Classifying details, interpretive)
> What can people learn from the fact that the passenger pigeon is now extinct? (Main idea, interpretive) (Aukerman, 1981, p. 28)

The questions in this short excerpt call for students to respond to interpretive or factual questions contained in a selection they have just read. The questions might allow the teacher to learn about students' reading comprehension. Nowhere are there opportunities to solicit student reactions or opinions about the material they have read. The guidelines convey the image of a teacher asking questions and fishing for responses until students provide something close to the expected, correct answer.

It is impossible to get an accurate picture of how the four teachers in this study picked and chose from the available questions, how they added their own questions, how they listened to their students, or used student responses to structure the conversation. Given that none of the four teachers talked about significant opportunities for students to share what they were thinking about, it is likely that class discussions looked very different from those I observed in their current teaching.

Classrooms like these--where teachers dictate all of the tasks and where the tasks have little personal connection with student concerns, where written work is tightly controlled, and where opportunities for students to speak are severely limited--are ill-suited to any of the kinds of attention that the teachers now practice. However, this does not mean that the teachers themselves had no ability or inclination to attend to their students; they simply had limited windows into their students' thinking or interests. In the words of one teacher not participating in this dissertation, "It's not that I never listened to the kids before now, it's just that I never let them say anything before" (Featherstone, personal communication).

Mixed Feelings

These three features of teaching practice-- the organization of instruction, the concentration of student work around mindless predictable activities, the restriction of opportunities for students to express themselves--were all deeply ingrained features that were difficult to change. The difficulty of change also came from one other thing--the fact that there was something appealing or at least easier about older methods of teaching. Each of the teachers referred to aspects of their earlier practice that were easier than what she was currently doing. Even though they would not choose to go back, their comments underscore both the challenges involved in adopting new practices and the change of perspective about the teachers' role that accompanied changes in practice.

Dissatisfaction

On one hand, the teachers felt frustrated with their early teaching. Each of the teachers expressed some dissatisfaction with certain aspects of her earlier practice. These statements expressed teachers' "gut feelings" or other emotional responses to their teaching. Linda described her feelings quite vividly:

> The whole time I was teaching that way, it just didn't feel right. There was like this sense that there, something more should be, there's just something more should be happening. It was just kind of gnawing at you, at me. (Linda, 2/2)

In this section, I present the teachers' statements about what frustrated them about their earlier teaching and discuss the different reasons for this dissatisfaction.

One reason Vera gave for trying new things in her classroom is that she was bored with what she had been doing for so long:

> I thought it was boring. You know, I really did. And that was another key in moving on with Math Their Way. It was so fun. And that ties in with the

> Michigan Model. It was so fun to have the kids so actively engaged in what they were doing. And that to me was a real key. (Vera, 2/24)

Michelle's dissatisfaction stemmed from a realization that her students were not learning what she hoped they would learn. Even though she felt competent with her methods, when she really thought about it, she realized that her students were not developing the skills she expected them to learn:

> They were word calling those books. So I didn't feel the satisfaction [then] that I felt [later]. And I guess I was at a point where I felt, "I can do this." And then you can look at it and say, "What am I not doing well? How can I improve myself? So I guess you can take that risk at that point in time (Michelle, 2/22)

Once she established a feeling of competence, she could look ahead and consider new ways to teach. She decided she was merely "entertaining" her students:

> I was entertaining the kids. They were happy... I had a list of forty people who wanted their kids in my classroom, but I didn't have the same autonomy in [my former] classroom as I did [my current] one. [Now] I was doing well and I could say it's because of me. I designed this curriculum, I'm carrying out, I'm effective, you know, it's working. [Before], I was frustrated 'cause . . . I was going through every single step I was supposed to go through and everybody was happy, but I didn't see learning that was permanent that was happening to my kids (Michelle, 2/22).

Michelle was dissatisfied with what students were able to learn in her classroom.

Another reason for the teachers' dissatisfaction was that they knew the tasks they set for students were not intrinsically motivating for their students, indeed not even natural for children of that age. Carrie talks about how she viewed "talent in teaching":

> Before I really did feel like your talent in teaching is to be able to coerce the kids into doing what you think they need to do that they don't want to in a way that will make them happy, you know, happy little, happy little slaves. I don't know. (3/4).

Carrie's dissatisfaction with her earlier methods was primarily related to the challenges of keeping students on-task when the tasks were not what she would currently consider developmentally appropriate:

> [I was trying] to coerce them into sitting in a seat which is not a developmentally appropriate thing to do. And make them copy a lot of things and do a lot of paper and pencil. That's just not developmentally what's best for children that age. And it's not, it doesn't develop that love of learning and that curiosity. But I didn't know how to do, didn't know how to implement what my idea was. (3/4)

The management challenge of trying to get students to do their work led Carrie to believe that there must be something else. She wanted her students to develop a "love of learning" and a sense of "curiosity." She knew that the current methods weren't accomplishing that, but she had no idea what other methods would.

Vera felt a similar gut level frustration with the expectations she placed on her students when she began teaching kindergarten.

> I just knew in my heart what I was doing was wrong. I just felt like I love little kids and I felt sometimes not cruel, but that I was asking, that I was asking them to do something that they just weren't ready to do. I mean honestly, that's how I felt. And that's why that first year was so difficult for me. Because it was all this structured stuff and I just knew it wasn't right. You know? And we were expecting so much out of these little kids that they really should have been socializing and doing things like that more. And I knew that. And I'm really a structured person and I believe, you know, four and five year olds can be taught what's right and wrong in a group and all that kind of stuff. But I should have, that was just how I felt from inside of me. No other way around it. (2/24)

Carrie said that her underlying frustration, or sense that there must be something different, something better, helped her be "ready" to change when she finally learned about some radically different ways to teach.

> [I] was convinced, convinced there was something else. So when I finally heard this idea, I said, "I think that's it, I think that's it and I'm ready." (Carrie, 3/4)

All four teachers described dissatisfaction with certain aspects of their practice. They expressed their dissatisfaction as "gut" feelings or affective responses to what they noticed about their classes. Vera felt bored with her old ways of teaching. Michelle began to realize that her students were not learning what she wanted them to, and that what they did learn was not permanent. Carrie and the other teachers faced challenges in trying to keep their students on-task and began to believe that what they were asking their students to do did not take into account what children of that age were ready to do.

This gut-level dissatisfaction opened the teachers to the possibilities of changing their practice, but the dissatisfaction alone did not seem to be the cause for their changes. Even though there were things that frustrated them about their teaching, they did not have any specific ideas of what to do differently. Indeed, their current dissatisfaction with their earliest practice may be more a product of describing their practice retrospectively using their current practice as a point of comparison. The dissatisfaction seems like an important condition for the changes that came later, but the dissatisfaction alone was not a sufficient stimulus for the teachers' changed practices. To change their teaching, the four teachers needed to develop new images of teaching. They needed access to new ideas about teaching.

Teacher Role

> We knew for a long time that it wasn't enriched, but there wasn't any other ideas ... Basically at that point in our history, everybody taught the same way. It was like, "Well, there is no other way. There is no other way, this is how you do it." (Carrie, 2/11).

Each of the four teachers felt caught up in a routine and a constrained set of beliefs about how they were expected to teach. Carrie's statement illustrates her feeling

that she was constrained by a certain view of teaching that prevailed in her school. Curricular materials were provided for teachers, and administrators expected teachers to use them faithfully. There was little opportunity or incentive for teachers to alter or develop curriculum.

In spite of their dissatisfaction, these four teachers were also constrained by their view of teaching. They had no alternative models, and there was little impetus from administrators or colleagues to do anything differently. As they became accustomed to a particular style of teaching, it became difficult to change. As Linda said:

> You also get in this cycle where you are very busy and you are trying to keep up from one day to the next and you just get caught in this cycle. And you're planning, you're looking at the teacher's guides, you're making your lessons plans, you're correcting your papers, you're making your work sheets, you're, you know dealing with discipline and the next day it starts and you start all over again. (Linda, 2/2)

This view of teaching was reinforced by fellow teachers and administrators. Linda talked about the models she had for teaching: her own teachers when she was a student, and the teachers who worked with her as a student teacher.

> The good models of [teaching] were the teachers that had very quiet classrooms, very. Everybody just sitting still and being quiet, and that was the model. (Linda, 2/2)

> My student teaching experience was sixteen weeks in a very traditional first grade classroom where the teacher was very, very traditional, very structured, no movement in the classroom. Everybody sat there. (Linda, 2/2)

When they had time or energy, they used their creativity to spice up the existing curriculum--perhaps by creating a new ditto which might be more enticing for students to do. Carrie said:

> So what our challenge was is to think how can we do this system creatively and make it fun for the kids. That's how far our creativity stretched. How can we make good seat work? (Carrie, 2/11)

The idea that they could choose to do something radically different, that they could design their own curriculum, or that they could rely on their own students to make choices about their own learning were foreign to these teachers. To varying degrees, these four teachers came to lack belief in their ability to make decisions for their own classrooms.

Another important part of these teachers' career histories is that they became empowered and self-confident enough to realize that new ideas about practice could come from within. They needed to openly acknowledge their reservations about their teaching practice. Then they needed to make courageous decisions according to their feelings about better ways to teach, in spite of what other teachers in their school were doing, or the kind of messages being sent to them by administrators.

Yearning

The teachers changes were not only from docility to self-empowerment. The other part of the career histories is that each teacher described certain features of her early teaching as desirable in some way. Even though none of the teachers wished she could teach as she had at the beginning of her career, there were moments when the teachers recalled, sometimes wistfully, positive aspects of those early days in their teaching.

Linda recalled the classroom where she student taught:

> There were really no discipline problems just because of the way she was . . . . She was a very good teacher. The kids learned a lot. (Linda, 2/2)

Vera talked about the politeness of the students.

> Classes were very structured, very quiet, kids were definitely much more polite and well-mannered, but that's really how it was. (Vera, 1/26)

Since there was more structure, their classes were more predictable. Their rooms were quieter, and this contributed to a greater peacefulness of sorts. All of the teachers attribute this in part to the structuring.

Carrie also talked about the students' cooperation and quiet classrooms as a function of differences in what she calls students' "life skills":

> I think when I first started teaching, you could expect kids to come in and do the assignment on the board. You're going to sit at your chair and you are going to do all these dittos and these workbook pages and I'm going to meet with groups. And then you are going to go out to recess and I'm going to correct everything. I think you used to be able to do that because kids even if they didn't like it, they were going to do what they were supposed to do. More than now . . . . I think when they came to school with those life skills it was easier to coerce them into doing something they didn't want. And when they didn't have that to begin with they didn't have the personal discipline. They didn't have the self discipline or the experience in being disciplined to do that. (Carrie, 4/8)

Another factor that made the earlier type of teaching easier is that since all the materials were provided for them, there was much less work in terms of teachers creating their own curricular materials. These self-created worksheets were not required; even if they did not design any new materials, the teachers felt assured that they were doing at least what was expected. Any additional effort was over and above expectations.

When she moved away from using the basal readers, Michelle described the freedom from textbooks as "wonderful" because it refocused her attention on her students and allowed her to use materials that were appropriate for the specific students in her class.

> All of a sudden you don't have any teacher's manuals for science, for social studies, for reading, for math. There's just, there's just you and resource materials. Which was wonderful (laughs). Which was the first time I could look at the outcomes that we said this is what we want kindergartners to do. And to pull from materials that I felt were appropriate ways to meet these kids' needs.

However, she also explained moving away from the textbooks meant that she couldn't use many of the materials she had collected over the years in her filing cabinet. Carrie talked about the challenge of leaving behind the safety of commercially published curriculum materials:

> When so many of us teachers left the basal program behind and this whole idea of whole language and trade books and invented spelling and creative writing was all new, it's like we just went into the abyss . . . There was very little structured curriculum . . . . Basically everybody was piecing their own curriculum together like a puzzle. (Carrie, 4/8)

Carrie and Linda also described how they prepared the summer before getting rid of the basals by collecting all the skill worksheets for first graders as one strategy to ensure that they were still teaching the required curriculum. I asked the teachers whether they thought their work was easier now or before. I expected to hear the teachers say that their work was harder today, but somehow more satisfying. I was surprised to hear teachers say that they felt the amount of their current work was similar to the amount of work they used to do, but the changes in their teaching had altered the nature of the work. For example, Michelle's taping and transcribing of students' conversations replaced earlier forms of assessment where she was grading their work: "Then I had stacks of worksheets and workbooks and all kinds of papers to correct all the time. And now I just would record off the tape recorder" (3/8).

Michelle considers the change to be a replacement of one sort of work with another. Since the element of coercion was significantly reduced when each of the teachers changed, they felt energized about their new teaching practices, even when they struggled to implement them.

Looking back at earlier times in their careers, these teachers occasionally revealed mixed feelings about these early days. On one hand, they did not express any wishes to go back. On the other hand, their comments about structured, quiet classrooms filled with polite, well-mannered children suggests that there may be something about those times that the teachers still long for in some way. Greater structure? Quiet peacefulness? Polite students? Do they believe that by introducing choice and ownership and the sounds of children's voices that they have sacrificed forever the structure, quiet, and politeness of calmer times? Or do they believe that their changes have been a necessary response to changes in students over the years? These questions, while fascinating, are outside the scope of this research.

This chapter suggests that a large part of changing one's teaching may be figuring out how to provide opportunities for children that one believes in at a gut level, while also figuring out ways to share a classroom comfortably with twenty to thirty students six hours a day. Teachers may be constantly trying to fulfill their commitments to students while seeking for ways to preserve structures, quiet, and politeness that make their lives in classrooms less stressful and hectic. Part of the journey of change involved the teachers coming to reconcile themselves with the features of their early practice that were lost.

Defining the Change: What Did These Teachers Learn?

From the evidence presented in this chapter and the last chapter, it is clear that, since the beginning of their careers, Carrie, Linda, Vera and Michelle have each changed their practices to create more opportunities to pay attention to various aspects of their students. One important condition for these changes is a sufficient dissatisfaction with

their existing practices to give these teachers the courage to jump into "the abyss," away from the safety and structure that were features of their early classrooms. Teachers learned to replace a familiar form of work with something completely unfamiliar, for which they had no models.

During their earliest teaching, all four teachers relied almost solely on a single source--the basal reader series with its textbooks, teachers' editions, and accompanying workbooks--as the material for their curriculum. When they felt like being creative and had the time and energy to do so, they created their own materials that they felt were more creative or interesting than the published materials. Today all four teachers use a collection of materials from different sources, including published textbooks and commercially designed worksheets. All four teachers feel a much greater sense of control and decision making power over what they do with students in their class. With this control comes a greater sense of responsibility.

Accompanying the greater freedom of the teachers to design their own curriculum was the greater freedom that teachers allowed their students to take part in shaping the curriculum. In their current practice, each teacher offers different ways for her students to exercise choice in her classroom, i.e. more creative writing, opportunities to write about books they have chosen to read, choices about projects to pursue within a general theme. Students in their classrooms are more likely to be writing on blank pieces of paper, expressing their thoughts unconstrained by multiple choice, fill-in-the-blank, or tracing-over-dotted-line ditto tasks.

In Carrie's, Linda's, and Michelle's reading programs, the single basal reader that conveyed to students what they were able and expected to read has been replaced by a

wide selection of children's literature at a range of different ability levels that all students can choose to read. Considering the coercion the teachers formerly used to keep their students on task, they had to develop faith that their students could be self-directed if they were working on engaging and stimulating tasks.

Another difference is that teachers have eliminated the strict sequencing and lockstep nature of the curriculum and the sharp ability-based groupings of students. In the past, students were placed into homogeneous groups. Each group moved through the basal reader page by page, book by book, and individual students were expected to stay with the rest of the group, regardless of whether the pace was too slow or too fast. In all of their classrooms today, the teachers provide some opportunities for greater individualization--through independent student writing projects, individually chosen books to read, and personalized lists of mastered and developing skills. Carrie and Linda still group students by ability as part of their use of the New Zealand Literacy Frameworks, but in every classroom there are also opportunities for heterogeneous grouping or whole class instruction which cut across ability lines.

Finally, the emphasis on silence and stillness prevalent in the teachers' early classrooms has shifted. Rather than trying to figure out new strategies or better work that will keep students working quietly in their seats, the teachers have all developed ways to hear more of their students' voices (both verbally and in writing). These differences range from the types of whole group discussions I witnessed compared with the discussion models found in teachers' editions. Writing, which was never part of their early curriculum, has become prominent for all four teacher. Every teacher also provides

opportunities for students to speak to one another, without the teacher herself present, about their reading and writing orally.

How do these changes in practice reflect changes in the teachers' attention to their students? The changes do not necessarily represent a movement from inattention to attention. During these early years, these four teachers had opportunities to pay attention to some things about their students. They noticed the students' resistance or lack of resistance to work they assigned, the students' feelings about their reading abilities, and as much about their students' learning as it was possible to learn using the tools they had.

Instead of moving from inattention to attention, these teachers seem to have created opportunities in their teaching practices for getting different sorts of information about their students. These opportunities, like windows, enable teachers to see certain things about their students while simultaneously hiding some things from view. Looking through a window only allows a single vantage point on a room. If a teacher's practice is like a building that she constructs, she places windows in particular locations at particular angles that, when placed properly and looked through, allow her to see particular aspects of her students.

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PROFESSIONAL DEVELOPMENT ACROSS THE CAREER SPAN: VETERAN TEACHERS LEARNING LITERACY TEACHING PRACTICES WHICH FACILITATE ATTENTION TO STUDENTS

VOLUME II

By

Brian Paul Yusko

A DISSERTATION

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PART II

HOW DO TEACHERS LEARN TO CHANGE THEIR PRACTICE TO ATTEND TO THEIR STUDENTS IN NEW WAYS?

Chapter 5

Current Perspectives on Effective Professional Development

In Part I, I examined how Carrie's, Linda's, Vera's and Michelle's current practices differed from their earliest practice to identify specific changes they had made in their practice throughout their careers. In Part II, I take up the question of how these teachers changed their practice into its current state. Using an analysis of the career histories of these four teachers, I will pursue the second question in the introduction:

> *What kinds of professional development opportunities, broadly construed, support teachers' ability to change their practice in ways that facilitate their attention to students, and how are these professional development opportunities incorporated into the lives of teachers?*

In this chapter, I examine the literature on professional development for current perspectives about the kinds of experiences that promote teacher learning most effectively. The chapter begins with a definition of "professional development." I describe representative current views from the research literature on effective professional development, and I talk about some of the dangers of the current formulations. I conclude the chapter with promising directions for research and illustrate using three examples.

Professional Development as "Educative Experience"

Much of the professional development literature focuses on how university or school-sponsored formal programs help teachers learn to "implement" particular changes faithfully. Richardson (1990) characterizes this literature as "literature on teacher

change," which tries to explain why particular innovations are not implemented as expected. This perspective, what Fullan (1991) calls the "fidelity perspective," views teachers as the delivery system for innovations designed by "experts," i.e. researchers, staff developers, or program designers.

A second view, found in what Richardson calls the "learning-to-teach literature," takes a naturalistic perspective on teacher change and focuses on individual teachers' cognition, beliefs, and other mental processes. Roughly analogous to Fullan's (1991) "mutual-adaptive or evolutionary perspective," this perspective does not view teacher change simply as the adoption of new practices or wholesale exchange of one practice for another. Rather it views teachers as "tinkerers" (Tyack and Cuban, 1995) or "bricoleurs" (Huberman, 1993), who pick and choose what to use in their classes, and how to use them. Change in teaching practice is an evolution of new ideas and practices being interwoven into the fabric of existing practice.

Richardson (1990) claims that neither literature is adequate to the task of conceptualizing "significant and worthwhile change in teaching practice." Whereas the teacher change literature provides standards of effectiveness and specific directions for change, the learning-to-teach literature provides understanding of how individual teachers consider new ideas and adapt their beliefs in the context of previous experience. She suggests:

> Bringing these two approaches together suggests that teachers themselves must be involved in making judgments about what change is worthwhile and significant; but it also suggests that practices and ways of thinking outside an individual teacher's own experiences should be introduced into the dialogue. (p. 14)

Richardson argues for the importance of understanding the subjective realities of teachers as they alter their practice from week to week, and from year to year.

I take the perspective that the development of teaching practices that enable teachers to attend to students in new ways requires more than technical changes in practice (although technical changes may stimulate teachers' learning). This perspective makes it difficult to describe precisely how "significant and worthwhile change" looks. Each teacher's changes required her to experience a "paradigm shift" of sorts, similar to the revolutions in their ways of thinking about teaching and students that other teachers have described (DiSchino, 1987; Paley, 1986; Stumbo, 1989).

Throughout this dissertation, I discuss professional development in its broadest sense, as the kinds of experiences--both formal and informal, collective and individual, personal and professional--that contribute in a meaningful way to teachers learning of new ideas or new practices. These may include formal and intentional opportunities such as workshops, graduate courses, involvement in school-based study groups, or involvement in cross-school networks. They may also include informal opportunities such as informal interactions with fellow teachers, independent reading and thinking, or other personal experiences not immediately connected to teaching.

This broad understanding of "professional development" is roughly analogous to Dewey's (1938) notion of an "educative experience." In Experience and Education, Dewey argues against a false dichotomy of education as "development from within" and "formation from without." Instead, he argues that all "educative experiences" must take into account both the inner conditions of the learner and the external situations encountered by the learner to understand whether particular experiences are educative or

not. The taking into account the internal conditions of the learner is what Dewey means by "the principle of continuity." Dewey argues that each individual experiences their life as a continuity, with each experience being viewed through prior experiences and affecting all subsequent experiences. This is what Dewey calls "habit":

> The basic characteristic of habit is that every experience enacted and undergone modifies the one who acts and undergoes, while this modification affects, whether we wish it or not, the quality of subsequent experiences. (p. 35)

Prior experiences and internal conditions inevitably cause people to experience the same external event differently. In turn, each experience leaves its mark on a person so that it affects how that person reacts to all future experiences. This is how individual people view their lives as a "continuity" of experiences.

That each individual experiences his or her life as a continuity Dewey takes as given; however, he argues that there is a need to differentiate between experiences that are educative and those that are miseducative. He acknowledges that learners need to develop in a particular direction. This is where the "principle of interaction" comes into play. Experience does not happen only inside a person. External situations, or "objective conditions," "interact" with each person's "continuity" to produce experience. Whether an experience is educative or miseducative depends on whether the objective conditions interact with the continuity of the person to "arouse curiosity, strengthen initiative, and set up desires and purposes that are sufficiently intense to carry a person over dead places in the future" (p. 38). This notion of "educative experience" is useful for conceptualizing the range of learning opportunities that were influential for the four teachers in this study.

Current Perspectives on Professional Development

Most current researchers of formal professional development programs dismiss the modal practice of one-shot workshops and in-service days as weak interventions unlikely to stimulate significant change (e.g. Little, 1993; Lord, 1994). Though these formats may present new information effectively, what teachers actually learn from such experiences is scattered at best as it is incorporated into the contexts of existing belief systems. These types of interventions do not allow teachers to make sense of these new ideas, which Fullan (1991) argues is crucial.

To remedy the weakness of the workshop model, Joyce, Murphy, Showers, and Murphy (1989) developed a set of training workshops followed by sustained peer coaching as teachers learned to incorporate new practices. While the program helped teachers integrate new skills into their repertoire, Little (1993) suggests that "much of what we anticipate in the present reforms does not lend itself to skill training because it is not readily expressed in terms of specific, transferable skills and practices" (p. 133; see also Darling-Hammond, Wise & Klein, 1995). The model of peer coaching has also been criticized by Hargreaves and Dawe (1990), who claim that such models are veiled attempts to control teachers bureaucratically through "contrived collegiality," rather than genuine efforts to promote teacher learning.

The unsatisfying nature of traditional teacher in-service and interventions such as peer coaching has led to a new approach to professional development. Lieberman (1996) describes the general orientation of this approach:

> This broader approach moves teachers beyond simply hearing about new ideas or frameworks for understanding teaching practice, to being involved in the decisions about the substance, process, and organizational supports for learning in school, to finding broader support mechanisms—such as networks or

> partnerships—that provide opportunities and innovative norms from groups outside the school. (p. 187)

With this new approach has come widespread advocacy for new forms of professional development (Ball, 1996; Ball & Cohen, 1996; Darling-Hammond & McLaughlin, 1996; Duckworth, 1996; Fullan, 1991; Hawley & Valli, 1999; Lieberman, 1996; Little, 1993; Lord, 1994; Putnam & Borko, 1996; Putnam & Borko, 2000; Yinger & Hendricks-Lee, 1998). The core of such new practices is the conviction that for teachers to learn new ideas in a deep and meaningful way that will affect their teaching practice, they must have opportunities to engage intellectually with new ideas (Duckworth, 1996; Little, 1993). Since this new approach values greater responsiveness to individual teachers and local contexts, actual practices vary enormously from place to place.

Cochran-Smith and Lytle (1999) advocate for a conception of teacher learning grounded in the idea of "knowledge *of* practice" rather than "knowledge *for* practice" or "knowledge *in* practice." They argue that in this conception of teacher learning, "both knowledge generation and knowledge use are regarded as inherently problematic" (p. 272). Teachers must question knowledge generated through research, and they must engage in their own knowledge production through inquiry into their practice. In turn, university researchers must acknowledge the validity of practitioner research while simultaneously questioning it. They claim that when teachers adopt a stance of inquiry, their work is transformed.

To adopt this stance, teachers and researchers must learn collaboratively, "primarily in inquiry communities and/or networks where participants struggle along with others to construct meaningful local knowledge and where inquiry is regarded as

part of larger efforts to transform teaching, learning, and schooling" (p. 278). Such communities often involve researchers, beginning teachers, experienced teachers, and student teachers in conversations about teaching in which all participants "function as fellow learners and researchers rather than experts" (p. 278). Cochran-Smith and Lytle say that these new relationships replace traditional distinctions between expert and novice.

The "Consensus Model"

Recently, a number of authors have suggested that from a once-fragmented set of ideas about professional development have emerged an "unprecedented consensus" in the research community about how good professional development should look (Hawley & Valli, 1999; Putnam & Borko, 1996; Yinger & Hendricks-Lee, 1998). I present three separate lists of statements purporting to represent this new "consensus."

Hawley and Valli (1999) offer a set of "design principles for effective professional development" (p. 136). These principles state that effective professional development:

1. Is driven, fundamentally, by analyses of the differences between (1) goals and standards for student learning and (2) student performance.
2. Involves learners (such as teachers) in the identification of their learning needs and, when possible, the development of the learning opportunity and/or process to be used.
3. Is primarily school based and integral to school operations.
4. Provides learning opportunities that relate to individual needs but for the most part are organized around collaborative problem solving.
5. Is continuous and ongoing, involving follow-up and support for further learning, including support from sources external to the school.
6. Incorporates evaluation of multiple sources of information on outcomes for student and process involved in implementing the lessons learned through professional development.
7. Provides opportunities to develop a theoretical understanding of the knowledge and skills to be learned.

8. Is integrated with a comprehensive change process that deals with the full range of impediments to and facilitators of student learning. (p. 138)

These principles elaborate on settings, time requirements, and integration with other school initiatives as features of good professional development. They highlight the value of school-based initiatives which involve teachers primarily in collaborative problem-solving activities. They argue for the importance of long-term sustained projects which are integrated into a school-wide reform process while simultaneously being responsive to individual teacher needs. The only claim in this list regarding the content of professional development is that professional development should be driven by an analysis of disparity between student achievement and standards for student learning, and that this analysis should be theoretically grounded.

Yinger and Hendricks-Lee (1998) argue that consensus around high-quality professional development has been made possible by the increasing agreement on images of high-quality teaching advocated by organizations such as NCATE (National Council for Accreditation of Teacher Education), INTASC (Interstate New Teacher Assessment and Support Consortium), and NBPTS (National Board for Professional Teaching Standards). Yinger and Hendricks-Lee review efforts by the National Staff Development Council (NSDC) and the National Foundation for the Improvement of Education (NFIE) to define standards for high-quality professional development based on these images of teaching. Both organizations provide standards describing effective contexts and processes for professional development. For example, the NFIE standards contain the following recommendations to improve professional development:

> Find time for continuous professional development. To keep up with change, teachers need time to collaborate with their colleagues and to update their knowledge and skills--as professionals in other fields are required to do.

Help teachers assume responsibility for their own professional development and for ensuring teacher quality.
Develop partnerships to enhance teachers' knowledge and skills, including partnerships with parents (their most important partners), higher education institutions, museums, libraries, and businesses.
Reallocate existing and appropriate new revenues sufficient to guarantee standards-referenced, quality teaching and learning in every school. (NFIE, 1996, cited in Yinger & Hendricks-Lee, 1998, p. 279)

Yinger and Hendricks-Lee also mention the National Staff Development Council's "content standards" which "focus on providing challenging, developmentally appropriate curricula, using research-based teaching strategies and assessments to enable success for all children, and enlisting family support and collaboration" (p. 280). Like Hawley and Valli's design principles, this list also focuses on the formal features of professional development: the availability of time and money, as well as opportunities for collaboration among teachers and partnerships with people outside of schools. There are no recommendations regarding the content of professional development.

Drawing on developments in the field of teacher cognition, Putnam and Borko (1996) offer their own set of characteristics of high-quality opportunities for teacher learning. Putnam and Borko explain that the "situative perspective" provides a set of "new" ideas about cognition and learning that can inform opportunities for teacher learning. They highlight three central themes of the situative perspective: a) that cognition is situated in particular contexts; b) that cognition is social as individuals participate in discourse communities; and c) that cognition is distributed among people and tools.

They construct a set of recommendations that parallel these three themes. First, they argue that teacher learning opportunities should be situated by grounding

professional development in specific experiences in school. This may be accomplished through school-based professional development, off-site professional development where teachers share their teaching experiences, or through workshops where teachers learn new subject matter. Second, they argue that teacher learning opportunities should be social, creating opportunities for teachers to talk to one another and developing new discourse communities that include teachers and researchers. Third, they advocate for the use of tools such as computers to allow teachers to individualize their learning, so that knowledge of teaching is distributed across teachers. A powerful example is the use of hypermedia materials as resources for teachers to investigate pedagogical problems they frame themselves.

What can we learn from these sets of recommendations? First, there is a remarkable degree of overlap among the different recommendations. All three sets of recommendations include these three features: a) the alignment of professional development opportunities with individually identified directions for growth; b) the creation of more opportunities for teachers to collaborate and discuss their teaching; and c) the situation and contextualization of learning opportunities in the particulars of teaching practice, usually through school-based initiatives. This new consensus is built around general agreement about several facets of professional development: a) effective processes; b) supportive contexts; and c) promising forms.

Processes of Professional Development. There has been a significant amount of literature devoted to understanding effective processes for teachers' professional development. One of the most common arguments is that

> Teachers cannot reconceive their practice and workplace culture in isolation, yet almost everything about school is oriented toward going it alone professionally.

> While it may be possible for teachers to learn some things alone, rethinking old norms requires a supportive community of practice . . . A collaborative culture of problem solving and learning must exist to challenge these norms and habits of mind; collegiality itself must be valued as a professional asset. (Darling-Hammond & McLaughlin, 1996, p. 211)

The call for increased contact among teachers can be traced to the "teacher centers" of the 1970's (Devaney, 1977). In 1982, Little studied six urban schools representing a range of involvement in school-wide staff development projects and a range of school success, as determined by aggregate standardized achievement scores in reading, language arts, and mathematics. Little (1982) found that successful schools where teachers were learning were characterized by particular norms of interaction among the faculty. She says that professional development is most assured when "teachers engage in frequent, continuous, and increasingly concrete and precise talk about teaching practice" (p. 331). In such schools, she says, "teachers teach each other the practice of teaching" (p. 331).

A number of researchers have used sociolinguistic methods to understand and describe productive group processes (e.g. Florio-Ruane & DeTaar, 1995; Harris, 1995; Pfeiffer & Featherstone, 1998). Lord (1994) enumerates the features of "critical colleagueship" among teachers, where teachers talk together to "confront traditional practice--the teacher's own and that of his or her colleagues--with an eye toward wholesale revision" (p. 192). Given the consistency of such reports, it seems reasonable to conclude that these characteristics represent our best working hypotheses about group processes that foster learning (as opposed to providing support or some other purpose). Working from these processes, the link to practice is sociocultural. This argument, based on Vygotsky's (1978) theory of the role of language in the development of thought,

suggests that changes in people's talk leads to change in thinking. Changing people's thinking, the argument goes, leads to changes in action and practice.

Another finding in the literature is that these norms of interaction take a long time to develop. Yusko (1999) studied a group of fifth grade language arts teachers and found that during six months of meetings, the group experimented with a variety of processes but rarely engaged in Lord's "critical colleagueship." The processes shifted according to different agendas of the people within the group. This is confirmed by Pfeiffer and Featherstone (1998), who report that only after a year of meeting did a group of teachers begin to engage in "sustained, passionate, disclosing conversations about the actual practices of the teachers who were present" (p. 13).

What can we learn from these accounts of teacher groups? First, for teachers to learn from one another, they must engage in conversations that are grounded in teaching practice and that maintain a critical stance. Teachers must engage in conversations that are disclosing and be open to hearing things that may suggest radical reform of their practice. Such conversations do not happen spontaneously; groups members need to develop the level of trust necessary to engage in these conversations. The development of trust among group members requires time and usually some external force that pushes teachers toward greater self-revelation. As group members reveal more about their teaching and their insecurities, they become more willing and able to share details of their practice with one another. To even begin such conversations, teachers in groups need to believe that intimidating conversations might eventually promote their professional growth or be personally fulfilling for some other reason.

Contexts for Professional Growth. A related body of literature is devoted to elaborating productive contexts within which professional development can occur. Since Little (1982) argued that teachers need to learn in collaborative contexts, there has been a widespread increase in efforts to describe how schools can be productive contexts for teachers' learning.

Little's (1982) study, which examined schools as workplaces, focused on "organizational characteristics conducive to continued 'learning on the job'" (p. 325). She found that the four "successful" schools were characterized by "support for discussion of classroom practice, mutual observation and critique, shared efforts to design and prepare curriculum, and shared participation in the business of instructional improvement" (pp. 331-332). This study, usually read as a recommendation for greater collegial interactions among teachers, has been followed by similar studies (Nias, 1989; Rosenholtz, 1989) which suggest that collective work and opportunities for interaction are essential features of learning organizations.

This consensus has led administrators, researchers, and staff developers to search for ways to "break down teacher isolation" and foster "community-building." Books like Building Community in Schools (Sergiovanni, 1994) and Professional Learning Communities at Work (DuFour & Eaker, 1998) offer visions of what communities look like and suggestions for how to build school communities.

This sample of literature typifies the support in the literature for the development of schools as communities. In promising school communities, all school personnel espouse beliefs that all students can learn and hold themselves responsible for helping students develop a deep understanding of the content. Teachers in promising school

communities work together to develop their practice around a set of shared values about effective teaching and high quality student learning. With this belief, researchers have taken different approaches to studying schools as communities. Some have examined the *processes* of creating strong communities. Some researchers have tried to distinguish between characteristics of different communities. A few have cautioned against an acceptance of "community" as an unquestioned good. The amount and overall favorable tone of educational research focusing on the possibilities and challenges of schools as communities demonstrates the steadily increasing value educational researchers have attributed to them.

Forms of Professional Development. Given what literature on professional development says about processes and contexts, what implications does this have for what forms it should take? Most authors on professional development shy away from advocating a single type of professional development and provide lists of promising forms.

For example, Lieberman (1996) provides a list of three types of professional development: (a) direct teaching in traditional formal professional development workshops; b) school-based learning opportunities through various forms of collaboration; and (c) and out-of-school learning opportunities. Table 5 is Lieberman's list of teacher development and professional learning opportunities:

Direct Teaching	Learning in School	Learning out of School
Inspirationals	Teacher Scholars	Reform Networks
Awareness Sessions	Teacher Leaders	School/University Partnerships
Basic Knowledge	Critical Friends	Subject-Matter Networks
Initial Conversation	School Quality Review	Informal Groups
Charismatic Speakers	Peer Coaching	Collaborations
Conferences	Action Research	Teacher Centers
Courses and Workshops	Story Telling	Impact II
Consultations	Sharing Experience	NEA and AFT Collaborations
	Teaching Each Other	
	Problem Solving Groups	
	Descriptive Reviews	
	Portfolio Assessment	
	Experiencing Self as Learner	
	Proposal Writing	
	Working on Tasks Together	
	Writing for Journals	
	On-line Conversations	
	School Site Management Team	
	Curriculum Writing	

Table 5: Teacher Development and Professional Learning Opportunities

Lieberman claims that all three forms of professional development can be useful. Direct teaching, she argues, may build a "constituency for change" by raising teachers' and parents' level of understanding and awareness of new ideas and changes. However, true reform only occurs when teachers are exposed to in-school and out-of-school opportunities that break with traditional professional development paradigms. Lieberman argues that these new types of professional development must be ongoing and integrated into the culture of the school. Lieberman claims that these new forms of professional development help teachers learn new ways to observe children, new ways to organize their classrooms, and new ways of assessing their students' learning. She

argues that teachers who engage in these forms find themselves in an "exciting cycle" of learning something which opens up new possibilities and stimulates them to want to learn more. While these claims are appealing, Lieberman's list focuses on the formal characteristics of different professional development opportunities rather than on the content of what teachers need to learn through any of these structures. Is it enough, for example, for teachers to be "critical friends," to "share experiences" with other teachers, or to be part of an "informal group" or "school/university partnership"? What should those types of activities help teachers learn? Does the fact that teachers are "sharing experiences" guarantee that they will learn powerful new ways to teach? Lieberman does not offer answers to these questions.

Little (1993) identifies promising alternatives to the training model which rest on the claim that "the most promising forms of professional development engage teachers in the pursuit of genuine questions, problems, and curiosities, over time, in ways that leave a mark on perspectives, policy, and practice" (p. 133). In particular, she describes the value of teacher collaboratives, subject matter associations, and other networks for developing teachers' subject matter knowledge while simultaneously giving them access to a broader range of professional relationships. She also talks about the potential benefit of university-school partnerships for involving teachers in issues of school reform. Little argues that "the most promising forms of professional development engage teachers in the pursuit of genuine questions, problems, and curiosities, over time, in ways that leave a mark on perspectives, policy, and practice" (p. 133). However, her descriptions of these "promising forms" does not go beyond the formal features to address what teachers should be learning.

Finally, other researchers provide rich accounts of the struggles and successes of particular arrangements that embody many of the principles of new forms of professional development. Rather than reviewing the full literature, I demonstrate general features using four examples.

1) As part of the Experienced Teachers' Program at Harvard, teachers participated in a bi-weekly seminar entitled "Teaching as Collaborative Inquiry." At the beginning of the year, the group negotiated a curriculum and structure for meetings. Throughout the year, group members took turns planning and facilitating meetings. Together, they examined issues faced by all teachers--ranging from curriculum, to motivation, to cooperative learning, assessment, and multiculturalism. In their account of a year of inquiry together, the writers end by saying, "At one time or another, we had all been uncomfortable. And yet for most of us, our time together . . . had been our 'biggest learning situation' of the year" (Duckworth et al., 1997, p. 156).

2) A group of eight teachers and one university professor began meeting weekly at Ridgeway Elementary School to help one another adopt developmentally appropriate practices for their early elementary students. Over a period of three years, they developed teaching practices that allowed for individual student choices about their own inquiry. They provide a convincing picture of changes they make in their practice. They changed the physical layout of their classrooms, their schedules, and their curriculum to allow for the children to work independently on inquiry projects. Increasingly, they came to value children's questions and find ways to help them seek answers to their questions.

Three years later, several of the teachers individually shared their enthusiasm for the experience in a book they co-wrote with the university professor (Meyer et al., 1997).

- My teaching philosophies have been further defined and critiqued through participation in our study group. The group empowered me to explore and implement a variety of teaching practices in my second-grade classroom. (p. 27)
- We enjoy having a relationship such as ours. We tend to ask each other questions, challenge existing curricula, and challenge ideas about change, too. We like to have our ideas well-baked before we bring them to our students. We hope that you will, as you read, see both our need for ongoing learning and our relationships as the two parts that helped us do what we did. (p. 100)
- Group members worked as collaborators, helped each other, and discussed what worked and what did not work. I developed my observation skill; something I had not previously had the opportunity to do. (p. 114)

Richard Meyer, the university professor, writes that "the group was disrupting old notions of teaming and composing a new understanding of a team as a thought collective that served as a forum for support, defense, enactment, thinking, being tentative, taking a risk, sharing writing, asking questions, and challenging self and others" (p. 169).

3) Since 1991, a group of elementary and middle school teachers and university researchers have participated in conversations about what it would look like to teach reform-oriented mathematics. This group, which calls itself the IMT (Investigating Mathematics Teaching), began as a graduate course in which participants watched and discussed videotapes of Deborah Ball teaching math to a class of third graders. After one semester of such conversations, group members opted to continue their discussions. Together, they began to examine their own teaching and understanding of mathematics. Writings of this group document much more closely what actually happened in group meetings and make a strong case for how the group learns to talk to one another. Over time, they began to evolve new ways of talking together about their work which they

came to describe as "sustained, passionate, disclosing conversations about the actual practices of the teachers who were present" (Pfeiffer and Featherstone, 1998, p. 13).

4) In a pilot study I conducted last spring (Yusko, 1999), I participated in a group of elementary teachers talking about new approaches for teaching and assessing student writing. In individual interviews, all group members reported great enthusiasm for the group and had plans for continued involvement, and yet they all had very different expectations of how the group would help them. Examination of meeting transcripts and members' private journals led me to conclude that the group spent much of the first seven months experimenting with a variety of formats and discussion topics, working out issues of membership and leadership, and building trusting relationships among members. In spite of participants' enthusiasm and a strong start, the group has met only sporadically this year since many of the group members are now pregnant.

What We Think We Know About Good Professional Development. What can we learn from the literature on professional development? First, effective processes of professional development involve teachers in conversations where they question current practices and examine new models for teaching. Most often, these conversations take place among teachers rather than in traditional in-service workshops.

Second, professional development is most likely to occur where there is time for teachers to develop effective processes. There is widespread, but not universal, agreement that these contexts require opportunities to meet with other teachers. This agreement has led to a range of inquiry about what kinds of communities are most likely to promote the right kinds of opportunities for teachers. The underlying belief seems to be that the creation of community is an important prerequisite for fostering teachers'

ongoing learning, and that teachers' learning will result in improved teaching and student learning.

Third, there is experimentation with a wide range of new forms for professional development. Most researchers currently advocate for school-based, context-specific forms of professional development to supplement, if not replace, traditional modes of in-service workshops. These forms often involve teachers working with one another, sometimes in partnership with university faculty, talking with one another about their teaching. Some involve teachers developing their subject matter knowledge; others involve teachers talking about individual students; others involve teachers sharing and discussing problems of practice.

Dangers

This new "consensus," with its widely-espoused principles, demonstrates some of the promises of new forms of professional development and warns of the pitfalls of traditional forms of professional development. However, there are dangers in rushing too quickly to embrace these recommendations as a litmus test for models of professional development, a blueprint for designing new forms of professional development, or a menu from which to pick and choose new ideas for professional development. First there is the danger of being seduced by a potentially ill-founded consensus. Simply because something is widely espoused does not make it true. Second is the danger that current sets of recommendations may be treated as a "recipe" for the creation of new forms of professional development, which may result in the replacement of one one-size-fits-all system with another.

False Consensus. First there is the danger of being seduced by consensus. Even though there seems widespread agreement on these findings, one must still ask how rigorous the research is which supports the ideas of this new consensus. Putnam and Borko (1997) caution that the structures and processes of professional development become like "mantras" that the research community recites, sometimes at the risk of losing sight of whether these structures and processes are actually helpful. Ball (1996) argues that current claims about professional development are a mixed bag of research-based and rhetorical claims.

For example, in spite of the widespread advocacy for teachers to develop processes of "critical colleagueship," there may be an important but untold story about productive conversations among teachers. Little (1987) argues that

> much that passes for collegiality does not add up to much. When teachers meet only occasionally on questions of logistics, broad curriculum outlines, or school-level matters, they are unlikely to engage in close mutual examination of how they think about teaching, plan for teaching, or handle teaching demands in the classroom. (p. 505)

A second concern about the role of conversation in helping teachers learn is that the ultimate goal of professional development is the improvement of practice which results in more or better student learning. Most advocates of particular types of conversations among teachers try to establish a sociocultural link between teachers' changed talk about their practice and about their practices themselves. However, Argyris and Schon (1974) have argued that espoused theories may not always correspond with theories-in-use, i.e. what people say they believe and wish to do does not always translate neatly into practices which match those beliefs. This difficulty has also been noted by Hollingsworth (1989), who argued that changes in beliefs do not always precede changes

in practice. The disjuncture between talk about teaching and teaching practice is complicated by the lack of a technical and shared language for talking about teaching, as Lortie (1975) charges.

Regarding effective *contexts*, there have been several recent efforts to differentiate between different types of communities and to acknowledge some of the barriers inherent in teachers' efforts to work together. For example, (Westheimer, 1998) complicated the concept of "community" in a sociological study of two schools reported to have a strong sense of community. Focusing on the "features of" and the "processes to" community, he found that strong communities can look very different depending on a group's conception of a community. He distinguished between "liberal" and "collective" school communities. Whereas liberal communities protect the rights, responsibilities, and autonomy of individual teachers, collective communities work toward the establishment of shared goals that become normative expectations for all members of the community.

Though interest and advocacy for collaboration dominates the research literature, there are some authors who caution against such enthusiasm. Noddings (1996) argues that "community is not an unalloyed good; it has a dark side, and both educators and students should be aware of it" (p. 245). Noddings describes how all strong communities have some element of normocentricity which may infringe on personal freedom and decision making. At their best, strong communities foster a sense of belonging and a satisfying sense that community members are working together toward common goals. At their worst, strong communities result in fascist-like communities with little tolerance for dissenting views.

Finally, regarding effective *forms* of professional development, researchers must confront the possibility that groups may not work equally well for all individuals in all circumstances. There may be times when people are justified in wanting to avoid some types of collegial interactions. People may object to groups because they see them as a form of bureaucratic control (Hargreaves and Dawe, 1990). They may be exercising what Hargreaves (1993) calls "strategic individualism," the choice to use free time, not with other teachers, but accomplishing other crucial tasks. They may simply prefer to work alone, preferring to spend time working with students or planning in solitude, what Hargreaves (1993) calls "elective individualism." They may be searching for those people most likely to present new ideas or expand their thinking, and believe that those people are best found outside of their own school (Huberman, 1993). Finally, groups are not always accessible to anyone wishing to join; they have a shared history and vocabulary, and newcomers are not always welcomed or easily included (see Little & Bird, 1984; Miller & O'Shea, 1996).

Huberman (1993) and Hargreaves (1993) argue for the potential value of *not* requiring teachers to work together. Huberman describes teachers as "bricoleurs," or "independent artisans," who construct a practice like a craftsperson by weaving together bits and scraps of material collected over time in a workshop-like setting. Although he stops short of suggesting that this is the most effective model, he states that many teachers cited a "lone wolf scenario" of series of graduated experiments as more helpful than conventional in-service programs (Huberman, 1995). He argues that teachers, like craftspeople, are benefited the most when they have opportunities to talk to fellow craftspeople working on similar projects who have developed new techniques or who

have a higher degree of skill. He uses this analogy to suggest that cross-school networks and subject matter associations may be more helpful than school-wide professional communities.

Hargreaves (1993) tries to debunk what he calls the "heresy of individualism" by offering principled reasons why teachers might choose to work independently, in solitude. He says that teachers sometimes choose to shy away from collaborative efforts in schools so they can spend more time with their students. Others fear the loss of individuality and the ability to make independent decisions in their classrooms. Other teachers simply need solitude, time "to reflect, to retreat, and to regroup" (p. 72). Hargreaves acknowledges that while these reasons could be used as excuses to protect one's incompetent practice from scrutiny, they must be taken seriously as potentially valid reasons for teachers to choose to work and learn alone sometimes.

Although many groups appear successful in promoting the professional development of their members, researchers cannot assume that the group-ness itself stimulates the learning. There may be other features (e.g. serious intellectual engagement or exposure to new ideas) that participants do not cite but that are more important and not even intrinsic to group experiences. Another unavoidable shortcoming of research on teacher groups is that the researchers and group participants are the very people most likely to begin as enthusiastic supporters of collective professional development opportunities. Often, researchers are the very people trying to make the group work. Self-selected group participants are likely to be enthusiastic about their participation.

These situations also influence research, writing, and publications about groups. Researchers may be loathe to write about unsuccessful groups or about participants who

do not learn. Even if researchers did write about either of these, journal editors and reviewers have traditionally been less willing to publish accounts of no change. Conversely, because of relationships with researchers or fellow teachers, participants may only choose to share positive feelings. There may also be equally compelling cases of people who learn nothing from participating in groups, but whose stories are never told. Although the literature about successful groups offers *sufficient* conditions for *some* teachers' learning, it has not been shown conclusively that the conditions are *necessary*, *sufficient,* or even *helpful*, for *most* teachers.

These arguments that dispute the consensus view illustrate the chicken-egg dilemma inherent in consensus ideas about professional development; it is difficult to tell whether the principles drive the new models or the examination of new models reinforce the principles. Since the epistemological basis for these beliefs ranges dramatically, researchers must hold them loosely and consider them open to examination and criticism. Although there is a growing recognition that delivery models of professional development, and even more sophisticated training and coaching models, are insufficient, there needs to be more research investigating how different forms of professional development, broadly construed, contribute to teachers' changed beliefs and practices over the long term.

Focus on Form Over Content. A second danger of embracing the current consensus view of professional development is that much current literature on professional development focuses on features of professional development rather than the content of professional development. For example, one could describe the work of a great painter by talking about the media, the choices of colors, brush styles or techniques

used to create the painting. However, to describe what makes a painting truly special requires an explanation of the painting's subject matter and the inspiration for the subject matter, perhaps even something about the historical situation of the artist and his or her likely intentions. It is a mistake to accept the features of something, i.e. the type of paint, brush, or color, for the thing itself, i.e. the subject of the painting.

The same is true with understanding how to promote teachers' professional development. The current literature on professional development asks questions that emphasize an understanding of the formal structures for professional development with little attention to the content of what teachers need to learn, or how particular interventions will help them learn this content. Unless the focus shifts to an attention to the content of what teachers need to learn, researchers risk equating the features--the processes, contexts, and different forms--with the desired end product, in this case, how teachers learn to pay attention to their students.

There are many examples of situations which seem to have formal structure of something without necessarily capturing the essence of what the structure is intended to describe. For example, Cohen (1990) describes the teaching practices of Mrs. Oublier, who had instituted the use of concrete manipulatives, small groups, the incorporation of estimation and problems solving in her classroom. However, even though her practice contained some of the features of reform-oriented teaching as defined by the National Council for Teachers of Mathematics, she also maintained many traditional features in her practice. Cohen describes Mrs. Oublier's practice as "an extraordinary melange" of traditional and new practices which she used interchangeably without regard for the conflicts inherent in her combination of practices.

We also know that different strategies work well for different learners. A common criticism of current and traditional models of professional development is that they come from a one-size-fits-all mentality about how to foster teachers' growth (Little, 1993; Lord, 1994). Current efforts to distill a single set of characteristics of effective professional development are essentially trying to replace the current "one-size-fits-all" model with a different "one-size-fits-all" model. Guskey (1995) claims that "there will be a collection of answers, each specific to a context. Our search must focus, therefore on finding the *optimal mix*--that assortment of professional development processes and technologies that work best in a particular setting" (p. 117). To that statement I would add "for particular individuals." Because of the importance of context and individual variation, Guskey argues that the optimal mix will necessarily change over time as it adapts to a variety of influences. New research needs to focus on understanding how different opportunities stimulate different teachers to learn different things, with the recognition that teachers may strategically select the experiences they believe will benefit them the most or at least impose their own coherence on a set of disparate experiences (Buchmann & Floden, 1993).

Promising Research Developments

The existing professional development literature provides a set of useful tools for examining current forms of professional development even though I have argued that it does not offer a proven blueprint for successful professional development. There may be much that passes as professional development which does not promote better teaching or improved student learning. Schools as workplaces may benefit by creating opportunities for teachers to engage in inquiry about their practice with one another. Researchers

should certainly continue to explore promising alternative forms of professional development. The mistake is when researchers and policy makers believe that we can mastermind a systemic reform guaranteed to reach all teachers and move teachers smoothly through a planned, connected, coherent series of professional development opportunities to help teachers become expert professionals.

Even though the existing collection of professional development experiences offered to teachers may actually be more of an "incoherent and cobbled-together nonsystem" (Wilson & Berne, 1999), researchers must consider the possibility that the existing systems actually have something to offer, and that teachers may be able to impose their own coherence on this non-system. One approach to reforming the system of professional development is to align it according to a set of standards and try to increase its coherence; a different approach is to broaden the opportunities available to teachers and help teachers themselves navigate the system more effectively in a way that makes sense for their own professional growth instead of being a pick-and-choose, shopping-mall type selection. Ultimately, the issue is not whether the system is organized, coherent, or cobbled-together, but whether individual teachers use the available opportunities as resources from which they construct a personally coherent system out of the jumbled array of things that are available to them.[9]

[9] In an article entitled "Coherence: The rebel angel," Buchmann and Floden (1993) argue against attempting to create programs of teacher education that send people through a tightly structured, lockstep set of experiences designed to offer students a set of knowledge and skills deemed necessary for teaching. They claim that a system which is too neat may make teaching look more certain than it is. By disguising endemic uncertainties in teaching, such programs may rob their students of opportunities to grapple with genuine teaching dilemmas.

Two types of promising research go beyond the elaboration of effective processes, contexts, and forms of professional development. The first type moves away from understanding the *features* of professional development toward understanding the *content* of what teachers need to learn. The second type begins with stories of actual teachers careers and seeks to understand the range of experiences that promote individual teachers' growth over the course of a career.

Focus on Content

There have been several recent arguments for an increased attention to the content of what teachers learn through professional development. Thompson and Zeuli (1999) argue that a professional development ought to focus on helping teachers develop an awareness that students need to think in order to learn, and that teaching for learning requires providing opportunities for students to think. Any professional development which does not explicitly develop this idea is unlikely to promote widespread changes in teaching that are necessary to effect current teaching reforms.

Ball and Cohen (1999) state:

> Any design for improved professional learning must be grounded in the cornerstones of education: what needs to be learned (content), the nature of that content and what that implies about how it might be learned (theories of learning), curriculum and pedagogy (with what material and in what ways the learners can be helped to learn that content, given who they are, the nature of what there is to be learned, and theories of how it is best learned). (p. 6)

Ball and Cohen suggest that teachers need to learn several things: a) the subject matter they teach; b) what children are like and what they are likely to find interesting and to have trouble with; c) cultural differences among children; d) ideas about learning; and e) a pedagogical repertoire. Wilson & Berne (1999) develop a similar list. They discuss

and provide examples of three different types of powerful agendas that may promote teacher development: a) opportunities to talk about subject matter; b) opportunities to talk about students and learning; and c) opportunities to talk about teaching. Ball and Cohen suggest that teachers may learn these things best by developing a "stance of inquiry" for learning in and from practice.

Rhine (1998) cites Cognitively Guided Instruction (Carpenter, Fennema, Peterson, Chiang, and Loef, 1989) and Integrating Mathematics Assessment (Gearhart, Saxe & Stipek, 1995) as two promising models of professional development. He believes that the promise of these models lies in their ability to focus teachers' attention on students' thinking processes in particular mathematical areas using research-based knowledge about students' problem-solving. However, the drawback is that it is impossible to provide teachers similar opportunities in all subjects for all the concepts they teach. Drawing on House's (1996) theory of "bounded rationality" which postulates that teachers, like anyone, are limited in what they can know, Rhine argues that "even if it were possible to expose teachers to everything they could know about children's thinking, the constraints of bounded rationality indicate that they will be unable to process it perfectly" (p. 28).

Rhine then asks the question, "What is the crucial knowledge that projects like CGI and IMA provide which seem to enable teachers to boost their students' achievement?" He suggests that the most important idea a teacher can take away from any professional development is the

> paradigm shift away from a focus on teaching and toward a focus on students' learning. Instead of teachers reflecting on what students are doing, they appear to begin to consider what students are thinking and understanding and how that influences what they do in the classroom. (p. 28)

In one example, Rhine quotes an IMA participant who remarked, "All I remember about those videotapes [of clinical interviews with students solving problems] is Steve asking the kids over and over again, 'Why did you do it that way?'" (p. 28).

From these examples, three ideas clearly emerge. First, the content of what teachers learn through professional development is crucial and needs to be identified by researchers of professional development. Second, there are many possible contents for professional development, but two consistently emerge: knowledge of subject matter and knowledge of students. Finally, the content of what teachers learn needs to be grounded somehow in actual teaching practice.

Stories of Individual Teachers' Learning

What kind of research can help us to discover how teachers learn the necessary content for professional growth? If the goal of professional development is teacher learning, we must examine closely how teachers learn what they do; as Fullan (1991) argues, "the transformation of subjective realities is the essence of change." Huberman (1993) claims that

> We might do better not by setting specific school-wide objectives and then rationalizing the tasks and functions to be accomplished by school staff, but by grafting such deliberative work on the ways in which teachers spontaneously construe their work and relate to their peers (p. 45).

These two statements point to the need to understand, from teachers' own perspectives, what kinds of experiences interact with the continuity of their professional careers to produce powerful changes.

How can we learn about "the ways in which teachers spontaneously construe their work" and how to design professional development that will be responsive to these

variations? One promising direction is to listen to stories of individual teachers who have made significant changes in their practice. Using teacher stories is one way to understand how teachers perceive the experiences they have, and how the experiences affect their teaching practices. By gathering stories across the entire span of a career, it is possible to learn what kinds of experiences emerge as particularly salient even long after they have happened. Finally, teachers' stories allow researchers to understand more about the context surrounding particular experiences. Rather than just gathering information about characteristics of formal professional development experiences, teachers' stories enable researchers to examine how objective conditions interact with personal continuity to produce "educative experiences" (Dewey, 1938).

There have been a number of efforts to document stages of teacher development (Fessler & Christensen, 1992; Fessler, 1995; Huberman, 1989) using cross-sectional interviews and surveys of teachers at different points in their careers. One of the most prominent of these is Huberman's (1989) study of teachers' career stages. After a series of interviews with 160 teachers, Huberman concluded that teachers pass through several phases in their career: a) survival and discovery; b) stabilization; c) experimentation or stock-taking; d) serenity or conservatism; and e) disengagement. A similar effort was undertaken by Fessler and Christensen (1992) who documented the interaction between professional career stages, organizational and personal environments. Using this model, they advocate for more personalized approaches to teacher development.

While helpful for understanding general patterns of teacher career development, these lines of inquiry do little to understand variations in individual teachers' careers. These studies paint rough sketches of reasonable predictions about teachers' careers

using broad brush strokes. Both sets of studies acknowledge individual teacher variation within these general models. However, since they rely on cross-sectional data, they offer little evidence of how individual teachers negotiate changes over the span of an entire career.

A different set of studies pay more attention to the individual, particular, and contextualized nature of individual teacher stories. Butt, Raymond, McCue, and Yamagishi (1992) use collaborative interpretation of teachers' written autobiographies to understand "how teachers think and act and how they have come to think and act in the way they do" (p. 51). Kelchtermans and Vandenberghe (1994) examine "critical incidents" that drive the transition from one career pattern or phase to another. Schwille (1998) uses interviews and written journals to reconstruct the story of one teacher's journey toward teaching for understanding. Finally, Connelly and Clandinin (1990) situate teachers' personal stories in a broader landscape of organizational change.

Conclusion and Plan for Part II

New research needs to continually assess and question "consensus" views of professional development. Given renewed emphasis on understanding the content of professional development, we need to continue looking at individual teacher stories to understand how different types of experiences function organically in the career trajectories of teachers. Researchers must assess the value of professional development opportunities with an eye on several questions: Professional development to what end? What do we hope teachers learn from this set of experiences? How will different teachers respond differently to this opportunity?

Rather than trying to uncover a new "one-size-fits-all" orientation, researchers need to broaden their conception of effective professional development. In particular, we must seek to understand how a complex mix of "objective conditions"--including formal professional development experiences, informal exchanges with colleagues, readings, or other personal experiences--combine and interact within the unique continuity of each teacher's accumulated personal experiences to "educative experiences" that support individual teachers as they develop new practices. Some teachers may make immediate changes as the result of some group discussions. Other teachers may need to discuss and think about new ideas many times before these ideas ever become prominent in their thinking. Ideas may need to exist in one's head long before any changes in practice are evident. When changes in practice do occur, they may be transformed and surface in odd ways which do not connect directly or obviously to their point of origin.

Putnam and Borko (2000) concur with this perspective. They say:

> The most appropriate staff development site depends on the specific goals for teachers' learning . . . . It may be that a combination of approaches, situated in a variety of contexts, holds the best promise for fostering powerful, multidimensional changes in teachers' thinking and practices. Further research is needed to better understand the complex dynamics of these multifaceted approaches to teacher learning. (Putnam & Borko, 2000, p. 7)

My research supports this contention and follows Putnam and Borko's recommendations to examine the "complex dynamics" of multifaceted approaches which occur naturally over the course of many teachers' careers. In the following two chapters, I examine more closely the characteristics and contents of these multiple approaches for each of the four teachers in the study.

Chapter 6

Carrie and Linda: Developing a Second Set of Eyes

In the next two chapters, I construct and discuss the four participants' career histories through their stories of critical incidents that had a lasting influence on their teaching. Each of the four teacher's career histories is composed of a unique constellation of "critical incidents" which combine and interact in ways that are specific to each teacher. Each teacher latches on to particular experiences because they mesh with the teacher's dominant orientations toward attending to her students. Even when teachers experience the same events, as Carrie and Linda did, the teachers' subjective experiences of these events differed; the experiences were important for different reasons and produced different changes in teaching practice.

In this chapter, I examine parts of Carrie and Linda's career histories that Carrie and Linda described as important in their professional growth. Carrie and Linda have been close colleagues for their entire teaching careers, each over twenty-five years. They have experienced almost identical professional development opportunities. During the first ten years of their teaching, neither Carrie nor Linda changed their teaching dramatically. However, during the mid-1980's, they became involved in the Teacher Learning Group (TLG), a group of teachers and university researchers who met at Dale Elementary to talk about the teachers' teaching during a three-year period. Both Carrie and Linda described their involvement with the TLG as a pivotal experience which transformed their views of their teaching practices and the way they responded to

subsequent professional development opportunities. During their time in the TLG, each teacher experienced different critical incidents which were focused and intense, producing rapid and deep-seated changes in their practice which opened up new windows on their students.

In the first part of the chapter I provide an overview of each teacher's career. I begin by examining the teachers' vivid memories of teaching and learning as a K-12 student to see what can be learned about their "internal conditions" (Dewey, 1938) regarding attention to students even before they became teachers. I then describe some of their earliest professional learning experiences and talk about the features of these experiences. In the second part I relate Carrie and Linda's memories of key events in the history of the TLG, and I examine the nature of the changes that Carrie and Linda made during this period of time. I conclude by describing some of the events that followed the TLG and how Carrie and Linda assessed the impact of these events in their careers. At the end I discuss what we can learn from Carrie and Linda's career histories.

Carrie: The Early Years

Introduction

In Part I, I described Carrie as a teacher who attends to the emotional attitudes her students bring into the classroom and who tries to foster students' confidence and self-esteem. Carrie's orientation of attending to the compatibility between learners and the classroom context has influenced the kinds of changes she has made in her teaching. She observes students' emotional readiness to begin school and their responses to daily activities. She offers frequent opportunities for students to choose which activities to

pursue. She believes that when students are engaged in activities of their choosing, they are more likely to stay on task.

Carrie's orientation of attending to the match between students and the classroom environment has been a constant thread throughout Carrie's changes. Carrie's stories suggest that her orientation is rooted in her memories of being a student. In addition, her orientation has influenced her responses to the professional development experiences she has had. Her orientation of attending to students is both an internal condition that influences her perception of different experiences as well as a tool for understanding the changes she has made throughout the years.

Memories of Schooling

Carrie's focus on the affective dimensions of schooling is evident even from her descriptions of herself as a student. Carrie described herself as a "good student" who was always in the "high reading group" during her elementary school years. She remembered sitting around the teacher reading "Dick and Jane" books. She remembered a lot of seat work; she was not able to go outside until she completed her workbook pages. As a student, she did little or no independent writing. One piece of writing she remembered was a "Michigan Week" book that she colored and copied from the board during third grade:

> I remember I did my very best and it was perfect and I got to the end and I couldn't fit in three words. My paper was full. And I remember the teacher took her pencil and she wrote in the space at the very bottom of the page, very small for me so it would all fit on the page, and it was just beautiful . . . . Ahhh, her hand writing was just, oh, it was like art. It was just beautiful . . . I wished I could write like her. (5/12)

In this assignment, Carrie was copying words that were already on the board. Her most important task was to fit the words in the available space.

When she did recall the work she did as a student, she remembered doing things that she didn't enjoy but were expected of her:

> There were some things that were even for me being a good student who wanted to do well, were boring. Just that I really hated but you had to do it like the spelling workbooks and just copying stuff. (5/12)

As a student, Carrie had the "life skills" that she says many of her students nowadays are lacking. These skills gave her the inclination to do whatever was expected of her, even the boring work, in order to succeed.

However, what she remembered most fondly was the general atmosphere of her elementary classrooms:

> I have very vivid, vivid memories of who was in my room and what our clothes looked like and what our furniture looked like and what the work looked like and what it smelled like. (5/12)

Carrie's "vivid memories" center around the intangibles of classroom life, the parts of school that were less related to the content of learning: the sights, the people, the smells. These memories map neatly onto Carrie's general orientation of attending to her students' affective responses to the classroom.

This orientation is consistent with Carrie's memories of her teachers. Carrie placed the greatest emphasis not on how the teacher taught or what she learned in the class, but on the relationship between the teacher and her students:

> The teachers that were authoritative, dictatorial, didn't matter what their subject was, I didn't enjoy their class. And teachers who really connected with the kids and had an interest in the kids and who listened to the kids, I liked their classes. (5/12)

She remembers all but one of her elementary teachers fondly:

> What I remember that's memorable about them is their grandmotherly disposition. How, oh they just, oh you know, they would just hug you to their breast and they would just, you were all so sweet little children. . . . They were just sweet, wonderful, little, old grandmothers. But I think they were good teachers, too. . . . They made you work, but they were sweet about it. (5/12)

Throughout school, the teachers she enjoyed most were the ones who tried to make personal connections with the students. As a student, her fondest memories were about the atmosphere of the classroom. Now, as a teacher, she strives to make the atmosphere of the classroom something her students will remember fondly.

Early Learning Opportunities

Collegial Relationship Between Carrie and Linda. Carrie began her teaching career in 1973 after completing her teacher preparation at a large public university. During her first year, she taught fourth grade. The following year, she switched to a different school and began teaching first grade, which she taught until 1995. Since 1995, she has taught second graders in a multi-age combined classroom with first graders.

During Carrie and Linda's first five years of teaching, they developed a close personal and professional relationship:

> We were both teaching the same grade. She was right across the hall. We were the same age and just had a lot of . . . similarities as far as our life was going . . . . At that time our husbands were both musicians, played the guitar. So we'd get together at night and the guys would play and we'd sit and talk or whatever. So we'd socialize and we'd do things together as couples . . . . I think we both really had the same philosophy as far as how we worked with kids, talked to kids, dealt with kids. (Linda, 3/2)

Carrie and Linda's relationship was initiated by the fact that they taught the same grade and worked in close proximity to one another. Their personal relationship was strengthened because they were the same age and their husbands had common interests.

Linda felt that they shared a general "philosophy" or orientation about how to work, talk, and deal with the children in their classrooms. Their relationship became a crucial foundation for many of the future events that stimulated Linda and Carrie's professional growth. Without the friendship already in place, some of the events that occurred later may not have had the same effect.

In addition to their social relationship, Carrie and Linda expanded their professional sharing:

> We all had self-contained classrooms, but we all liked each other as people . . . We would just spend time and eat lunch together, and we would just talk about our lesson plans and ask each other what we were doing that worked well. (Carrie, 2/17)

> We just shared things . . . What are you going to do for seat work today? . . . Here I have this good worksheet, I'll run this off for you . . . . If there was special holiday or a special event, like for Thanksgiving, if we were doing a Pilgrim and Indian thing, you know, we'd get together in the gym and one [class] would be the Pilgrims and one [class] would be the Indians. (Linda, 3/2)

These shared activities served several purposes. Both Carrie and Linda hoped that the new activities would stimulate increased involvement among the students. By sharing materials, they enlarged the pool of available instructional materials. Since they both believed at that time that their jobs called for them to design more creative worksheets, the exchange of new worksheets opened more possibilities for keeping students happy in their work.

At that point in her career, Carrie believed that having more materials helped make her a more effective teacher because better worksheets helped keep the students more engaged. As she said:

> Before I really did feel like your talent in teaching is to be able to coerce the kids into doing what you think they need to do that they don't want to in a way that will make them . . . happy little, happy little slaves. (Carrie, 3/4)

Carrie's description of students as "happy little slaves" shows her interest in making students a comfortable environment for her students. Even though she might have been exaggerating, she described the work she expected of students at that time as a form of slavery, but she believed that her job as a teacher was to keep students happy so they would embrace their slavery.

Even though this sharing did not significantly change the way Carrie or Linda taught, it reduced their stress because there were more teachers working together to produce new seat work materials. By combining classes for special activities, the two teachers also strengthened their relationship.

At around the same time Carrie and Linda both enrolled in a master's degree program in educational psychology. Even though Carrie did not consider the master's degree a major contributor to her professional development, she believed it helped her think more about the importance of students' attitudes in her class. She described some of the things she learned in this program:

> Like how important self esteem was and confidence and positive attitude. Just what a definitive role those attitudes played. And how teachers could unknowingly sabotage those positive attitudes with kids. So it was some real enlightening in some ways to realize that how I worded my comments to kids could either devastate them or support them. (Carrie, 4/8)

Even though her graduate studies did not change her teaching, her memory of the focus on self-esteem, confidence, and positive attitude is consistent with what was significant about other events.

Carrie's partnership with Linda was the most significant event of Carrie's early career, not because it transformed the way she taught, but because the relationship

provided the groundwork that supported many of the changes she made later in her career. Carrie worked closely with Linda, and the two teachers talked with one another about their teaching for over ten years before they experienced the transformative effects of the TLG. The close partnership but lack of change suggests two things about professional development. First, collaboration among teachers is not a guarantee of professional growth. Second, even arrangements which do not provide immediate growth may create conditions which make it possible or more likely for other experiences to be educative.

Teacher Expectations and Student Achievement (TESA). In the late 1970's, Carrie participated in Teacher Expectations and Student Achievement (TESA), which she said was "the first thing that made a significant change in the way I looked at my teaching and thought about my teaching" (2/11). Even though she went through this program over twenty years ago, she can still recall learning skills that she uses in her classroom today.

TESA was a semester-long program to help teachers learn and practice skills identified by the process-product research of the 1970's effective teaching practices, e.g. equitable distribution of response opportunities, positive feedback, and demonstration of personal regard. Each month, teachers attended a workshop introducing three behaviors to be practiced during the next two weeks. Two weeks later, teachers in groups of four teachers visited each other's classrooms and tallied how many times the observed teacher exhibited positive or negative instances of the behavior presented in the workshop.

Initially, the TESA behaviors felt awkward. After she practiced the behaviors and they came more naturally, she began to see positive changes in her classroom. She began to look forward to learning the new behaviors:

> Oh, my gosh, this is just the kind of thing that I've been needing, and I'm ready for this. This is good stuff. I want to learn it. It's helpful. (3/4)

Her positive feelings when she used the new behaviors led Carrie to a deeper trust in the validity of what she was learning. She was hungry to learn more and to try the new practices in her classroom. Carrie often spoke about how she was "ready" to learn what she could from different experiences in her career. In this case and others, being ready entailed believing in the value of something new because it pushed to teach in ways that she found productive but may have not previously thought about. In every case, Carrie's readiness to learn something new was directly connected with her personal commitments to establishing positive affective environment in her classroom.

Carrie remembered many of the skills she learned through TESA:

> [We] learned behaviors like proximity, touching, personal regard. And we learned things that having eye contact and saying good morning to every student every morning made a difference in how well they learned and touching them and standing close to them and knowing their family members' names and knowing who their pets were. In other words, knowing them as a person. Taking a personal interest in being personally connected with them made a significant difference in their learning. And you knew that always made the room, the classroom better but this was the first time that those behaviors were explicitly described and specifically practiced. (2/11)

Because she knew she was going to be watched by fellow teachers, Carrie practiced the behaviors even though they initially felt awkward. She wanted to make sure that when they came in, the behaviors came naturally. This experience convinced Carrie that, when practiced, even unnatural behaviors can eventually feel more natural.

A supplementary benefit of the program was the opportunity to visit other teacher's classrooms:

> I'd go visit three other classrooms. And that was wonderful . . . . I mean the objectives of the program which were the purpose of the visitation were very helpful. But just to get out and get into other people's classrooms and other buildings was great. (2/11)

In turn, she appreciated having other teachers visit her classroom. She says:

> It makes you look at yourself differently. "Oh, I wonder what this looks like from that perspective?" And you didn't have time to wonder about those kinds of things while you are teaching otherwise. (3/4)

She described these observations as "non-judgmental" since the visiting teachers were tallying her teaching behaviors according to a rubric from the workshop. There was no room for subjective judgments about one another's teaching. The observers were acting as instruments to help measure the frequency of particular types of behaviors. For Carrie, this type of observation was less threatening than many teachers describe when having colleagues observe in their classrooms.

The result of Carrie's new teaching behaviors was that the tone of her classroom was changed. The students responded more positively to her, were more willing to work, and she felt better about asking the students to do their work. She felt her relationship with her students changing:

> [I developed] a stronger relationship between myself and individual students. I felt more bonded to them. I felt more connected to them. I felt like I knew them at a deeper level. I knew them more as individuals. I understood who they were better. I could appreciate them more. What was significant was that was very valuable to the students. To feel recognized and cared for and appreciated. And that had a really positive impact on how hard they were willing to work. Then a lot of times, they do it just to please me. Or they do it just because I asked them to. Or when I'd tell them to, they'd argue less. The classroom became more of a family environment instead of an institutional environment. . . . I think it improved the learning in a really indirect way. . . . It wasn't because I drilled

more and brought in new materials. It's because I affected the, the affective part of the classroom.

Discussion

From her experiences as a student, Carrie's primary orientation of attending to the affective dimensions of her schooling is evident. From her experiences as a student, she remembered most vividly how her teachers made her feel, the relationships they developed with their students, and the feelings they promoted in their classrooms.

Carrie's early experiences with Linda and with TESA helped her develop new practices that were consistent with her orientation of attending to the affective dimensions of school and the relationship between teacher and students. The TESA practices changed the relationship she had with her students. TESA offered something that she was "ready" for, because she had an unspoken desire to promote positive affective atmosphere in her classroom, and she sought new practices that helped her accomplish that. Even though she expressed skepticism about the new behaviors at first and initially felt awkward practicing them, she was convinced when, through practice, she discovered that she could accomplish something in her classroom that she valued.

Carrie appreciated learning experiences that gave her new ways to affect the environment of her classroom and the relationship she had with her students. She appreciated learning specific practices, but she did not just try anything she was told. She responded best to those which aligned with her commitments. Finally, she was willing to try new practices even before she could see how they might change her classroom. Carrie became convinced of the value of new practices when she could see for herself how her classroom changed.

Carrie appreciated having someone watch her teaching, but only when she perceived it to be "non-judgmental," in a way that did not introduce subjective opinions about good teaching. Instead, she appreciated observers who provided her with a new perspective by acting as recording instruments, paying attention to specific things and reporting what they saw. Observers functioned as what Carrie calls a "second set of eyes."

Linda: The Early Years

Internal Conditions: Patience and Passion

Former Teachers as Models. Many of Linda's ideas about her teaching originate with images of teachers she had as a K-12 student. The outstanding teachers she recalled were caring adults who demonstrated patience in teaching their students or conveyed enthusiasm for their subject matter. The ideas she got about what classrooms were supposed to look like, along with the images of good teaching that she had collected as a student, combined to produce an idea of what Linda wanted to be as a teacher: someone who dealt patiently with students and demonstrated passion for her work.

An early example of a caring teacher was her second grade teacher:

> I had a second grade teacher that I really liked a lot . . . I think it was just because she smiled and she laughed and we had fun and she was pleasant. She was a kind person and just seemed to enjoy what she was doing. (5/3)

Linda focused on her teacher's "smile," the "laugh," the "fun" and the "pleasantness," all features that made Linda feel more comfortable in the classroom. Linda did not offer examples of how this teacher helped her learn new material, but her memory suggests the importance she attributes to students' feelings about the classroom.

Linda talked about a Spanish teacher who went beyond teaching language skills. He took his students to Spanish neighborhoods in Detroit, went with them to concerts to hear Herb Alpert and the Tijuana Brass, and took students to Spanish movies without subtitles so they would be forced to listen carefully and try to make sense of it. He even went bowling with them. For Linda, there were three important things about this teacher: he found ways to make real world connections to the subject he taught, he took extra effort and went beyond standard practices to help his students learn Spanish, and he developed a relationship with his students that went beyond the classroom.

The teachers she remembered learning from were those who listened hard to the students, who tried repeatedly and patiently to help students understand. For example, she talked about a high school chemistry teacher who had just begun teaching:

> This guy was a great person and we just all really liked him . . . . He tried so hard to work with us anyway. When we didn't understand, I can remember him just clenching his jaw and taking deep breaths and trying to explain it over again . . . . I think it was just because he never gave up and he never lost his patience and he kept trying. And he kept listening to us. . . . You didn't write him off as a jerk. (Linda, 5/3)

Linda's description shows a teacher who cared about whether his student learned the material and worked hard to make sure they did. When his students did not understand, he listened to their difficulties, and tried to explain the material again. Linda perceived him as someone who listened patiently to students.

Linda's high school math teachers also focused on the teaching of the subject matter. Describing these teachers, Linda focused on their interest in math:

> The people I had as math teachers were highly regarded teachers. They really made you think. . . . They really challenged you. They had high expectations. They really knew how to teach it and explain it and make it make sense . . . . You knew they really loved what they were teaching. (5/3)

Linda believes these teachers were outstanding, not because they worked with students extracurricularly or had warm personal relationships with students, but because they were passionate about teaching their subject. These teachers are memorable for their high expectations, the use of multiple representations to help students understand, and their passion for the subject.

The consistent feature of all these memories is that Linda felt these teachers cared about her. Some teachers, like Linda's second grade teacher or high school Spanish teacher, demonstrated concern through warm caring relationships with students. Other teachers, like her chemistry teacher or her math teachers, concentrated more on helping their students learn the subject matter. They demonstrated their caring through patience, holding students to high expectations, and offering multiple representations of subject matter. Like Carrie, Linda focused on her affective responses in classrooms, but she combines her affective response with the teachers' patience and passion for helping their students learn the material. It is not surprising that Linda developed a commitment to these qualities she admired in her own teachers.

Other Adults as Models. These images of good teachers were reinforced by Linda's memories of other adult teacher-like figures in her life. She had a special relationship with the woman who shared an apartment in the house where she lived with her family:

> She was a single, older lady. . . . For every holiday and every birthday . . . she always gave us, the kids in my family a book. . . . She always picked the ones that were best sellers for kids . . ., award winners. (5/3)

Linda appreciated her neighbor's personal interest in her, but Linda remembered more than just a kindly disposition. She remembered the high quality books the librarian gave

as gifts. Although books may be a common gift for children, the neighbor's gifts were connected with something she felt passionate about as a librarian. Like Linda's math teachers or Spanish teacher, the librarian was sharing some of her passion with her next door neighbors.

In Linda's first algebra class in high school, the teachers regularly assigned very difficult problems. Even though Linda had been a strong math student, she had difficulty with these problems. When Linda's father, a school administrator, tried to help, he demonstrated characteristics of a patient, passionate teacher:

> I remember that was a big step going to Algebra . . . I'd sit there and try to do my homework and I couldn't do it, so my dad would go, "Don't worry, go to bed." I'd get up the next morning and he had sat up for hours working on these things, trying to figure them out. . . . He'd sit down and he'd explain the whole thing to me. Then I'd go to school and . . . I'd totally understand it. (5/3)

Her father's diligence in trying to understand the math homework after she went to bed and his patience in explaining it to her is reminiscent of her chemistry teacher, who was so patient and tried so hard to find new ways to explain and represent the material.

Throughout all of Linda's memories, the theme of teachers working hard to make sure that their students understood the material is evident. Although she enjoyed being in classrooms where teachers smiled and laughed, she also enjoyed being in classrooms where teachers clenched their jaws and challenged students. The constant thread in these memories was the teachers' passion for their subject matter and their concern for helping students feel confident and competent.

Early Learning: The Power of Inertia, Even Though Something's Gnawing at Me

Something's Gnawing at Me. When Linda began teaching, she came with these images of good teachers. She wanted to deal patiently with students and demonstrate

passion for her work. At the same time, she believed she was expected to keep her students silent and busy at their desks. The combination of these beliefs resulted in the practice described in chapter 4. She taught in the same way as all the other teachers in her school. When she could, she designed new worksheets to keep students engaged while helping them learn the material.

In retrospect, she was not happy with this style of teaching:

> All of the whole time I was teaching that way, it just didn't feel right. There was like this sense that there, something more should be, there's just something more should be happening. It was just kind of gnawing at you, at me. (2/2)

Even though she could not pinpoint the source of her discomfort, something about this way of teaching did not feel right. Perhaps there was something incongruous about keeping students silent and stationary while also trying to be patient and caring. This "gnawing" feeling may have been buried deep within her, something that she was not even conscious of during those years and only becomes obvious in retrospect. Perhaps only after she became aware of how a classroom could look dramatically different did she realize how dissatisfied she had been by her earliest teaching.

The Power of Inertia. In spite of her gut feeling that there must be something more, Linda did not have any major breakthroughs during the first ten years of her career. Linda and Carrie continued to work together, developing new curriculum materials and combining classes for special events. According to the professional development literature, Linda and Carrie's joint work over a long period of ten years would be a promising start for reforming teaching practice. However, the basic structure of her class with all the accompanying challenges of being able to attend to students remained

basically unchanged. What prevented her at that time from creating more the kind of classroom she has today?

Together, Linda and Carrie sought out ideas from other sources. They attended the same in-service workshops and tried to implement the ideas they learned, but Linda never described any far-reaching effects that caused her to rethink how or whether her existing class structure enabled her to be attentive to her students. Linda never talked about the TESA program, which Carrie described so enthusiastically, as a particularly important professional development experience. Linda said that whenever she attended professional development workshops, she would try new ideas briefly, but she would eventually revert to her old practice:

> You'd go to another workshop and [think], "Oh, that sounds really good." And then you'd make the things or whatever it was you were supposed to do and then you'd go back and implement then in your classroom. And then over time . . . it'd just fade away. (2/2)

There are several possibilities to explain why new ideas tended to "fade away." The ideas they were getting may have been of the same sort as the ideas they shared with one another--a more creative ditto, a fun activity. Once they tried it, it was over. Linda said that many of these new ideas were very labor-intensive. For the amount of effort it took to implement the new ideas, the results were not satisfying. Linda felt that these new ideas came from outside influences. Since the new ideas did not come from within, Linda may have used the new ideas as a script or a recipe without taking ownership of them. Linda did not recall any of these new ideas becoming a permanent or significant feature of her teaching.

During this time, Linda found it easier to let inertia take over:

> You also get in this cycle where you are very busy and you are trying to keep up from one day to the next and you just get caught in this cycle. You're planning, you're looking at the teacher's guides, you're making your lessons plans, you're correcting your papers, you're making your work sheets, you're dealing with discipline and the next day . . . you start all over again. (2/2)

Her principal did not support new or different kinds of teaching. From her time as a student, Linda had learned that it was best not to "rock the boat." Even if she had wanted to make dramatic changes in her teaching, any change that resulted in more noise and movement in her classroom would have been frowned on by her principal. As a result, Linda taught as she was expected to rather than "rock the boat" by experimenting with alternative methods. Given the weak effects of early professional development, the expectations of the principal, and the influence of "inertia," Linda did not make significant changes until almost fifteen years into her teaching career.

Discussion

Like Carrie, Linda tried to make her classroom a place where students felt comfortable. She believed in the importance of helping students develop self-esteem and confidence in their ability to learn the material. However, more than Carrie, Linda's memories of good teachers emphasize their patience and caring toward students who have difficulty learning material *as well as* a passion for the subject matter. Though Carrie would probably not disagree with these features of good teachers, they are not the first things that she spoke about when recalling memorable teachers.

Except for the TESA program for Carrie, none of Carrie or Linda's earliest learning experiences revolutionized their teaching in the way that later experiences did. Linda talked about few important changes in her teaching during the first decade of her career. Like Carrie, Linda believed that her early partnership with Carrie was influential.

According to the "consensus model" of professional development, their partnership had powerful potential. The partnership was long-lived, school-based, and based concretely in their teaching practice. However, this partnership did not have the kind of transformative effect on either Carrie or Linda that their later involvement with the TLG did. What was it about this kind of collaborative work that was so different?

At some level, conscious or not, both teachers felt some "gnawing" feeling that there may be a better way to teach. However, the nature of conversations between Carrie and Linda may never have taken the form of Lord's (1994) "critical colleagueship" that would have exposed these concerns and made them the explicit focus of their conversations. The kinds of exchange of materials with occasional co-teaching opportunities that Carrie and Linda describe are what Little (1990) calls "idea-swapping," the least threatening and most common form of joint work among teachers. Sharing in such ways requires little in terms of teachers expressing their more underlying ideas about teaching. What held the partnership together is the social bond and the sense that they both had similar ideas about working with students.

Carrie and Linda's stories suggest two possible reasons why their relationship alone did not stimulate substantial changes in their teaching. First, they had no alternative models--modeled by other teachers, evident in curriculum materials, or promoted by the principal--powerful enough to overcome the inertia of daily teaching routines. The ideas they designed on their own reinforced their existing views of teaching, and even when they learned and tried to implement new ideas, their implementation of the new ideas faded away. Second, Carrie and Linda never wondered

aloud whether their modal teaching practices were accomplishing the goals they set for their students.

This analysis might suggest that the relationship between Carrie and Linda was a relatively insignificant experience of professional development. However, the importance of the relationship lies, not in the promotion of change and growth during their early years, but in how the relationship laid the groundwork for events which followed in their careers. When Carrie and Linda were approached by a group of university researchers in the mid-1980's to form the Teacher Learning Group, their relationship became a major factor in the success of the group and in the impact it had and continues to have on their teaching.

Teacher Learning Group: A Critical Experience for Carrie and Linda

In January 1985 a group of researchers from a local university went to the Dale District superintendent in search of teachers with whom to work on a project. The superintendent referred them to the principal, who had recently come to the school and was interested in supporting innovation among the teachers. The principal referred the researchers to Carrie, Linda, and their fellow first grade teacher.

All three teachers and their principal agreed to participate. Carrie described the excitement that the three teachers felt:

> It was always important to all three of us to do our job well, and to learn as much as we could to do our job well and to always be improving and always striving to do that. This looked like a chance to get some support. Here were some people from the university that were willing to come in and focus just on the three of us. And I think it was the recognition, too. I think we felt really proud . . . that we were being recognized as somebody worthy of working with. (Carrie, 2/17)

This was the beginning of the Teacher Learning Group (TLG), which lasted for approximately 3 years. Both Linda and Carrie, without hesitation, said that the experience of participating in this group was the single most powerful professional development experience of their career:

> It did more than any other workshop, or staff development, or professional journal or conference. It led to greater changes from the inside out than any exposure from changes from the outside in I've ever had. (Carrie, 3/4)

> But that probably, that experience was probably the most profound, had the most profound impact on my teaching than anything has ever. (Linda, 2/2)

How did this arrangement begin and why was it so meaningful for both Carrie and Linda?

Initially, the researchers informed the teachers that they wanted to see how teachers would change their practice as a result of being studied by researchers. The researchers proposed to use non-judgmental, non-interventionist ethnographic methods to learn about what the teachers were doing.

> What they had noticed in other projects . . . is that just the process of having people observe and talk with you led to changes. So they wanted to go in with a completely neutral slate, no agenda, and just observe and talk and specifically look at the process of how that kind of reflection led to changes, or how that happened or why. So we really had the chance to set our own priorities, set our own agenda, talk about, spend our time pursuing what was most important to us. (Carrie, 2/17)

At first, the three teachers were skeptical of this open-ended neutral stance. They wondered whether the researchers had some sort of "hidden agenda":

> We thought, "O.K., OK, there's got to be more. You've got to have something more hidden in there." [We thought] they had some hidden agenda, more than just seeing what's going to happen if we meet and talk and they observe us in our classrooms. (Linda, 2/2)

However, the teachers were also flattered by the interest and attention of the researchers, and the possibility of continuing to develop their teaching.

During early meetings of the group, the teachers shared the barriers that prevented them from doing their job well. Carrie thought the researchers expected them to say they needed to learn more content, but the teachers all said they wanted more time to talk to one another and think about their teaching:

> We need more time to be able to talk to each other, to plan together, to be reflective. As we were trying to identify the issue, you know, that was our answer. It's like if we just had more time we could be excellent teachers. (Carrie, 2/17)

The group divided themselves into sub-groups, each consisting of one professor, one graduate student, and one teacher. The professors' and graduate students' primary activity was to observe in the teachers' classrooms and take notes. After each observation the teacher and the observer wrote a journal entry about what had happened that day in class. The following day the teacher and the observers got together to exchange and discuss the journals. The journals also proved to be important for building trust among members in the group and for initiating difficult discussions about teaching.

The Journal Sharing Incident

One instance demonstrates the power of the journal task for bringing the three teachers closer together as a group. During the first year of the group, the three teachers wrote and exchanged journals about difficulties they felt in their teaching. The resulting conversation has remained emblazoned vividly in all the participants' memories; both Linda and Carrie describe in detail the outcome of this conversation.

> There was a pivotal experience where [the three teachers] each wrote a journal and . . . got together and shared it. We all three broke down in tears because we felt such a weight lifted off our shoulders and such a relief. We had each

> individually written . . . how we each felt less competent than the other two . . . . We always felt like we [were] falling short of what a good teacher should do because we felt a good teacher has a hundred percent responsibility for everything that's going on: the behavior, the attitudes, the learning, everything. And that if behavior isn't right on it's all the teacher's fault. And if everybody isn't learning it's all the teacher's fault. So you constantly were feeling like you never were good enough . . . For me to sit back and see these two master, expert teachers . . . feel that way, then I could feel that maybe I wasn't as bad as I thought either. And truly, when we had that insight . . . it was very pivotal. (Carrie, 2/17)

> Here I sat with two very close friends--colleagues I trusted and respected more than any others and people I had communicated with openly for many years--and yet I felt almost like we were learning about each other for the first time. We shared a mutual respect for each other's teaching, and yet we discovered that day that we had so many common feelings of inadequacy, isolation, and frustration that we had not shared before. I believe this was the very first and the most important step in unlocking the strength and confidence I had in myself that would contribute in so many ways to further growth and change in my practice. (Linda, in an article published by the TLG)

This sharing was an important turning point for all three teachers. The three teachers, for the first time, allowed themselves to admit to one another that they were frustrated by aspects of their teaching. They had never discussed these feelings before. They had worked together for several years, each person privately believing that the other two teachers were more competent because of a facade that each teacher constructed. Maintaining this facade introduced a conservative bias into all of their teaching practices. By maintaining the status quo, each teacher knew that she was, at least on the surface, doing what the other teachers were doing. Even though the teachers believed that their way of teaching was not the best, they were able to protect themselves from critique. By acknowledging frustration and occasional failure, the journal sharing also opened up the possibility for more radical changes in teaching practice.

The journal sharing story also shows the need for an extra push to get collaborative efforts moving in a real growth direction. These three teachers had been

partners for over ten years before this event. Without the journal sharing prompted by the TLG, the teachers may never have come to this "epiphany." Linda described:

> Sharing the journals that one day was just a real epiphany . . . It just, for me it was anyway. I think it was for everybody. We all were moved. It moved us. It just brought us to a much deeper level of understanding each other and being able to work together that we thought we had already. But we really hadn't, 'cause we were just leaving out some things, you know, about these inadequacy feelings. So that really deepened our respect for each other and our connection. (Linda, 3/2)

This journal writing and sharing provided an important venue for helping the teachers discuss feelings they had never shared before. The result was that the teachers strengthened their bond with one another, which made more in-depth conversations about teaching possible. The literature about teacher groups often describes the need to develop trust among group members. Some research talks about the formation of trust as the development of an agreed-upon set of norms for conversation. This instance shows that real trust is built on genuine respect that may have existed for a long time. The extra push of writing their thoughts down allowed these teachers to verbalize things they may have never acknowledged to themselves, and exchanging the journals helped the teachers say things to one another that they may have never said in face-to-face conversation. The activity of writing may have provided the necessary push, or trigger, to move the group forward.

Even though the teachers in this episode revealed feelings of inadequacy, the realization that they all felt some insecurity about their teaching freed them to take more risks. They knew that if their efforts were unsuccessful, their colleagues were probably experiencing the same frustration. Linda said this realization helped her feel empowered to experiment with her teaching:

> It was exchanging the journals . . . And realizing that we all believed in each other, or we all had this respect for each other as professionals and that we all were feeling this inadequacy . . . Having these similar feelings and knowing that these other two teachers felt that way and they really respected me . . . . That gave me a lot of confidence to just trust myself, what I knew. (Linda, 3/2)

This journal sharing experience was momentous for all three teachers. What made it particularly moving was the long term relationship that they had all shared and the sudden realization that they had all been able to keep their feelings of insecurity secret for so long.

Critical for Carrie: I Changed in One Weekend

The journals also became a tool for negotiating the relationships and conversations between Carrie and Linda and the researchers that were working with them. Each week the researcher and/or the graduate student would come into her classroom to observe, write field notes, and occasionally videotape. Usually, the researcher would ask if there was anything in particular that Carrie or Linda wanted him to notice. When they shared and discussed their journals the following day, the researcher would pose open-ended questions about different aspects of her teaching.

On one hand, Carrie found in the journal writing experience the time and opportunity to think alone about her practice in ways she had never made the time for before:

> It'd be eleven o'clock at night and, "Oh, geez, I got to do this journal." You know, so you'd sit there in bed and write and it would just be like the lights turning on. It was like, "Oh, my goodness, I hadn't thought about that before." And then sometimes [the researchers] would pose questions with the way . . . they had seen things we hadn't seen which would make us start to see our own room differently. . . . We were a little self conscious. I mean we were pretty confident or we wouldn't agree to it in the first place . . . But as we really got used to having them in the room, we developed the ability to see it from their eyes. "Oh, I wonder what this looks like from over there?" . . . . It helped us to develop a

> second set of eyes. So even when they weren't in the room I was looking at my room differently. (Carrie, 2/17)

The experience of having someone in the classroom, being self-conscious enough to try to see the classroom from their eyes, as Carrie says, "develop a second set of eyes" and then thinking about unfamiliar questions and writing about them helped Carrie gain insights into her own practice she had not had before.

Because of her commitment to the group, Carrie spent more time posing, thinking about, and answering questions about her teaching than she had done before. Even though she had no more time than she had before her involvement with TLG, her commitment to the group forced her to make time to think and write:

> What was really powerful was our *own* writing in our own journal. Answering our own questions. To actually take the time to sit back and reflect and think, and that only happened because there was an obligation that you had made as a commitment to do it to somebody else. (Carrie, 2/17)

Carrie's story of writing in her journal is a curious mix of collective and individual experience: her commitment to the collective, TLG, provided the impetus for individual reflection on her practice.

Carrie's experience of journalling and reading other people's journals is reminiscent of her TESA experiences where other teachers came into her classroom to observe in a non-judgmental way, acting as a data collection instrument. The experience of having someone watch her teaching turned out to be very important because she became much more conscious of what she was doing. In each case, she was asking new kinds of questions about her practice. With TESA, she was asking herself whether she was faithfully demonstrating the new behaviors she had learned. With TLG, she was asking herself what the researcher in the back of the room might be noticing. In both

ıe impetus for continuing to ask herself questions and for experimenting with new

rs, even though they felt awkward, came from a sense of obligation to other

Weekend of change. Sometimes the questions or comments posed by the

ers forced the teachers to ask uncomfortable questions about their classroom.

escribed one particular instance was extremely uncomfortable, but which led her

ge her practice in one weekend."

During a meeting of the whole group, the TLG had been discussing the difference

"schooling" and "education."

Ve were having this big philosophical discussion [about] the difference between chooling and education. And schooling was knowing all the rules and knowing ow to line up and knowing where your paper goes, . . . and all the little routines ıat you go through. And how to be a listener and all that. But education meant ue learning. (Carrie, 2/17)

wing week, one of the graduate students observed Carrie teaching language arts.

rrie and the graduate student traded journals the following day, Carrie was

o read what the graduate student had written:

took her journal home that night and one of her comments was, she didn't see ıything educational going on in my room that day. She saw a lot of schooling. m thinking this is supposed to be non-judgmental, non-critical, you know? And ıe's coming in and telling me she sees nothing, nothing educational going on in y room? I was devastated. I was devastated. (Carrie, 2/17)

t that the graduate student had violated the ground rules of the group, which

that the researchers' observations were supposed to be "non-judgmental."

thought more about it, she had to confront the possibility that the graduate

ıd written what she had seen, and that she might be right: "What I had to face

at I had to deal with it, was maybe she meant exactly what she said. And if she
e got some things to look at" (2/17).

Carrie did not dismiss the graduate student's written comments. If someone she
ttle about or did not respect had made similar comments about her classroom,
aid she would have told herself that person did not have enough information to
ıch a judgment and that they really did not understand what was going on.
er, because of the rapport the TLG members had developed, Carrie trusted that the
e student wrote what she honestly believed and that her comments were grounded
oadly than in this single observation.

To relieve her feelings of devastation, she called the other graduate assistant in
ect. After they agreed together that the first graduate student had written what
uinely believed, the two began to consider how Carrie's classroom could become
ducational."

The graduate student said, "Well, you know, there are some other ways that you could think about reading." And I'm like, "What?" And she said, "Well, instead of using the basals"--which I hate, the kids hate it, but what else was there?--"you can get some trade books . . . Just give the kids some plain paper and have then do creative writing." And I said, "They don't know how to write anything yet. To do creative writing, first they have to learn how to write." She said, "Well, no, there's something called invented spelling." I said, "What's that?" I'd never heard of this before. (2/17)

interest in the graduate students' ideas was spurred on because "I think deep in
t I knew [the way I was teaching] wasn't educational either. I mean I was
kids to sit down and copy this stuff off the board. They didn't like it" (2/17).
scussing these new ideas over the weekend, Carrie decided to make several
in her classroom:

> On Monday the kids came in and I said, "O.K., we are going to rearrange the tables, we are going to do our morning work differently, we're going to do creative writing, I'm going to get some different books." I mean I had books in the room, but they weren't for reading time. All of a sudden they were for reading time . . . . This thing I did over the weekend. I was that ready. (Carrie, 2/17)

e graduate student came into the classroom and did a model writing lesson. She ught a teddy bear into the classroom with a Band-Aid on his arm, and told the dents a story about where his Band-Aid had come from. She asked students to go k to their desks and write stories about what they thought happened to the bear. She lained how to write words if they did not know how to spell them yet. Carrie was ressed by the students' excitement about this assignment.

Over the course of a weekend, Carrie rearranged her classroom furniture, inated her leveled reading groups, invited students to read trade books of their own ce instead of the basal readers, and introduced creative writing assignments for ents using invented spelling which she began publishing for the class. Carrie felt dy" to change her teaching in a way that she had never felt before.

One of Carrie's concerns about abandoning the basal reader program was to make that students were still learning the skills that were taught and tested by the basal s. To address this concern, Carrie and Linda devised a system for teaching all the listed in the curriculum:

> Linda and I, at that point, went and got a big cardboard box and filled it with contact paper on the outside and file folders on the inside and we listed all the skills. . . . Then we ripped out work book pages and found a bunch of things and filed them. So that then we would teach like one skill at a time . . . . So we still did skill lessons as a group . . . It wasn't the most ideal because . . . the very top [kids] already knew it and didn't need it, and the very, very bottom [kids], it was just way over their heads and they were like lost with that anyway . . . . I felt like it was such an improvement over what I had been doing before that I felt really good about it. (3/4)

Experience also increased Carrie's confidence that students would still learn what e wanted them to learn throughout the year. Since Carrie had used the basal reader so tensively for over ten years in her classroom, she had a good idea of the skills she anted her students to learn. She used the teacher's edition, not as a script, but as a ideline. She felt more comfortable leaving the actual basal workbooks behind since e knew she'd be able to help her students get it anyway. Huberman's (1989) entification of the first five years of teaching as a period of survival and discovery ggest that a much younger, more inexperienced teacher may not have been able to ake the radical changes Carrie made in this one weekend.

Carrie and Linda developed an "individual reading conference form" to record necdotal notes about what children were reading and where they struggled. They each ept a group sheet to make sure that they met regularly with all the students. To measure rogress across the year, they used a standardized reading test recommended by the istrict reading consultant. Though they felt skeptical that the test was an accurate neasure of grade level equivalent, they were happy to discover that their students showed rowth in their reading ability. As evident from the analysis of Carrie's current practice n chapter 3, this basic format for literacy instruction has continued to exist to this day, vith slight modifications.

Why did Carrie change? Carrie attributed her sudden and dramatic changes to the nfluence of the TLG, particularly one particular journal sharing incident with a graduate student who questioned her teaching. As researchers, we could seek more information about the properties of the TLG that made it so successful. We could ask about the

haracter and quality of the conversations among the TLG members, how those onversations were initiated, and how they resulted in changes in teaching practice.

However, the story of Carrie's learning is about more than the direct and mediate influence of the TLG. One way to understand the significance of the TLG perience is to consider how it was situated in Carrie's career history. Figure 2 ustrates the constellation of experiences that influenced Carrie's subjective experience the TLG.

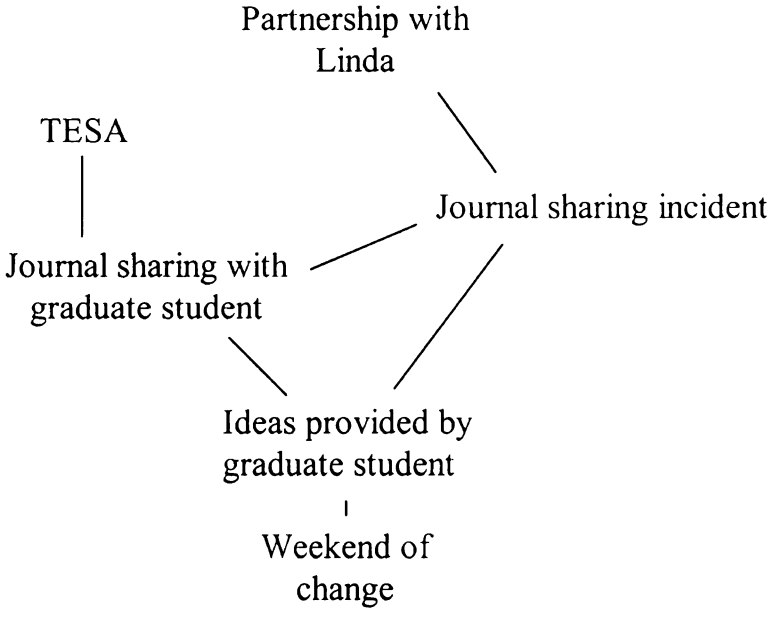


Figure 2: Carrie's Constellation

s figure illustrates how a number of different experiences combined to make Carrie ady" for the changes she made during her TLG experience.

Carrie began her teaching career with an orientation of attending to affective ensions of schooling for her children. She was already predisposed to implement nges which she believed would help her students feel more comfortable in her sroom environment. She had a close personal and professional relationship with

Linda which she had developed ten years before the TLG began, and which had been trengthened by the journal sharing incident.

The involvement of the researchers, particularly the graduate student who raised uestions about Carrie's practice and the graduate student who alerted her to new ossibilities, was instrumental in Carrie's changes. However, what was important about e researchers' involvement was not just the connection to other people; Carrie's nnection to the other people was built on a foundation of trust and respect she had veloped for these people. The journal sharing incident had opened up the possibility r Carrie to acknowledge shortcomings in her teaching more openly, and her periences of having TESA observers take careful notes on her teaching had prepared r to accept observers' comments as plausible.

This combination of factors helped Carrie to be "ready" for the changes she made. anging her teaching to its current state required Carrie to acknowledge what frustrated about her teaching, but it also called for her to have an idea of what could be ferent. Carrie's readiness came partly from her dissatisfaction with her current ching, partly from her experience that gave her the confidence to move away from the e way of teaching using the basal series, and partly from seeing that the students onded well to the new ways she was teaching. Since her students felt better about the k they were doing, they were more willing to do it, and she had to do less coercion, realized that she could spend more of her time actually watching what the students e doing. Thus, these new ideas fit with Carrie's orientation of attending to the ctive dimensions of her classroom.

Critical for Linda: Overcoming Concerns

Linda also experienced radical changes in her teaching as a result of her involvement with the TLG. Like Carrie, Linda described how the experience of having someone observing in her classroom made her more self-conscious. Writing in the journals, and being introspective about her teaching, was also a new experience. Even though Linda appreciated that the researchers were trying to be non-judgmental, they often raised questions in their journals. Like Carrie's response to the graduate students' comments about lack of education, Linda's initial reaction to the researchers' questions was defensive--"What are you suggesting?"--until she realized that they were posing genuine questions that any observer might ask about her classroom.

The experience of writing the journals and answering the researchers' questions helped Linda think about how her classroom looked from the researchers' perspective, what Carrie called "developing a second set of eyes." Linda began to internalize the researchers' questions:

> I started questioning a lot of things. Why, why am I doing any of this? Why do I do anything that I do the way I do? Why this, what's the value of [this]? (3/2)

I heard this internal voice increasingly as she planned and taught. This questioning, the answers that she sought within herself and from outside sources, ultimately led to revolutionary changes in her teaching.

The Dumb Math Worksheet. The earliest changes in Linda's instruction happened her math teaching. Math was a subject that interested her, and it was also an area of interest for the university researchers working with her. As the researchers asked questions about her math teaching, Linda began to question the value of the worksheets

had always used with her students. She began to believe that the worksheets did not lly require the students to think, nor did they provide a useful window into her dents' understanding of the concepts she was teaching.

Linda described her early experiences of questioning the value of a particular e in the workbook. She was teaching the math concept of "one more" to her first de students. After a few days of building sets with blocks and cubes, she decided they e ready to move on to the corresponding page in the workbook. The page was filled n rows of vegetables, with each row containing one more vegetable than the last. The ructions asked the students to "Color one more of each vegetable in each row." To plete the page correctly, Linda realized, the students only needed to color in every etable pictured. They did not need to understand or demonstrate any understanding of concept "one more."

Linda called this an example of "the dumb math worksheet." In retrospect, she d not imagine how this had slipped her attention; she had used the worksheet for ral years without ever wondering about its value. She used this story to show how it was to get caught up in the inertia of maintaining the status quo from day to day, k to week, year to year, when there was no opportunity and no reason to question the nale underlying her practice. The TLG group provided an opportunity to ask those s of questions, and the university visitors planted some questions in her head that she nued to ask herself.

The researchers' questions (which Linda internalized) led not only to a tisfaction with current ways of teaching, but also pushed her outward to seek other . Linda had taken a Math Their Way workshop, which involved students using

ncrete manipulatives to study mathematical concepts. At first, she had only used these tivities as a filler, but she began to wonder how she could integrate the activities more o her curriculum. Actively seeking new ideas and figuring out how to make them work her classroom was new to Linda. She said, "Up to this point, I had not sought out a lot new information because it always seemed to be adding to an already overwhelming rkload." Her search for new ideas was not a search for something she needed to bring o her classroom as an add-on, but as potential solutions to problems she wanted to ve. Linda's increasing frustration with the materials she had used for so long and her ision to seek out new ideas is reminiscent of Carrie's "readiness" for new ideas. The posefulness of Linda's search for new ways to teach may explain why previous ervices had never yielded permanent results while the changes she made during the G time have lasted until the present time.

Linda began to believe in her own gut feelings about her teaching. When she felt there was a better way, she felt justified in seeking out and experimenting with new s. She began to have faith in her own judgments about whether what she did in her sroom measured up to her expectations for herself or her students:

> The questions I was asking myself, I was coming up with the answers, you know. I was coming up with answers, so I knew there was a better way to do it. Different. There could be another way. (3/2)

se were the early signs of Linda taking greater ownership and control over her own essional growth. She began to take control over her own teaching in a way that she she could not do when her principal did not support the changes. Some of the vers came from her own ideas about what to do differently; she sought others from de sources. She began to examine new practices critically to see if they were

consistent with her newly developing personal philosophy of teaching, and she made the final decisions about whether and how to use new ideas.

Readers' and Writers' Workshop. While Linda was busy trying new things in her math teaching, her ongoing conversations with Carrie and the other TLG members led her to consider changing her language arts instruction in ways similar to Carrie. Linda described the energy created by the group experience:

> We were all kind of working together and changing and really doing a lot of collaboration and bouncing things off each other. Course, you all do it in a different way 'cause you're different people, . . . but we're all kind of going, we're all going the same way, we're all going the same direction . . . The same changes came from us. The way we wanted to do it. (2/2)

As described above, Carrie was already experimenting with having students read trade books and engage in creative writing. As Carrie began to make these changes, Linda began to make similar changes along with her.

Linda had come to realize that she was not alone in her dissatisfaction with her teaching, and she began to be more vocal in her criticism of the way she and the other teachers in the group had taught for so long.

> What I didn't like about it . . . was that kids didn't have opportunities to read other books. And they were just, you're stuck in this reading level and those are the books you read and that's the book you read . . . . They didn't have equal opportunity or whatever to, equal access to whatever they wanted to read. It was . . . almost like you were stifling the kids. Or just telling them, "No, you can't" . . . . You didn't say it, but that's kind of the message everybody got. (Linda, 2/2)

> I just remember we didn't want to teach basals anymore. Just, you know, kids sitting around the table and we had them in these ability groups, and reading Round Robin and you know just all that. (Linda, 3/2)

Consistent with her orientation to create a classroom where students believe in their own abilities, Linda wanted to use reading instruction as a place where all students would

have access to all the books in the room without worrying whether they were smart enough to read them. She wanted to eliminate students' feelings of exclusion and decreased self-esteem that she witnessed with ability grouping, which encouraged students to rank themselves in relation to their peers.

When Linda began to seek out different images of classrooms, the graduate students and professors in the TLG provided literature with different ideas about teaching:

> We had come to a level where we wanted, we were ready to get new information. [The graduate student] was giving us a lot of things to read about writing, on Donald Graves, Marie Clay . . . Regie Routman wrote a book, "Transitions." . . . . [They] just showed some different ways classrooms looked. Different approaches to teaching reading and writing. And learning about invented spelling and how kids can write even [before they can spell]. (Linda, 3/2)

Linda decided to "chuck the basal reader" (Linda, 2/2) and worked with Carrie to "make sure we were still going to be teaching those skills and objectives that were in that basal reader" (Linda, 2/2). She began to fill her classroom with a broad range of literature. During reading time students were allowed to choose any book in the room, and Linda listened to individual students read while other students read independently or worked on other activities. Whenever Linda grouped students, she grouped them heterogeneously according to the books they had chosen to read, rather than by ability. She provided time for students to write in journals on topics of their choice using drawings and invented spelling.

Linda said that the difference between these changes and her earlier attempts to implement ideas she heard about in workshops was the fact that they came from within:

> What happened was the changes that I made during that time were changes that nobody imposed upon me or told me about. It was stuff that I already knew. That just evolved and emerged . . . I started to [teach] the way I really wanted to

> teach . . . It was very, very exciting, very energizing and just a lot of hard work. Working really hard and having a lot of fun doing it and really changing. Totally changing my practice. (Linda, 2/2)

The changes Linda made in her teaching were quite dramatic. She went from following textbooks carefully in every subject to creating new opportunities for students to make choices, to talk to one another, and to demonstrate their understanding in her math and literacy teaching. One might expect that Linda faced difficulty making so many simultaneous changes in her classroom teaching. Instead, she talked about the experience as "stimulating" and "fun" (2/2). The realization that new ideas could come from within, that there might be other ways to teach, and that as a teacher she could decide what to do and what not to do all contributed to the excitement that Linda felt during this time. No longer did she need to watch cautiously to see what other teachers were doing in her classroom or try to follow faithfully what experts told her to do.

Linda worked hard on her practice, but the hard work was "fun" in a way that other previous changes had not been. The combination of experiences in the TLG convinced Linda that she had the knowledge, experience, and authority to make decisions about her own practice. Linda's experience was similar to the kind of experience she wants her students to have. She became confident in her own ability, and her confidence gave her the energy and enthusiasm to work hard even when the work became difficult.

Concerns About Noise and Movement. Even though the "fun" of the experience remains imprinted in her memory, Linda did recall some challenges she faced. She struggled with expectations she had set for herself about acceptable levels of noise and movement in her classroom. Many of Linda's new teaching practices resulted in more noise and movement among her students. For example, when they used manipulatives to

solve math problems in small groups, when they wrote and shared their journals, and when they moved around the room to choose new books to read, the students were more vocal and more mobile. The increased level of noise and movement, which violated her strongly ingrained beliefs about good teaching, made Linda uneasy.

After over ten years of trying to figure out creative ways to keep her students occupied, silent, and in one place, the idea that students should sit still and be quiet was deeply ingrained:

> I still had this leftover feeling from the way I'd been teaching, how your classroom still has to be very quiet and . . . everybody just sitting still and being quiet because that was what the model of good teaching had been presented to me for ten years or eleven years or twelve years. (3/2)

With the help of the group, Linda began to re-think her perceptions of noise and movement in her classroom. Without the support of the group, the changes Linda was making in her classroom might have been short-lived.

Linda raised this concern with the university researcher, who assured her of the value of what she was doing and agreed to videotape in her classroom. When Linda watched the videotape, she changed her views about noise and movement:

> [I watched a videotape of] a lesson where the kids were sharing . . . what they had written in their journals. They were just sitting at a table, around a table and they were all just reading. Taking a turn reading something from their journal. And the kids are all up on their knees and they are all just leaned in and, you know, they are just pointing to each other's and talking to each other . . . If you were across the room and you looked at that, you might just think those kids are just fooling around. They were making noise and they are not sitting in their chairs right. But then I went back and watched that video tape, just zooming in. I saw all this great stuff, you know, just real engagement and interest and learning. (3/2)

Linda began to distinguish "productive noise" from non-productive noise. She still felt that it was important to know the difference, but watching the videotape convinced Linda

that there was such a thing as productive noise, and she became more confident about what she was trying to do in her classroom. After watching the video, she said, "O.K., I can, I can support this. I give myself permission to go ahead and teach this way" (3/2).

Why Did Linda Change? In a jointly authored article about the group, the teachers described the factors critical to the success of the group. They cited three primary features: 1) participation in the group was voluntary; 2) the university researchers believed in the teachers' knowledge and ability to direct their own growth; and 3) the teachers were free to determine any changes they made in their teaching practice. In addition to underlying beliefs, the group cited the time available for reflection, the building of trust and respect which was fostered by the non-judgmental, non-interventionist approach, and opportunities to prepare and present the work of the group as additional elements that contributed to the group's success.

Like Carrie, Linda attributed her ability to make substantial changes in her practice to experience in the TLG, but Linda's subjective experience of the TLG was different than Carrie's, and the reasons for her changed practice were slightly different. Like Carrie, her experience of the TLG was influenced by her prior experiences and orientation toward attending to students. Figure 3 illustrates how the events are interrelated:

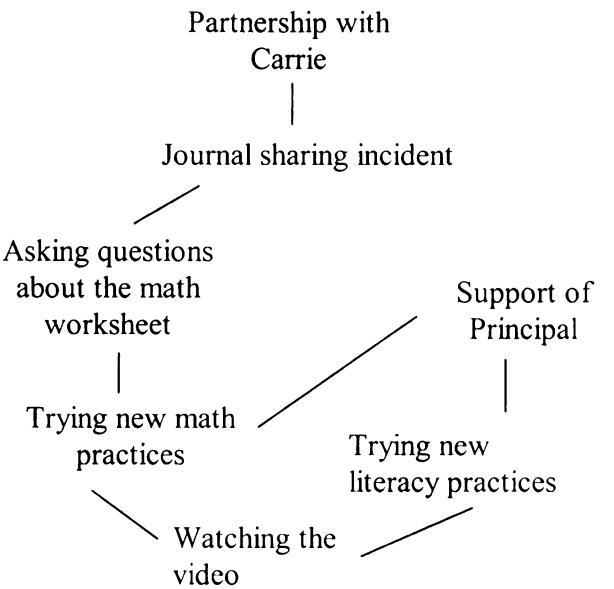


Figure 3: Linda's Constellation

Three of the most salient images are illustrated in her stories about the journal sharing, the dumb math worksheet, and the video watching. The journal sharing highlights how the group provided a safe place for Linda to share her vulnerability as a teacher. She was responsive to expectations she felt were being placed on her, and she chose to follow meet those expectations even when they made her uncomfortable as a teacher. The journal sharing event changed that. She began to admit her frustrations and openly question activities she had always taken for granted. The dumb math worksheet gave her a sense that she could make decisions, even if they differed from the recommendations contained in a textbook or teacher manual. Finally, the video allowed her to see that her experiments were successful, and she broke free of the stranglehold of expectations about noise and movement of students.

Linda taught in a particular way early in her career because she constrained by others' expectations and because she did not want to share with anyone the concerns she

had about her teaching. She found herself caught in the inertia of trying hard to keep her classes silent and still while wondering secretly whether there was a better way to teach.

In addition to the group experience, there were other factors that contributed to Linda's transformation. Linda's principal played a crucial role in making the space for Linda to experiment with new teaching practices. Linda said:

> I think having a principal that trusted me really made a big difference and supported me. 'Cause I mean, she's the bottom line in the school, and she was very open and nurturing these changes. So that helped a lot. (3/2)

Another crucial aspect was the amount of teaching experience that Linda brought to the experience. When the university researchers asked her questions that no one had asked her before, Linda found she had answers that came from within. Being able to answer someone's questions was very empowering for Linda, and she began to believe in the value of her ideas:

> What we [all] found interesting was not that we had every answer, but we had a huge amount of knowledge because of our experience and what we know about kids, and teaching and learning that just came from ourselves. (3/2)

Linda's journey toward taking greater control over her own teaching was similar to her goal of increasing her students' self-confidence. She wants students to feel that they have the ability to make independent choices.

Before the TLG, Linda had felt that there must be a better way to teach. When she changed during the TLG, she felt her own ideas being validated, and many of the things she decided to change in her classroom came from within. She sought out ideas from other sources, but the dramatic impact of the group came from her increased sense of self-efficacy.

Recent Professional Development Experiences

Carrie: In Search of New Ideas

Carrie said that without experiences like the TLG, she experiences relatively little change in her career.

> I think the biggest insight I had was . . . that without some almost formal kind of professional development, I haven't been making changes. My changes in my classroom and in my thinking and in my teaching are really quite directly related to formal professional development experiences I've been having. Those periods where there wasn't really formal structured professional development, I really kind of just glide along without changing much. . . . But really as an isolated individual, I don't come to major changes. My changes are in relationship to groups or other people having an impact on me, I think. (4/8)

She appreciated it when someone came to her with specific ideas, but she only took the ideas seriously if they were aligned with her commitment to paying attention to the affective environment of her classroom. The TLG experience created a "trigger" that sent her down the path of change.

> Now, once I get that information or I get that trigger or . . . something is initiated, then I think I really go with that. I think I take it and think about it and work on it and develop it and adapt it to my classroom. I give myself a lot of credit for that. (4/8)

Once the trigger is pulled, Carrie works hard to figure out how to make it work in her own classroom, as she picks and chooses aspects to use, and modifies the ideas for use in her own classroom.

Recently, Dale School District has promoted the New Zealand Literacy Framework of "guided reading" (Fountas & Pinnell, 1996) for all early elementary teachers. As part of that effort, Carrie and Linda both participated in an intense semester-long workshop (equivalent to four graduate credits) to learn the components of the method:

> There's shared reading, guided reading, independent reading, reading to the person and there's the same thing for writing. Writing to, writing with, shared writing, guided writing. Those are all the things we are learning. And then how to level books and put kids into groups according to their ability . . . um, not always their ability but what their needs might be. Where their gaps might fall. (Linda, 3/2)

The workshop emphasized the need to understand children's abilities to match them with books that are challenging but manageable, depending on whether the books will be read independently, with partners, or with guidance from the teacher. Unlike the "reader's workshop" that Carrie and Linda used since participating in the TLG, the New Zealand workshop called for teachers to group students according to their "needs." This method groups students according to ability, but the groupings are more flexible than the ability-grouping that Carrie and Linda abandoned during the TLG.

During the workshop, teachers were taught to use running records to assess students' abilities and difficulties with reading, and how to assess the difficulty levels of books to match readers with appropriate books. Carrie described the appeal of this program:

> I thought all the content of this class was exactly what I wanted. It was wonderful. I felt it was how to take my next big step. . . . This idea of leveled books and running records and guided reading and shared reading and modeled writing and all these ideas were really exciting. And it was new. It was new stuff, and it was stuff I wanted to learn. (Carrie, 4/8)

Even though this workshop possessed few of the features of the TLG, Carrie was enthusiastic about what she learned, and she believed that the new ideas helped her improve her literacy teaching.

The new plan for literacy addressed some of the problems Carrie felt when she first changed her reading and writing instruction during the TLG:

> When so many of us teachers left the basal program behind and this whole idea of whole language and trade books and invented spelling and creative writing was all new, it's like we just went into the abyss. . . . There was very little structured curriculum. . . . You could leave the basal structure behind and just pick and choose from lots of little workshop ideas, . . . but basically everybody was piecing their own curriculum together like a puzzle. (4/8)

Carrie felt that the New Zealand program offered a coherence that was impossible when she first changed her teaching during the TLG:

> This was the first time I saw a total communication arts literacy curriculum that ... addressed a whole language classroom with trade books and creative writing and invented spelling and did it with structure. That was structured but still left it open ended for every child so that it provided the guidance [students] needed, the assessment they needed, the flexibility they needed, the focus they needed, the assessment, the evaluation. I see it as a really total package that takes us to that next level. (4/8)

Even though Carrie was enthusiastic about the New Zealand method, she still viewed it as a "trigger" that gave her clear new ideas about how to change her practice, but which she planned to adapt as she used it in her own classroom. As she said, "I don't like everything about it, but . . . at least it's a structure that I can adapt" (4/8).

Carrie's response to the New Zealand Literacy Framework was consistent with her responses to other powerful forms of professional development. The New Zealand workshop stimulated new changes in her teaching, even though it had few of the characteristics of the TLG. Carrie said that without interventions that provide triggers for change, she would not be likely to make the kinds of changes she has made throughout her career.

The common features of the interventions that promoted changes in Carrie's career is that they provided specific practices that addressed concerns she already felt about her teaching. She willingly tried the new practices because they fit with her pre-existing orientation about attending to students. When she attempted the new practices in her classroom, she discovered that they helped her accomplish goals she had set for herself. However, she did not simply transport ideas from workshop to classroom as a straightforward implementation. The new ideas acted as triggers. She tried out new practices to see how they could benefit her, and then she adapted them to fit her classroom. The implementation and adaptation of new ideas is what Tyack and Cuban (1995) call "hybridization" of reforms.

Linda: Faith in Herself and Empowered Experimentation

For Linda, the importance of the TLG was the development of a newfound confidence in herself, which influenced the rest of her career. Once she developed this confidence, she was a highly self-directed learner. After participating in the TLG, Linda viewed professional development workshops as *opportunities* to learn. She no longer felt pressure to attend or to implement new ideas:

> I think with this TLG, just my whole way of approaching whatever it is that comes my way [changed. When I participate in professional development experiences], . . . I want to go in feeling like I can still learn something and get something from this. (3/2)

Instead, she saw new materials and strategies as resources to help her continually shape and reshape her language arts instruction.

Like Carrie, Linda recently attended the New Zealand Literacy Framework workshop. She adopted an open, but critical, response toward the new ideas:

> It kind of is, but it kind of isn't going back to ability leveled reading groups where the kids are reading from the same book. Because they are. . . . That's where I have this struggle. I'm working through it because I know kids have to read a book that they can read and be successful with. You don't just want to give them some book. And I've always done that. But you want to have children feel like they have the freedom and they have the, they are entitled to read any book they want to like any other kid. And I want them to feel that as well. That, "No, you can't have that book yet." I don't want them to feel that discouragement. (3/2)

Linda would not have struggled with a new idea before her involvement with TLG. When she learned about the New Zealand rationale for grouping students homogeneously and assigning books according to student abilities, she felt torn. On one hand, she saw that giving students opportunities to feel successful by matching books to their reading ability might boost students' self-confidence. On the other hand, she felt that opening access to all the books in the room sent a message to students that they were capable of reading any book they chose. Both positions were consistent with her orientation toward students.

The pedagogy of the New Zealand Literacy Frameworks seminar instructors was dramatically different than her learning experiences as part of TLG. Linda said, "[The New Zealand seminar is] very much, this is the way we do it and this is the way you do it" (3/2). In the training, teachers learned about the method through reading and watching videotapes. They were expected to practice the new skills in their classroom and demonstrate them for the rest of the people in the seminar.

Each week, one teacher brought a small group of students and taught a lesson "behind the glass" in a room with a two-way mirror. This training/coaching experience differed drastically from the non-judgmental, non-

interventionist approach of the TLG. "Teaching behind the glass" was a demonstration in an artificial setting with a subset of her class. Linda did not use the opportunity to try something new; instead, she used it to demonstrate what she usually did in her classroom. Finally, the feedback of the observers was totally judgmental. They knew the right and wrong way to teach the New Zealand method, and they judged the teachers according to those criteria.

Linda appreciated the additional books and the new strategies she learned through the New Zealand workshop. Although she was not completely convinced of the value of all the methods, she was willing to entertain the value of the new approaches to see how they could move her teaching forward. She said, "It's not going against my philosophy, or I'm not going to let it go against my philosophy" (3/2).

Linda's response to the training was different than it might have been earlier in her career. Now she has a philosophy and a commitment that she feels strongly about; before the TLG she was inclined to do what she felt was expected of her. When I asked her to guess about what might have happened if she had gone through the New Zealand training before the TLG, she replied:

> I would have felt really stressed out. Like I could never be that way. I would be very discouraged. It would just be overwhelming and I would try really hard to be just like that. (3/2)

Linda's increased self-confidence continued to manifest itself in the control she has taken over her own professional development during the years since the TLG. After the TLG, she became a critical consumer of professional development workshops as she held up new ideas to her evolving philosophy of teaching. She became a resource-gatherer, but

not a blind resource-gatherer. Instead, she developed a philosophy of teaching and a set of commitments that she was determined to uphold. As she encountered new ideas, she asked herself: "What is the benefit of this idea? What is the drawback? Are there things about this that go against ideas I've come to embrace?" Her answers to these questions led her to be a critical consumer of each professional development opportunity.

What Can We Learn From Carrie and Linda's Stories?

Carrie and Linda said they were always interested in improving their teaching, but specific events that occurred during the TLG meetings had the most profound impact on Carrie and Linda's teaching of any other experience in their career. Carrie and Linda's stories support the "consensus model" of professional development; their stories illustrate the powerful potential of school-based groups of teachers meeting to talk regularly and concretely about teaching practice. Their stories show how teacher study groups can effect individual teacher change that is sustained and self-starting. Both Carrie and Linda went through a series of intense experiences to transform the way they thought about and practiced their teaching. This radical shift in a short time launched them on a path toward shaping their own professional development experiences and responding critically to subsequent experiences. However, Carrie and Linda's stories of professional development are more complicated. The two teachers responded differently to the same experiences, and they nominated different types of experiences as beneficial. The teachers' different experiences highlight the importance of understanding not just the features of the change but the subjective reality of how each teacher experienced and remembered the significance.

First, there is evidence that teachers responded differently to the same experiences. Carrie and Linda participated in almost identical sets of professional development experiences--early partnership, master's degrees in educational psychology, TESA, TLG, PDS projects, and the New Zealand Literacy Frameworks class. In addition, there are countless workshops they both attended throughout their careers as teachers in the same school and district. Even though they have very similar orientations toward their teaching and their students, they still respond differently to these experiences and tell different stories about how the same experience influences them.

Second, there is evidence that some of the professional development they experienced that does not fit neatly within the consensus model was powerful, and some of the professional development experiences that did fit within the model were not as powerful. Some behaviorist interventions, like TESA or the New Zealand Literacy Frameworks, were powerful, especially when they were aligned with teachers' dominant perspectives. Others that were not aligned "faded out" even though the teachers may have fully intended to implement the changes.

Carrie and Linda's critical events tended to be linked to relationships with other teachers. In their partnership with one another, they found comfort and ways to make their work easier even when they were not transforming their practice. During TESA, having others observe her teaching gave Carrie the impetus to practice awkward new behaviors faithfully until they came naturally. With the TLG, the researchers' presence that Carrie and Linda perceived as non-judgmental helped them to develop a "second set of eyes" from which to view their classrooms. Sometimes this happened literally, like when the researchers showed Linda videotape of her own classroom. Sometimes it

happened figuratively, like when Carrie sat down at 11:00 P.M. to write in her journal about that day's teaching. The TLG offered both teachers opportunities to see their classrooms from different perspectives, to ask themselves new questions about their teaching and their students, and forced them to make time to reflect on their practice alone in ways they had never done before.

However, it is not simply the collaboration that makes these events pivotal. Collaborative work is not always transformative, as Carrie and Linda's early partnership shows. The TLG was built on a pre-existing collegial relationship between Carrie and Linda. Both Carrie and Linda cited individual changes they made in their teaching as an important outcome of their participation in the TLG. The consensus model of professional development offers little explanation for why professional development experiences of different forms might be influential for different teachers.

To understand the power of these experiences, researchers must examine more about the content of what the teachers were learning during these critical events. These two teachers' stories provide evidence that the content of powerful professional development is connected to either: a) offering new practices that provided teachers with new windows on their students and allowed them to see things they could not see before; or b) raising new questions about students that the teachers had not asked before.

When these teachers learned new practices, the practices that were most influential were those which tied in with Carrie and Linda's preexisting commitments and beliefs. The events that Carrie and Linda described as pivotal were closely aligned with their orientation about attention to their students and the resulting personal commitments about the kind of classroom environment they want to create. Side by side,

their two collections of stories show the importance of the interaction between the person and the experience over and above any particular features of the experience.

Before changing their practices dramatically, both Carrie and Linda said they had to be "ready" for the change. Even though they felt discontent with their existing practice to varying degrees, they needed to internalize behaviors that felt awkward. For Carrie, this meant experimenting with new ways to develop a positive environment in her classroom; for Linda, this meant overcoming deeply ingrained concerns about students remaining quiet and staying seated.

To engage in these risky behaviors when their existing practices were safe and common, the teachers needed to trust that the practices would be likely to have positive results, to "give themselves permission" to attempt these new practices. They needed a sense that they would not be reprimanded by their principal for trying these new practices. They also needed to trust themselves to believe that they could pull off the practices successfully, and that they themselves had the ability to make decisions about their teaching that could be just as valid as commercially packaged curriculum materials, models of teaching that they themselves had encountered, or messages that were conveyed to them by principals. Carrie and Linda's stories suggest that this trust is more easily accomplished in the context of strong, trusting relationships with other adults, where vulnerability and imperfection were openly acknowledged.

Simply trying the practices was not sufficient, though, for Carrie and Linda to sustain their changes. They also needed to gather evidence that these new approaches were accomplishing desirable goals. Both Carrie and Linda benefited from the presence of others who gathered impartial evidence, e.g. tally marks for particular behaviors,

videotaping and replaying the videotape. The presence of others in their classroom provided Carrie and Linda with additional tools for gathering evidence about the efficacy of these new practices. Their sense that these observers were non-judgmental was supported by their trust in the good intentions of the observers.

Experimentation with new practices, supported with evidence from what they and others saw in their classrooms, allowed them to see what was previously hidden from them. Both teachers learned that they could gain insights into their students that were impossible without engaging in these new behaviors. Even though their overall orientation to students remained consistent throughout their careers, their view of the way to accomplish those objectives changed dramatically. For example, Carrie moved from trying to turn her students into "happy little slaves" to giving them opportunities for choice about what to read and write, to matching students carefully with the appropriate level books. These changes were all in the interest of establishing a positive environment in her classroom where students felt less coerced, but the way of accomplishing that goal was very different.

These new practices seemed to acted like "triggers" that set off a chain reactions of change and ownership of their own professional development. For over a decade of their careers, Carrie and Linda had both tinkered in minor ways with their practice without making the kind of radical transformation they experienced during the TLG. After the TLG, the two teachers took greater control over their own growth as they took a more active role in seeking out and responding to professional development experiences. Their stories suggest that pivotal experiences can be used as levers to expand the range of practices that fit within teachers' orientations.

The changes that have stayed with Carrie and Linda over time are changes they made voluntarily. This does not mean that they are only changes they invented themselves, but they are changes for which they took ownership because they believed enough in their value to try them and because when they tried them they learned something new about their students. Regardless of the intentions of professional developers, teachers are ultimately the ones who make sense of their experiences and decide how what they learn is going to influence their teaching.

Carrie's and Linda's career histories are coherent stories created from a set of disparate experiences. Their career histories are more than just a way of understanding and relating the past; their stories help these teachers define who they are and where they are headed. For Carrie and Linda, a set of experiences like those provided by the TLG raised new questions, forced them to make time to ponder those questions, and had new ideas available for the teachers to replace former practices when they wanted to change. In their case, the consensus model of professional development holds up--because it came at a time when they were ready and because it fit into their dominant orientations. In the next chapter, I discuss two teachers whose career histories do not map onto the consensus model of teacher professional development.

Chapter 7

Vera and Michelle: Two Bricoleurs

Michael Huberman (1993, 1995) argues that most teachers do not have the necessary conditions for transformative experiences like Carrie and Linda. Far more common, he says, is the "lone wolf" scenario, in which teachers act as "bricoleurs," or artisans:

> He or she adapts on the spot the instructional materials that have been bought, given, or scavenged, as a function of the time of day, the degree of pupil attentiveness, the peculiar skill deficiency emerging in the course of the activity . . . In doing this, the teacher relies heavily on concrete bits of practice that have proved successful in the past but that must be reconfigured as a function of the specific situation in the classroom, in order to make them work. (Huberman, 1993, p. 15)

Bricoleurs do not change their practice by implementing a program or rapidly overhauling their teaching. They piece together their practice over time as they collect and adapt ideas, materials, and tools to work in their classrooms. In his work on teachers' career paths, Huberman (1989, 1995) found that the mode of teacher learning in which teachers "tended their own pedagogical garden," were extremely satisfying for teachers. Huberman argues any schemes for redesigning professional development must be "grafted" onto this type of learning.

In the previous chapter, Carrie and Linda exhibited some features of bricoleurs: they gathered information from a variety of sources and adapted it to fit into their classrooms. However, their tinkering did not result in steady incremental change. Until

the TLG experience, most of their tinkering did not result in significant changes to their practice; new practices they tried tended to "fade away."

Vera and Michelle's career histories, on the other hand, demonstrate the bricoleur model's potential for stimulating teacher learning to produce significant and sustained change. Neither Vera nor Michelle had an experience like the TLG, with its intense, sustained professional development experiences supported by long-time colleagueship. Instead, Vera and Michelle's critical incidents were spread out over a longer period of time and were sometimes unrelated to one another. Although each experience influenced the teachers' perception of subsequent experiences, the learning did not all happen during a short period of time to produce the kind of rapid, substantial changes that Carrie and Linda made. In this chapter, I construct Michelle's and Vera's career histories, and I examine how their stories can also inform ideas about professional development.

Vera's Narrative: What Are my Students Ready For?

In Chapter 3, I described Vera as a teacher who attended to students' abilities. She tried to figure out ways to understand what writing skills individual students needed to develop and offered targeted instruction to help students learn specific skills. She accomplished this by providing many opportunities for students to write--either their ideas about subject matter or something of their own choice. She hoped that opportunities for choice promoted greater student ownership of the work. She gave students specific feedback through individual writing conferences, and she provided opportunities for students to talk with peers about their writing.

As I explained in Chapter 4, Vera did not always teach this way; her earliest teaching was very similar to the early teaching of the other three teachers in the study.

Some of Vera's changes were supported by involvement with colleagues, but these relationships were relatively short-lived and did not have the same kind of impact as Carrie and Linda's partnership. Vera changed her teaching through the step-by-step incremental changes that she made independently in response to workshops she attended and books she read. Over the years, experimenting and tinkering with new practices, Vera has worked as a "bricoleur" (Huberman, 1993) to construct a teaching practice.

Images of Teaching

Although Vera did not have many strong memories of her own schooling, the memories she recalled were consistent with her orientation of attending to students' skills and abilities. Vera learned how to read in first grade, but she did not develop much interest in reading until third grade. At that point, she became a regular, but not avid, reader:

> I wasn't an avid reader outside of school 'cause I was pretty active. I was into climbing trees and swimming . . . My parents always had books in the house and I do remember reading "The Bobsey Twins" and "The Boxcar Children" and all those books. (3/24)

Her memories of learning throughout her K-12 school experiences were vague:

> At school . . . I remember being in reading groups, but I don't remember having any joy. I liked school. But I don't remember anything . . . specifically about what we did. I didn't dislike it. I know as I went through the grades, I always liked writing. I always liked English. . . . It came easily to me. And probably reading did, too. But I don't remember. (3/24)

Vera's reconstruction of her schooling experiences illustrated her mixed feelings about school. She "liked school," but it did not bring her any "joy." Schoolwork came easily to her, but when she went to college, her parents told her that they did not expect her to "set the world on fire." She was a competent but not eager student.

Vera's memories of elementary school were consistent with her memories of secondary and post-secondary education. She did what she needed to succeed, but she had no particular passion for what she was studying. She did remember one high school English teacher, Mrs. T., with some clarity:

> [Mrs. T.] was first of all a no-nonsense person, and so I liked her class because when you went in there you knew what was going to happen and there wasn't any fooling around. . . . I liked that structure. When she gave us an assignment, we knew what the assignment was about and we knew what she expected out of us at the end. If you ever had problems with it you could go to her and ask her and she could give you ideas or let you talk through your ideas. . . . She was trying to open us up and trying to listen to where we were coming from as . . . writers. I always felt very comfortable, I wasn't afraid to make a mistake in there which was something I was always afraid of. . . . I guess she kind of put . . . a little bit of a joy into what we did as writers. Also, we did a lot of grammar and things like that. . . . I learned a lot in there. I remember learning how to take a piece of writing and really make it into a good piece of writing through her help and her instruction. (3/24)

Mrs. T's classroom was a structured, no-nonsense classroom where students were actively engaged in the assigned tasks. She communicated clear, firm expectations to her students, but Vera also described her as someone who listened carefully to her students and helped them improve their writing through multiple revisions. She made Vera feel comfortable to make mistakes and to ask for help. Vera's comments about Mrs. T.'s focus on mechanical skills and helping students with revision while simultaneously helping students feel "a little bit of joy" in their writing corresponds with Vera's own classroom. Many of the features of Mrs. T.'s are strikingly similar to Vera's goals for writers' workshop.

Unlike Carrie and Linda, Vera did not have strong memories of particular features of her classrooms. She did not have any strong love of content or powerful learning experiences that foreshadowed the kind of teaching she tries to do today. She

remembered little about her classrooms and little about what she learned there. The one clear memory she had of Mrs. T.'s classroom was one in which she was helped through a structured system to develop a written draft into a finished product.

Michigan Health Model and Cooperative Learning

Vera began teaching in 1978, six years after earning her teaching certificate. Vera could not name a specific time in her career when her teaching began to change into its more current version. She had few memories of specific moments that stimulated her to adopt new practices. Vera had a hard time reconstructing her learning journey:

> I read a lot, I can't tell you what I read. . . . I'm sure part of it was being exposed to [new ideas] and talking to other people. . . . I know I went to . . . seminars and training . . . can't remember a whole lot about [them]. I remember reading books, but I don't know what they were. I truly don't. (1/26)

Vera's difficulty in remembering may be because she had not had opportunities to reflect on and share her stories before this study. Part of her difficulty may be because she had few major breakthrough experiences and many smaller learning experiences. Vera described how she learned through a piecemeal collection of practices picked up through reading, conversation with colleagues, and personal experimentation:

> I think some of it was kind of trial and error and even maybe picking it up from working with other teachers. . . . I'm sure it was very piecemeal, as I look back. (1/26)

Unlike Carrie and Linda, Vera remembered her career changes as a piecemeal collection of ideas and practices she gathered from a range of places, most of which she could no longer remember. She did not have a concentrated set of experiences that resulted in dramatic, sudden change. The learning experiences she did recall were an eclectic

collection of experiences that spanned a long period of time and that promoted changes in different subject areas.

Vera has always been a consumer of ideas through courses, workshops, and personal reading. Throughout her teaching, she took courses in reading, children's literature, and gifted and talented education, although she never earned a master's degree. She regularly attended in-service workshops, which she generally liked. She recalled a period of time during the 1980's, when she was learning so many new ideas that she went to as many workshops as possible.

Vera's professional reading has included research literature by Atwell (1987), Graves (1983), Calkins (1994), and Routman (1988), as well as "how-to" books like Classroom Management (Cummings, 1983). Some of these books were given to her by principals, some she read for committee work, and others she ordered from her National Council for Teachers of English catalog when she was a member. She often cited these books as sources for her ideas about teaching.

When Vera started teaching, she taught second grade for two years until she was laid off when her school closed. During these first two years of teaching, her teaching changed little. When Vera returned after a year-long layoff to teach third grade, she began to experiment with new practices. One of the earliest changes she can remember was beginning to teach health using a "hands-on" approach she learned about in her mandatory training to teach the Michigan Health Model, a state-wide elementary health curriculum. Vera described the grade-specific training:

> In [the third grade training] we studied some of the body systems and I remember doing a dissection. I had really never done . . . any kind of hands-on learning that I can remember, other than art. . . . I really enjoyed doing that. We made a replica

> of a spinal cord with dog bones. . . . The kids really like[d] it and it made it exciting and fun. (1/26)

At the conclusion of the training, teachers received a box filled with all the necessary materials to do the same activity with their students. Having done the project herself, and having all the materials necessary to do it with her students, Vera began to use the activities with her students.

The Michigan Health Model provided "hands-on" activities that represented a dramatic difference from the "dittoes and dittoes and dittoes" that Vera had been using from the teachers' manuals. These new activities were memorable in part because she had never done anything like this in her teaching before, but also because she had never experienced learning like this. Since she enjoyed doing the activities herself, and since the materials were provided for her, there were no reasons not to try out the new activities. When she tried it, she was pleased to discover that her students also liked it and the new methods made health "exciting and fun."

A second change she made was experimenting with different ways to get students to work together. She talked about her new uses of groups during this period of time:

> Maybe it came with doing more of the social studies and getting in groups in science. . . . In reading you did . . . groups on the different levels. That was not what I'm talking about. I think I did have kids work with neighbors and do things [in science and social studies]. I remember working on projects together. (1/26)

From the beginning of her career, Vera had grouped students according to ability for reading instruction. The reading groups provided, not peer assistance, but a way of managing different dittoes for different students, depending on ability. Vera's grouping of students in science and social studies was designed to have students "working with neighbors" to complete projects.

Although Vera remembered a time when she did not use such groups, she could not recall why or when she started having her students "work with neighbors" or "work on projects together" or how she learned to structure these opportunities. This aspect of her teaching has become so ingrained that she did not even identify it as a change.

These two changes--using "hands-on" approaches to teach health, and grouping students in ways other than ability groups used for reading instruction--enabled Vera to see possibilities for other methods of teaching. She saw the level of student engagement rise when students pursued "hands-on" activities differed from the dittoes she had used previously. She was comfortable to try the "hands-on" approach because she had been given all the necessary materials and experienced the learning activities herself as a student. The Michigan Health Model activities foreshadowed Vera's writer's workshop as a type of "hands-on" activity structured to keep students actively engaged by allowing students to choose their own topics and giving them time to write. She was pleased with the outcomes when she began having students work together on projects, and that feature of her practice has survived in the form of peer writing conferences.

Consistent with the bricoleur model, the "hands-on" Michigan Health Model activities and strategies for cooperative grouping were valuable not just by themselves, but also because they gave Vera new tools and materials to use as she constructed her practice. These changes paved the way for Vera to make other changes in her practice. Even though she was not currently teaching the Michigan Health Model or having students work in pairs on science or social studies projects, she remembered these changes as important steps that helped her change her teaching over a period of several years early in her career.

Math Their Way

After her third year teaching third grade, Vera took the training for Math: A Way of Thinking. As a second grade teacher, she had taken Math Their Way, a version of the same program for younger students. These two programs showed teachers how to create mathematics teaching manipulatives using common household items such as beans and macaroni and how to use these manipulatives to teach mathematics. After the first time she took the workshop, she had not used the ideas because she was too overwhelmed at having to "buy the materials, make the materials, set them up" (2/24). The second time she decided to "scrimp and beg and borrow" and recruit parent volunteers to prepare the necessary materials.

Why did Vera spend time to prepare the Math Their Way materials after the second time she went through the training, and why did she decide that using them might be worth the trouble? Vera hoped the new methods would help her students learn challenging mathematical concepts:

> Borrowing and carrying is a really difficult task for third graders to do. . . . So [in the training] . . . we learned how to show them when you have ten beans, you can trade it in, or when you have nine beans and add one more, you have ten . . . You took them through the physical movement of objects to understand the process of borrowing and carrying . . . so you had maybe three different hands-on ways for them to experience that. And most kids needed that. (2/24)

Math Their Way offered multiple ways for students to see and understand the ideas behind mathematical algorithms. As with the Michigan Health Model training, Vera worked through the same tasks and problems that she would be using with her students. Vera appreciated the potential value of multiple representations since she had struggled to learn math, but she had not been ready to try the new techniques in her classroom.

The second time she went through the Math Their Way training, Vera had more experiences that made it less overwhelming. First, her experience with the Michigan Health Model had prepared her for using "hands-on" approaches with students. Unlike the Math Their Way program, where she had to make all of the manipulatives herself, she had been able to use the Michigan Health Model activities immediately because she had been given all of the necessary materials. When she used the Michigan Health Model activities, she saw how engaging the "hands-on" activities were, so she became more determined to use the Math Their Way manipulatives. Having students work together in social studies and science had also prepared her for the challenges of orchestrating groups of children. Her several years of experience in the district had helped her develop a reputation that enabled her to mobilize groups of parents to produce the materials rather than making them on her own.

Finally Vera had decided that the other methods she had been using to teach math were "boring":

> I thought it was boring. . . . And that was another key in moving on with Math Their Way. It was so fun. And that ties in with the Michigan Model. It was so fun to have the kids so actively engaged in what they were doing, and that to me was a real key. And we didn't see a lot of that then. You just didn't. You saw your nice little classrooms with people sitting quietly and working and not a lot of interaction. And I guess I was comfortable enough in my classroom management skills that it didn't bother me to have kids being noisy, but actively engaged. And that's what happened. I liked it. It was fun to teach that way. (2/24)

She felt confident enough in her classroom management skills that she felt willing to experiment with forms of teaching that would result in more activity (and more noise) in her classroom.

When she began to use Math Their Way, she did not adopt the program completely. She used some of the ideas from the Math Their Way materials and "Integrated it with the book because we were still using books and it was still expected that we would" (1/26). One of her earliest attempts was using beans to teach multiplication by adhering rather strictly to the guidelines provided in the Math Their Way guide:

> I remember actually following a process that was set up through the Math Their Way book and basically using that to teach [multiplication], and thinking, "Am I doing this right? Is this getting the process across?" And not really sure.

She was impressed with her first attempts to use these new ideas, in ways she had not anticipated:

> I remember watching the kids after a couple days and . . . learning from the kids, . . . learning how they would explain to me what multiplication was in their own words. And from that point I remember going on that incident . . . and saying, "Would you write that down for me?" I had never done that before with any kind of math. The only writing we'd done in math was if there was a story problem, so I remember having them write down verbally what multiplication was. . . . I don't remember where I went with it, but thinking, "Wow, this is something I could do in other areas" kind of thing, you know one of those seat-of-the-pant things. (1/26)

Not only were her students engaged, but she saw that they were learning from one another, and she began to realize that "their ideas were just so profound and so varied, some of them. It was just amazing to me that some of them had the understanding they had. And the way some of them arrived at the understanding" (2/24). This experience caused her to envision writing as a tool for enabling students to express their thinking.

Since the Math Their Way activities were so different than the math teaching she had done, one might imagine that Vera would have had difficulty implementing the Math

Their Way techniques in her classroom. However, she did not recall difficulties with implementing the new techniques:

> It wasn't frustrating doing it because I had a guide to do it. They told you how to do it and I followed that, but as I was doing that I wasn't really sure . . . if I was wasting time doing it. Until I had done it two or three days, and I saw, heard the kids talking, working in groups, which you know we'd been doing . . . To me the revelation was [that] this is not only working, but they're sharing information and they're able to put it in their own words, which is definitely more meaningful. . . . If I had stopped that first day I never would have seen it. (1/26)

The guide book was explicit about what to do and say. Vera followed the directions, as one might follow a script, or a recipe. Whether or not she experienced frustrations or struggles with using Math Their Way, what she remembered most clearly was that the new practices had enough potential to continue using them. Ultimately, she remembered these changes not as frustrating, but as "fun."

Vera's experience with Math Their Way shows how the influx of new ideas and practices significantly influenced not only her teaching of math, but her inclination and practice of paying attention to her students' understanding of subject matter. She attempted Math Their Way for a variety of reasons: she thought the program had potential for helping struggling students, she had the means to produce the materials, and she was bored with the ways she had been teaching math. As a result of her experimentation, she learned something she did not realize before: her students had ideas about the meaning of multiplication, and they could express these ideas given the opportunity. She knew that her students were experiencing some difficulty with mathematics, but she had never before given them the opportunity to express their thinking so clearly. The Math Their Way script provided Vera with the question "What is multiplication?" These questions provided Vera with a new window into her students'

thinking. The Math Their Way activities allowed her to see something that she could not have seen with her previous methods of teaching. The Math Their Way practices stimulated Vera to go beyond wondering whether students were able to multiply; she began wondering what students thought multiplication was.

Using these new ways to teach math had ramifications beyond Vera's math teaching. She began asking students to write their reasoning to problems in other subject areas. She used the same technique to help her 8th grade language arts students use the writing process to prepare essays for tests in other subject areas. The Math Their Way experience helped Vera realize that students may know more than usually say. When she gave students time and opportunity to express what they knew, they produced work which revealed a deeper level of thinking than she had seen before.

Programs like the Michigan Health Model and Math Their Way provided Vera with an explicit and detailed set of "hands-on" practices that differed dramatically from the experiences she had been offering to her students. She tried these new things in her classroom because she had experienced them herself as a learner and she found them fun and engaging. She felt comfortable enough in her classroom management to allow her students to be noisily engaged. She was happy that the students enjoyed the activities and that they were not boring. Using these new techniques also gave Vera the opportunity to hear something about her students' thinking that differed dramatically from anything she had heard her students say before.

Teaching Kindergarten

In 1986, after teaching third grade for five years, Vera switched classrooms with the kindergarten teacher. When she switched to kindergarten, she briefly returned to her

former methods of teaching, and then resumed her experimentation with new practices with full force. Her move to teach the youngest children in the school had a profound impact on her inclination to attend to her students.

To prepare for the switch, Vera "exchanged curriculums" with the kindergarten teacher over the summer. Vera decided to structure her class in the way that the kindergarten teacher recommended, which featured the use of basal readers and the homogeneous grouping of students by ability that was characteristic of her early reading practices. Vera felt that it was easier to structure her classroom in the "traditional way" so that she could use the teacher guides and materials. She was freed from having to get all new materials and having to figure out how to use them with kindergartners.

Early Frustration. Vera met with early frustration in her kindergarten teaching:

> [I] went into kindergarten the first day, and when the kids left in the morning I was sobbing. I had never in my life felt so downhearted and so overwhelmed as I did that day. I still remember it . . . . What happened was, the teacher had been very traditional. She had reading groups, she had math groups, and so that's how I went in. (1/26)

Vera attempted to put her kindergartners into the kind of groups she had used during her early teaching years: ability-level groups used to manage instructional tasks, rather than the kind of learning from peers around hands-on tasks that she had been experimenting with as a third grade teacher.

She faced management difficulties which she attributed partly to the size of the class, but which she also believed resulted from asking young children to do things that they were not ready to do:

> I had 27, 28 kindergartners in [the morning and afternoon] session . . . Unbeknownst to me I had 5 EI[10] kids in that class, and their names all were

[10] The label used by the district to indicate emotionally impaired students.

> Robert so that was part of the issue but, really when I look back and think through it the issue was [that] I was taking these poor little 4 and 5, and 6 year olds and putting them in little groups. I didn't do that the first day, but I was just overwhelmed by it. (1/26)

Even with five emotionally impaired students named Robert, Vera's classroom management skills enabled her to establish the oppressive classroom structure after approximately two months. After she had begun to use new methods of grouping and "hands-on" activities with her third graders, her method of teaching kindergarten felt like a step backwards. Even though her principal said that she was free to change things, she said "I didn't even know how to go about changing it" (1/26).

In her first year of teaching kindergarten, she did not use the practices she had learned from the Michigan Health Model, Math Their Way, or any of the cooperative grouping arrangements she had used. There are several possible explanations for why Vera did not quickly or easily translate her new teaching practices in third grade into kindergarten teaching practices:

> I was so overwhelmed with dealing with that many children in a classroom and thinking that I was so responsible for how they exited, their knowledge, being ready to read, being ready to be put in a math book, those kinds of things. That still was a concern at that time. I don't think it was, you know what drove me, but it was reality. And I knew they went into very, very structured rooms. (1/26)

First, she was faced with a greater number of younger students who were still learning to deal with the "grammar of schooling" (Tyack & Cuban, 1995). Second, she felt pressure from the first grade teachers, whose rooms were "very, very structured," to make sure that her students left kindergarten prepared to enter these structured first grade classrooms.[11] This pressure was reinforced by some parents who expressed their hope

[11] This is similar to how she described her responsibility for preparing her 8th graders to handle the grammar and other aspects of the traditional ninth grade classrooms.

that she would stick to a more traditional curriculum. Although she did not mention this, a third possible explanation is that changes in teaching may not translate easily to new grade levels (especially if the changes you had made were highly age and content specific).

Gesell: Assessing Children's Developmental Readiness. The following year, she thought to herself, "This is nuts. I cannot do this" (1/26), because she believed that the structure was wrong for her students:

> I just knew in my heart what I was doing was wrong. . . . I love little kids and I felt sometimes not cruel, but that I was asking them to do something that they just weren't ready to do. (2/24)

This gut feeling was reinforced by a workshop she attended before her second year of teaching kindergarten. Vera went through training (Gesell & Amatruda, 1947) to learn a series of developmental tests and stages of children's development. Vera described the workshop in this way:

> It takes you through learning about different stages in children's lives, how they develop. What's appropriate, what's age appropriate, what isn't, socially, mentally, physically, all that kind of stuff.

At that time in the district, the kindergarten teachers tested all the incoming kindergartners to determine whether they were developmentally ready to enter kindergarten. Even though she was ambivalent about the testing process, she enjoyed reading about the developmental stages of children.

Even though the Gesell training did not convince her of the value of the testing, she said that the importance of the training was "Not the training itself, but what the training opened up for me" (2/24). Eleanor Duckworth (1996) argues that the importance of using Piaget with teachers is not to teach them to "know Piaget" but instead to teach

them to "be Piaget." In other words, teachers benefit most not by learning Piaget's stages and substages of development, but by learning to appreciate the power of his clinical interviews to probe children's thinking.

Vera's son was just going into kindergarten at around this time, and unlike Vera's first child, her son struggled to learn how to read and did not become a proficient reader until 3rd grade.

> I saw [different rates of development] with my own children. I had one who read before she went to school and one who really kind of was turned on by the time he was going into third grade. And he's a great student and a great reader. (1/26)

Vera's experience as a mother, and her gut feelings of what children needed, confirmed what she learned in the Gesell training: that children develop at different rates and times. She began to believe that teachers should be responsible for helping children to develop according to their developmental readiness:

> I guess my philosophy's changed that schools shouldn't be set up for schools, they should be set up for where children are at. I don't think we did enough of that years ago. I still think that's a problem now. We don't look at what children need, what they're going to benefit from, and I think Gesell made me realize, "Wow, we're asking these kids to do something that they're just not ready for." An example I give is, kids learn to walk, crawl, talk, when they're ready and I think we need to look at that throughout a child's career in education a little bit more. . . . We didn't acknowledge that and . . . we were kind of rude to children sometimes. We expected them to do what we felt they were ready for and not what they were ready for. . . . Kids were berated. (1/26)

Vera began to ask herself about her students' readiness for particular tasks. She began to search for practices that she could tailor according to children's needs and abilities. Her belief in providing students developmentally appropriate opportunities has continued throughout her career. In her current practice, she demonstrated this by keeping lists of

skills that each student has mastered or is working on, and by using student writing to plan for individual writing conferences with each student.

Starting to Change Again. During her second year of teaching kindergarten, Vera made a series of rapid changes that resembled some of the things she had tried as a third grade teacher. She made several significant changes:

> I implemented Math Their Way. I did [learning centers] on a very limited basis, because it was pretty overwhelming to do too much. The . . . second part of the year, I implemented process writing and got the kids doing that and did . . . the beginnings of whole language. . . . I say the beginnings because I was learning as I went along. I didn't have anyone to show me. (1/26)

That year, Vera implemented many practices that had previously taken her several years to implement in her third grade classroom. While she was changing, Vera said she was "learning as I went along." Even though she did not have the explicit guidelines to follow, she felt that she was doing the right thing: "It was what I had read and what I really felt really kind of in my heart you know, as a mom maybe, that kids needed, but didn't quite know how to get there" (1/26).

More than at any previous point in her career, Vera decided to change based on her own beliefs about better ways to teach.

> I was never fighting anyone or at odds, but I got to the point where I said, "I just don't care. I know this isn't the right way to do it. I'm going to continue with what I'm doing." (1/26)

During this period of time, Vera said that she was "pretty much on my own." However, she described a number of people who were influential in her learning. Even though Vera did not trace any of her changes to her interactions with colleagues (as both Carrie and Linda did), she enjoyed the support of other people in the school.

First, Vera felt supported by her principal, who boosted her self-confidence by allowing her freedom to make changes as long as her students were learning. As she described him:

> He was a very well respected principal, very stern, very curriculum oriented. Did a nice job. Had expectations and you followed them. He slowly changed through the years in that he felt that if we could reach a certain goal, it didn't matter how we got there. . . . He was very instrumental . . . in constantly giving us articles to read. . . . He was definitely a person in my life that kept me current, kept me thinking about things, and I think that that is very, very important in a teacher's life.

This principal was similar to Mrs. T., Vera's high school English teacher, in his ability to communicate and maintain consistently high expectations and maintain consistency. However, he was not simply a disciplinarian. He allowed Vera the freedom to experiment with her practice as long as the outcome was positive, and he served as a source for new ideas by giving her helpful readings.

Vera also felt supported by fellow teachers. She spoke with a group of kindergarten teachers at other Flat Creek elementary schools about offering developmentally appropriate instruction for kindergartners. In addition, there were a group of teachers at Vera's school who shared her ideas about teaching.

> The whole atmosphere in the school changed because [certain people] helped each other. "Hey, what are you going to do? I need help with this." So that to me was like a whole window, like a flower, you know, had opened up for me, 'cause that's what I had needed the whole time and never had. . . . And we were friends and that helped. We enjoyed each other. We shared about our kids. . . . We had a real close professional and social body of people there. (1/26)

Like Carrie and Linda, Vera established a personal and professional relationship with other teachers in the school, and these teachers talked together about their teaching. As Carrie and Linda's histories suggest, simply having close working relationships with

fellow teachers does not guarantee change. However, Vera's relationships with fellow teachers bolstered her confidence to experiment in her classroom.

Finally, the first grade teachers at Vera's school were not part of the group of teachers who were helping each other. Initially, the first grade teachers in Vera's school were skeptical of her new methods, which differed from their more traditional practices. However, they did not raise objections when they began to realize "that the students came in knowing, being considerate, being socially ready, knowing how to raise a hand that kind of stuff, so there was respect for that" (1/26). Vera was determined to do what she believed was right for her students, and the first grade teachers' silence contributed to Vera's ability to change her teaching.

The Rest of the Story

After teaching kindergarten for five years, Vera took a fifth grade opening in the same school. She had decided she wanted to work with older children, partly because she was tired of being "a parent to parents" and trying to help parents figure out how to work with their own children. She felt that by the time parents had children in fifth grade, they were willing to be involved in their children's education but did not rely on the teacher to tell them what to do. Vera taught fifth grade for five years, and then she moved to the middle school to teach sixth grade for three years. Currently, she teaches eighth grade language arts on a team of teachers from the five core areas (language arts, literature, math, social studies, science), "special" teachers, a counselor and a special education teacher.

Since leaving kindergarten, she continued to make changes, the most important of which was the institution and adaptation of her writer's workshop format as described in

Chapter 3. Over time, she modified her structure for teaching the writer's workshop, she developed a sense of what children at different ages are capable of doing, she fine tuned her record keeping processes, and she has gotten much more experience reading student writing and conferencing with individual students.

Discussion

How did Vera develop her classroom to its current state? What challenged Vera to do things differently and supported her in her attempts? How did she create a classroom with a structure that allowed for both student choice and ownership rather than limiting opportunities for individual developmental differences or student choice? Even though Vera had a difficult time reconstructing her own career history, some of Vera's stories illustrate experiences that have remained vivid and continued to shape her perspective on teaching. From this collection of stories, three ideas emerge as important: (a) Vera's memorable experiences were aligned with her orientation of attending to students; (b) the experiences were important not just by themselves but as a sequence of events; and (c) Vera learned and experimented with new practices even though she did not have the same kind of close collaboration that Carrie and Linda had.

Alignment with Personal Orientation. As with Carrie's and Linda's stories, Vera's memorable learning experiences fit with her dominant orientation toward attending to students: learning what students are able to do and devising structures to individualize her instruction accordingly.

The Michigan Health Model and Math Their Way workshops led Vera to adopt practices that promoted greater student enjoyment. However, what made the workshops

powerful learning experiences is that when Vera used the strategies she learned, she was able to learn new things about what her students thought and what they were able to do.

These opportunities which aligned with her orientation helped Vera develop new practices that changed her classroom. Some new practices, like the use of cooperative groups or Michigan Health Model "hands-on" activities, changed the look and feel of her classroom. The students were more interested and engaged when they had opportunities to talk with one another and work on something other than worksheets. Other new practices, like the Math Their Way activities, expanded Vera's potential for learning things about her students which she had never thought to ask before, such as their explanation of what multiplication was. Finally, practices like the Gesell testing raised new questions for Vera about her students. She wondered what students were able to do and what they were ready to learn. These new questions led her to offer opportunities specifically tailored to individual students' needs and abilities.

In Vera's career history, the content of memorable professional development experiences was either about the development of new practices or the raising of new questions. She learned and implemented new practices that offered structures that would be more engaging for students. When she discovered new practices that allowed her to learn something new about students, she continued to ask new questions about what her students understood. These questions led to her continued experimentation with new practices that addressed those new questions. When she began teaching kindergarten, went through the Gesell workshop, and watched her son enter school, she began to ask herself new questions about when students were ready to learn particular things. Even though professional development experiences are powerful because they align with

teachers' pre-existing commitments, when they offer new practices that lead to new questions or raise new questions that lead to new practices, they have the potential to transform teachers' practice.

Professional Development as a Sequence of Experiences. The experiences are important as a sequence, a unique constellation of events that combined and interacted to support changes in Vera's practice. None of the experiences stands alone as a model of effective professional development. Each was important as it contributed to Vera's professional development in a particular sequence at a particular time in her personal and professional life. Each experience shaped Vera's subsequent experiences. Figure 4 illustrates the interrelationship among Vera's different experiences:

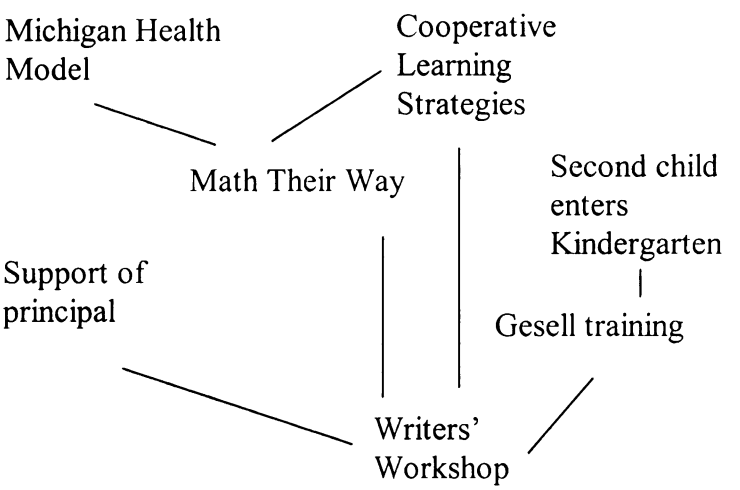


Figure 4: Vera's Constellation

The "hands-on" activities of the Michigan Health Model and the cooperative learning strategies increased the level of student involvement and enjoyment in the

classroom, and Vera felt better about using those activities. These new practices also seemed to influence her experience of the second Math Their Way training and paved the way for Vera's implementation of Math Their Way activities. The early practices increased Vera's level of comfort with students using manipulatives and working together, which raised the level of commotion in the classroom. Since Vera had developed skills to manage this commotion, she could focus on what the children said and did instead of the commotion itself. Focusing on what the children said allowed Vera to learn that students had thoughts and could express them with the right opportunities.

Vera's path toward the development of the writer's workshop continued when she entered kindergarten. Her students' poor reaction to the initial structure, the Gesell workshop, and her son's kindergarten experiences convinced Vera that children progress at different rates and different times. She began to search for ways to allow students to work on tasks that they were ready to do, and she tried to develop ways to tailor her instruction to individual differences. Without the support of her principal, Vera may have had a more difficult time experimenting with new practices. These early experiences planted the seeds that eventually emerged as her current writer's workshop format.

Vera's story shows why researchers must consider not only the features of any given professional development opportunity, but also how an opportunity functions in the ecology of a teacher's professional life. Vera's memorable professional development experiences were not memorable simply because helped her implement new practices,

but because they changed how she thought about their teaching and they enabled her to take advantage of subsequent opportunities.

Learning Without Collaboration? Vera's history seems to show someone who learned new practices without the same kind of close relationship as Carrie or Linda. Even though Vera talked with other teachers about her teaching, she never experienced the kind of professional development that the "consensus model" would advocate. However, her practice has continued to evolve to allow her to attend to different aspects of her students than she did when she began.

Vera needed to be dissatisfied enough with her existing practice to be willing to try new practices. Vera's dissatisfaction did not come from conversations with other teachers as it sometimes did for Carrie and Linda. Vera's dissatisfaction came partly from a feeling of boredom and an eagerness to try something new. Later, she responded to her gut instincts, reinforced by her son's early school experiences, that schools were not set up to adjust to individual children's levels.

The dissatisfaction alone was not sufficient; to attempt the new techniques, she also needed to be ready to implement them. Being ready meant having the self-confidence to attempt new practices. At times, self-confidence was boosted by the availability of materials (including scripts) that had been given or created. At other times, confidence meant deciding whether a new practice was promising and whether she was confident enough in her classroom management to try something that might create more noise and chaos. Vera never reported any real concerns about classroom management, except for the brief time when she began teaching kindergarten. Her

classroom management skills may have enabled her to be more adventurous throughout her career.

Vera needed to feel free to decide what to do in her classroom. At the beginning, there was little need or opportunity for her to make teaching decisions. She had little or no choices as a teacher since she followed the manuals obediently without an alternative vision to draw upon. At the same time, she was raising two young children.

Vera was also supported in the changes she made by her fellow educators. Her principal clearly confidence in her abilities. He provided her with current reading materials, and he let her make their own teaching decisions. Some teachers in her school and in her district shared her ideas about attending to the developmental readiness of students. Even teachers that disagreed with Vera's new practices were willing to accept the practices because they could see by the students that came from Vera's class that her methods were not harming the students or making their jobs harder.

Vera learned to change her practice by taking advantage of available opportunities and by seeking out new ideas. She did not participate in a close collaborative relationship with other teachers, and she did not experience any sustained professional development opportunities. Vera's case offers a counterexample to the consensus model of professional development and forces researchers to re-consider the usefulness of identifying formal features of effective professional development.

Michelle's Narrative: Listening to Kids' Voices and Letting Them Do the Work of Learning

Introduction

Michelle's attention to students was centered around her orientation of paying attention to students' interests. She designed curricula that provided opportunities for students to pursue projects, as individuals and as a whole class. She used a variety of techniques for learning about what her students were thinking, and she experimented with new ways to gather this information.

Throughout her career, Michelle was interested in learning ways to improve her teaching:

> I'm always interested in learning how to do what I'm doing better. If they've got a flyer that says this speaker is going to come and talk about this and I think that I'm going to learn something so I can do it better, well, then I'm interested in going. (3/8)

Whenever she encountered promising new ideas, she tried them in her classroom and modified them to make them work.

> I'm the person that . . . if I understand the philosophy behind it and maybe don't know all of the mechanics of making it work but really believe in what the idea is behind it, I will try it. And then as it's not working, I will have the kids help me, so that they are part of the system and take ownership in whatever it is we are trying to do. [I] make adjustments along the way. (3/8)

She was frustrated with teachers who said every year, "I'm getting ready to do something new, I just have to do a little more research." She saw herself as willing to try something even if she was unsure of whether she could make it work. She always expected to make "adjustments" to get new ideas to work in her particular classroom.

Even though Michelle always sought to improve her teaching, her classroom after fifteen years looked much the same as it had at the beginning. After fifteen years, Michelle experienced several critical incidents which led to a series of radical changes in her teaching practice. Since then, she has continued to make substantial changes.

Images of Teaching

When Michelle talked about her K-12 schooling experiences, she did not have vivid memories of powerful teachers. She had some teachers that she liked, but "nobody that inspired me to think teachers are wonderful" (5/3). Michelle's most vivid memories were focused on the content of particularly memorable assignments.

Michelle recalled herself as an "adequate student." She said, "I knew that I didn't struggle like some people struggled. It was kind of just easy and I just kind of did what I had to do" (5/3). In spite of her success as a student, she remembered having little confidence, especially in her writing ability. When she was in fourth grade, her teacher asked all the students to write a poem about autumn using colors. When she brought her poem the next day, her teacher read it and said was too good for her to have possibly written it. To appease her teacher, she "went home and changed it and made sure it didn't sound as good and turned it back in, and then it was OK" (5/3). She began to internalize her teacher's doubts about her writing ability.

Throughout her schooling, she continued to doubt her ability as a writer:

> I thought of myself as a lousy writer. . . . I am a terrible speller. . . . In high school [the teacher said], "OK, write a short story." . . . Every other word I couldn't spell. And I spent . . . the whole hour thinking of, "OK, what word can I substitute with this word that means the same thing because I can't spell that one." (3/30)

Michelle's difficulty with spelling prevented her from writing freely. She had internalized the message that good writers needed to be good spellers. As a teacher, Michelle tries to help her students believe in their writing ability more than she did, even when they struggle with spelling.

Michelle remembered some enjoyable assignments. Her seventh grade social studies teacher assigned a culminating project for each unit. She remembered two such assignments:

> I remember making maps of every battle of the Civil War, and drawing out the map and which way the troops were moving for every battle. . . . I remember doing that and really liking it. Another one had to do with the costumes or the clothing of the time period. My friend and I gathered all the Barbie dolls we could find and we created costumes that were representative of every era. . . . We had a dozen different dolls and had to use rubber bands and pins and needle and thread and material and come up with our own costume. I remember for the knight in armor, wrapping Ken in tin foil. I remember enjoying doing that. (5/3)

Michelle remembered the topics of these memorable assignments: a poem about autumn, maps of the Civil War, costumes of different time periods. Although she did not say whether she had chosen these topics, she was interested enough to remember them over thirty years later. She mentioned little about her teachers, their personalities, or how she felt in their classrooms. Even her memory of feeling inadequate as a writer was tied not to the classroom environment, but to feelings about her own ability. These memories were consistent with Michelle's goal: connecting curriculum with student interests to promote students' self-confidence.

Michelle's tried to pursue her desire to connect with children's interests by majoring in Child Development, with the intention of working in a day care setting. As

part of the major, she earned her teaching certificate. She said that her Child Development courses fixed her attention on children from the very beginning:

> My background in studying children really impacted how I looked at the students in my classroom. I didn't look at them and say, "Here's my math curriculum, I have to teach these kids." . . . I looked at them and thought, "These are kids and how can I help them best learn and grow and develop a desire to be a learner?" So I didn't think of curriculum. I thought of kids. (3/8)

When she finished her degree, she decided not to teach in a daycare center because she realized that she would only earn minimum wage. She began to look for a teaching job.

Early Learning Experiences

Immediately after graduating, Michelle accepted a kindergarten teaching position at Riley Elementary school. She taught kindergarten for one year. The following year, she was asked to teach first grade. Her principal expected her first grade room to be structured traditionally. She did, albeit grudgingly. After doing this for a year, she grew frustrated with the "traditional" format, and began to use centers that resembled what she had tried to do in her kindergarten classroom.

Michelle taught first grade for 10 years, during which she had four children. Michelle's curriculum did not change much, nor did her teaching. She took courses to earn her continuing credential in 1978, but the courses were not much different from her undergraduate courses. She even filled out a plan for a Master's degree but decided not to pursue it.

Michelle's district always paid for teachers to attend one conference a year. She always took advantage of this opportunity, but she was dissatisfied with the offerings:

> When I first started teaching . . . there would be teachers' meetings but it wasn't about how to work with the kids. . . . I can remember going one year with some other teachers but it was like a . . . "Make it/Take it." . . . You made little things, game boards and things to use in the classroom. (2/22)

The "Make-it/Take it" sessions brought materials into her classroom but did not stimulate her to think differently about learning. Unlike the Michigan Health Model materials that Vera received, the materials Michelle made in these sessions did not help Michelle envision any new ways to "work with the kids"--to think about students' development or learning opportunities to stimulate that development.

Michelle joined professional associations. In the early 1980's, she joined the local branch of the National Reading Council, which entitled her to attend the five or six meetings each year featuring guest speakers. For a long time, Michelle said, meetings were about moving away from basal readers and integrating trade books into the curriculum, since few teachers were actually doing this.

Michelle also experimented independently in her classroom:

> As it was, I can remember at night going home thinking, "How can I do this differently? What am I doing wrong?" And brainstorming and trying a lot of different things. I mean there was a year I think I probably rearranged my room every week thinking there's got to be a way to make this work.

These examples of Michelle's early learning show Michelle's interest in improving her teaching seeking new learning opportunities. Even though Michelle was an eager learner, her practice changed little during the first ten years of her teaching. She struggled to envision a different practice. She seemed to lack concrete images of how her classroom might look different, images which her early learning experiences did not provide.

Developmentally Appropriate Kindergarten

In 1990, fifteen years after she began teaching, Michelle moved from teaching a second/third split classroom to a kindergarten position. In part, the switch came out of

desperation. Since 1988 she had been teaching in split classrooms: a first/second split and a second/third split. Since seniority in Michelle's district was determined by the number of years teaching the same grade, these earlier switches had left her with no seniority, and she was afraid she would be forced to continue accepting higher and higher split positions. When a kindergarten opening came up, she jumped at the chance to teach younger students again.

However, she wasn't the only teacher interested in the position. Joan, a part-time teacher in the district, also wanted the full-time position. Contractually, the district had to offer the position first to part-time teachers. Since Joan was part-time, she was offered the position. Luckily for Michelle, another kindergarten position opened up when another kindergarten teacher retired, and she was offered the other kindergarten position. The six years that followed turned out to be the most fertile period of learning in Michelle's twenty-four year career, during which she adopted new practices that helped her learn about her students' thinking, interests, and understanding.

Joan and Michelle's relationship was strained at first, but soon the two teachers realized that they shared similar ideas about teaching kindergarten. Both teachers were determined to offer their students a "developmentally appropriate program." Both teachers petitioned the principal to use their allotted funding to purchase manipulatives and other materials instead of new basal workbooks:

> We decided from the beginning we weren't going to have workbooks that made the kids feel like they were failures because they were getting them wrong. And that we would get manipulatives that could be for a whole range of kids. (3/8)

Michelle believed that manipulatives allowed students with varying levels of ability, "a range of kids," to engage with the material. Michelle felt that the workbooks helped

some students experience success, but other students' self-esteem suffered when they kept "getting them wrong." This presented a problem when students were expected to move through these materials simultaneously and at the same pace as most teachers do when using basal readers and accompanying instructional materials.

Instead of being intimidated by eliminating workbooks and basals, Michelle was excited about the freedom and the possibilities:

> All of a sudden you don't have any teacher's manuals for science, for social studies, for reading, for math. . . . There's just you and resource materials, which was wonderful (laughs). [This] was the first time I could look at the outcomes that we said this is what we want kindergartners to do, and to pull from materials that I felt were appropriate ways to meet these kids' needs. (2/22)

Rather than feeling overwhelmed or nervous about straying away from the basal texts, Michelle described the change with a sense of giddiness, like having a heavy weight removed from around her neck. Michelle did not explicitly describe how she used these new manipulatives with the students, but for her the important part of the story was leaving behind the basals, choosing her own materials, and providing something that enabled students at various levels to engage with content without feeling like failures.

Relying on her own judgments about materials came with a price. Teacher's editions dictate specific content sequencing, provide neatly indexed accompanying materials, and even offer partial scripts for teachers to follow. Michelle decided which materials to use based on what she was trying to teach and what her students could do. This increased responsibility heightened her sense of responsibility to pay attention to her students:

> Once you're no longer following somebody's teacher's manual, you have to look at the kids and say, "OK, these are my kids, this is what they know, this is what they don't know and how can I best meet that?" So that was a very important learning year because all of a sudden I had the professional responsibility of

> assessing my kids and guiding instruction, not following a teacher's manual. (2/22)

Not using the teacher's manual allowed Michelle to "pull" materials from her resource collections that were appropriate for her students. To determine what to pull, she needed to know more about her students. She focused on "what they know and don't know" and thought about how to help them learn what they did not know. She needed to have a better system of assessment for determining what her students knew and did not know.[12]

According to Michelle, her first year teaching kindergarten was the first time in her career she considered her teaching truly "student-centered." Before then, she had always tried to engage and motivate her students, but she had never observed her students closely to understand their thinking or their interests. She had always determined the themes and topics of study. She had designed and created the learning centers. Students simply navigated through her teacher-created, teacher-directed environment.

In her new classroom, Michelle observed her students as they engaged in different activities. Michelle audiotaped her students, transcribed her tapes in the evening, and filed her transcriptions in individual students' assessment folders. When I asked whether this was very time-consuming, she stated that she was just replacing the time-consuming activity of correcting students' workbooks with the equally time-consuming, but much more illuminating, activity of listening carefully to what students said.

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[12]Michelle and Vera both described their kindergartens as "developmentally appropriate." Although the "developmentally appropriate instruction" is a term found in the research literature since the early 1990's, I try to understand the term as Michelle and Vera each used it.

Michelle's new teaching practices were consistent with her expressed inclination to "teach the whole child," but the new practices allowed her to attend to her students in unprecedented ways:

> [Before 1990], it would have been a lot harder for me to . . . say I'm [teaching] well because it wasn't me. I was following the textbooks. Yeah, I was entertaining the kids. They were happy, you know. I had a list of . . . forty people who wanted their kids in my classroom. But I didn't have the same autonomy in [previous classrooms. Now the students are] doing well and I could say it's because of me. I designed this curriculum, I'm carrying out, I'm effective, you know, it's working. And [in the past], I was frustrated 'cause . . . I didn't see learning that was permanent that was happening to my kids [even though] I could train them to pass those tests. (2/22)

Once Michelle began writing her own curriculum and holding herself responsible for understanding what the children knew, she also felt a greater sense of pride when the students succeeded. When she used the textbooks, she could keep students and their parents happy, but she felt like a vehicle for delivering textbook instruction. She was also less convinced that her students were learning things deeply and permanently, as she hoped they would with her own curriculum.

Michelle's desire to teach a "developmentally appropriate curriculum" had begun when her third child had gone to kindergarten a few years before. Her third child's birthday was in June, and she began to wonder whether she should send him to school right after he had turned five. She had read about "developmentally appropriate" classrooms and had even visited a local elementary school which had a developmentally appropriate program.

Michelle's experiences as a mother led her to seek out information about new methods of teaching, which offered an image of the kind of classroom she wanted and the kind of teacher she wanted to be:

> I see another thing that really impacted me as having children of my own. Seeing how my kids came home and talked about education and school and how much their emotions and feelings were often overlooked in the hubbub of this social setting of schools, made me want to give my [students] something different, have them feel more a part of the community of the classroom and [allow them] more choices.

Michelle's interest in "developmentally appropriate" programs was strengthened by Joan, who was also interested as a result of her son's troubling school experiences:

> [Joan and I were] also very tuned in to wanting schools to meet the needs of our children. Knowing that our own kids had been in situations where their needs hadn't been met, we wanted the kids to develop a love for education, a love for learning, and to have their school be a happy place where they could go and have their curiosity heightened and come to an understanding of the wonder around them. (3/8)

Both mothers were influenced by memories of their children's schooling experiences. The experiences Michelle shared with Joan brought the relationship beyond a professional working relationship and even beyond friendship. Together, Michelle and Joan were determined to give their students opportunities that they wished their own children had in school.

This common bond between Michelle and Joan led them to a closer relationship and more frequent talk about their teaching.

> But as we got to know each other that year, we found out we really thought a lot alike. . . . The next year, we started sharing more ideas. And by the last two years we were working together, because it was five years there, we were doing units together. Like when we would do our Thanksgiving unit, we would work on it for a month. And she would teach all the lessons that had to do with Indian concepts and I would teach all the ones that would have to do with the Pilgrims. And then we'd have our big feast together and reenact it. (3/8)

During these years, Michelle was on the search for powerful math and literacy programs that would help her reach all of her children without the rigidity of the basal series. Michelle attended workshops for Math Their Way and Box-it and Bag-it, two math

programs which offered ideas consistent with their "developmentally appropriate" theme. Michelle and Joan attended a regional early childhood conference together. The conference seems to have influenced Michelle, but sharing a room with her fellow teacher was branded even more into her memory.

> We would go to the early childhood conference and we would spend the night there and process and talk about everything we heard all day. That became something we did every year. And it was really valuable because I found out issues that I wasn't aware of. . . . It was a place where things that were happening at the national level and at the state level, you could find out about. (2/22)

This conference allowed Michelle to learn about recent research activity and policy initiatives at the national and state level. It also provided a time, place, and content for the two teachers to talk with one another.

In her search for a literacy program that could encompass the needs of all her students, Michelle attended other conferences. During that year she attended the Michigan Reading Conference, where she heard Taffy Raphael speak about the work she had been doing with book clubs for fourth and fifth graders. She was inspired, and decided at that time that if she ever decided to go back to graduate school, she would study literacy.

The "Growing Year": Moving to Multi-age

Michelle learned during her five years teaching kindergarten, but these years were also important for laying the foundation for teaching in a multi-age classroom. During that year, she co-planned and co-taught with Joan in a classroom that combined kindergartners, first and second graders. She also worked closely with the reading support teacher to implement process writing in her classroom. Michelle said that this year was the "growing year," the single most crucial year of her career.

During her fourth year of teaching kindergarten, a new principal with new ideas, started working in her school. This principal was different than previous principals:

> We went to some multi-age conferences and . . . her idea was school within a school. She wanted to have different tracks all within this building to offer parents more variety in choosing classrooms. So one of her ideas was to offer a track where there was a multi-age. (2/22)

Michelle was interested in the idea of a multi-age classroom for several reasons. She had previously taught split classes with students at two different grade levels. A multi-age class provided the possibility for furthering her ideas about "developmentally appropriate" education in a setting where students were not rigidly separated by grade level but could interact with other children with similar abilities or interests (even if they were different ages).

Michelle and her principal attended a multi-age conference where they became more interested in multi-age teaching. Together they read books and journal articles, talked about the multi-age program, and attended other conferences. Michelle did not want to teach in a multi-age classroom alone, but Joan agreed to do it with her. The principal, Michelle, and Joan wrote a successful grant proposal to pay for time that summer to develop the multi-age curriculum. In addition, the grant provided money for Michelle and her partner to attend several conferences that year. The grant supported Michelle's conference attendance, supported her research about multi-age teaching, and forced her to write her ideas down.

The following year, Michelle taught math and reading in the morning with her first and second grade multi-age class. In the afternoon, when the afternoon

kindergartners came, they combined both classrooms for a K-1-2 combination, and both classes worked on science and social studies.

Michelle considered her first year of teaching in the multi-age classroom, as "a real growing year" (3/8), largely because of her partnership with Joan:

> Probably the biggest change [in my practice] was having the chance to team with somebody and develop this multi-age program. Because you had to talk so much about your beliefs about how kids learn and why this was important and this wasn't important.

The multi-age teaching arrangement allowed the two teachers, who had already developed a relationship as fellow kindergarten teachers, to plan together more intensively and to watch one another teach.

The summer before they began the multi-age classroom, Michelle and Joan searched for ideas that would help them adapt the curriculum to all of their students. Michelle remembered feeling "frantic" about deciding what to do in her multi-age classroom:

> I'm recalling . . . how I was kind of frantic. How can I best meet the needs of all these kids? And I knew I had some really, really low second graders. I knew I had some high first graders . . .

She wanted to find a way to offer powerful experiences for students with a wide range of abilities and interests. She wanted a "core reading program that would expand for first and second graders."

As part of the search, both teachers read extensively. This reading stimulated Michelle's new ideas about curriculum:

> If we want to have the kids have an opportunity to really understand this concept and to really have experience with this concept, then this is going to take this amount of time. So [we were] deciding what was worthwhile ideas to invest your time with. . . . Maybe it's really fun to do this activity, but is it worthwhile when you only have the kids so much time? (3/8)

Michelle began to believe that she had to choose which things were most important for students to learn. Michelle wanted to offer powerful, meaningful curriculum that resembled her seventh grade social studies projects. If they were important, then they were worth spending enough time to make sure students learned these topics well, even if that meant giving up special holiday activities that were not integrated into the curriculum. They realized that if they only had their students for a certain amount of time, they had to make the best use of that time.

While making choices about what to keep and what to cut from the curriculum, Michelle and Joan sometimes disagreed. Michelle had to justify her beliefs in a way she had never been forced to do before:

> [Joan] was real strong, and she would say, "But why do you want to do that?" You really have to know your educational beliefs and why you want to do something and why whatever you're expounding to do is valuable. So, it was a really wonderful learning year for us. We found out just what our beliefs were.

The experience of questioning and answering helped not only in the design of the curriculum, but it also helped Michelle come to a greater awareness of her own beliefs. Michelle and Joan organized their multi-age classroom using the theme of "cycles." They chose topics that "built on [our students'" understanding of the world" (3/8).

Another important aspect of the move to the multi-age classroom was the opportunity for Michelle to work side by side with another teacher in the same room. During the time when Michelle and Joan combined their classes, the teachers offered some direct instruction, and some opportunities for students to work individually or in small groups at literacy, math, and science centers.

Being in the same classroom allowed Michelle and Joan to combine their students, but Michelle also appreciated watching Joan teach:

> We were in the same room teaching all the kids together. And we learned from each other. We definitely found out what each other's strengths were. And you could see by how the kids reacted what things really worked well and what, you know, things that didn't work as well.

Michelle saw how Joan was able to run her classroom more smoothly. For example, Joan frequently used chants and songs to get and keep the students' attention. Michelle was amazed at how easily Joan was able to manage transitions between activities. Michelle has made chants and songs part of her teaching repertoire, as I saw on the day I observed.

The two teachers met daily at lunch to discuss the day. Sometimes Michelle and Joan discussed individual students:

> [Our lunch discussions were] a lot more intense than the type of things we had done in the past. And it was a time to be reflectful. We had somebody else to [ask], "Did you see this person do this? Did you hear what he said to her?" It was really a time when where we probed over kids . . . talking about the kids, being reflectful about their growth and their needs. (3/8)

While one teacher led the whole class, the other watched the students to see how they reacted. This helped Michelle see what "worked," and "didn't work."

Michelle's new practices created new possibilities to attend to her students. First, different groups of students pursued projects of their choice within the larger scope of the unit. For example, in the cave unit described in Chapter 3, different students studied temperature zones in caves, animals in caves, or the geological formation of cave structures. Michelle's attention to her students is inseparable from the content of the curriculum. She maintains a delicate balance between what she wants her students to

learn, what is most important for them to learn, and where her curriculum intersects with students' interests.

During that same year, Michelle also worked with Sarah, the reading support teacher, as part of an inclusion model for helping special education students. Michelle and Sarah worked on Michelle's students' writing using a writer's workshop format. Though Michelle had tried unsuccessfully to do writer's workshop before, she was willing to try since Sarah had prior experience making writing workshops work. Michelle and Sarah successfully instituted a writer's workshop in Michelle's classroom. Initially, Michelle watched while Sarah launched the students' writing activities by reading the book Maria's Cave, which Michelle was reading when I observed in her classroom. Watching Sarah helped Michelle see how to get students hooked on a topic:

> [Sarah] would come down each day and read part of it. We'd shut off all the lights. . . . She'd read with a flashlight and we would visualize all the things that are going on in this chapter book. And then we got to the point after we finished the story that we wrote our own cave adventure stories. (3/30)

Later, Michelle and Sarah combined their efforts. Michelle kept teaching with her themes, and Sarah helped students with the writing process to accompany the theme. When students had difficulty understanding parts of the writing process like peer conferencing, Michelle and Sarah acted out scenarios to show the students how it might look.

The move to multi-age teaching was important in Michelle's career for several reasons. First, a multi-age classroom was a logical extension of Michelle's interest in developmentally appropriate curriculum since the students ranged in age as well as ability. Second, preparing to write the grant for the multi-age classroom, writing the

grant, and writing curriculum with Joan forced Michelle to read literature and to articulate her beliefs about what was most important to teach. Third, Michelle had many opportunities to teach side by side with Joan and Sarah. Watching these two teachers helped Michelle see different ways to teach.

Graduate Work

At the end of that year, Michelle's principal left the school. The new principal did not share the previous principal's enthusiasm for multi-age teaching. Other teachers in her school expressed resentment that Michelle had a big classroom designated as a kindergarten classroom, even though she did not teach kindergarten. The principal informed Michelle that she would not be able to keep her classroom. Without the close proximity, Michelle and Joan were forced to end their multi-age teaching experiment even though Michelle continued to teach a first and second grade multi-age class. Michelle felt upset at the ending of the arrangement, and she also felt frustrated by the other teachers' resentment.

> I was really discouraged about having the teaming situation broken up and just doing the first and second because of having the classroom move. And I felt like my principal--even though he seemed like a very professional person--didn't have any background in multi-age. And it was hard to have somebody not understand [what] I thought was so important about the multi-age program.

Michelle felt unsupported by the staff, even to the extent that other teachers would undermine her teaching when parents would ask about it. "I don't know anything about *that*," they would say, referring to Michelle's multi-age arrangement, as if "that" was not worth their time to know or discuss. This tension left a bitter taste in Michelle's mouth about her school colleagues.

Sarah, the reading support teacher, encouraged Michelle to apply for a summer national writing project. Sarah had participated in the project, and she repeatedly told Michelle that she would enjoy it. Sarah felt that this experience would help Michelle connect with other teachers who shared her ideas about teaching and were also using a writer's workshop in their classrooms. Sarah hoped that the project would ease the sting of resentment Michelle felt from her fellow teachers. With Sarah's support and encouragement, Michelle applied and was accepted into the program.

That summer, Michelle went to a local university campus every day for six weeks. Michelle said the project was a "life-changing" experience. During different times of the day, teachers divided into smaller groups to discuss books they were reading. At another time, teachers took turns sharing their own "best practices" in language arts teaching. Each teacher was also working on an independently chosen writing task, so some time was spent each day in writing conferences with small groups. At the end of the workshop, each teacher read an excerpt of their writing, and the full written pieces were "published" for the group.

Michelle recalled the group camaraderie, which made her feel validated and supported: "I spent six weeks . . . bonding with this group of educators that are all there because they have this passion about literacy, and learning, and writing and sharing best practices" (3/8). Part of each day was spent "grazing" around the food table. Participants took turns recording each day's events and presenting their summary to the whole group. Michelle enjoyed some groups' creative and humorous presentations, e.g. one group wrote a poem, one wrote and acted out a skit, Michelle's group wrote a picture book.

Through the project, Michelle became connected to new sources of ideas. First, she learned about authors she had not known about previously:

> I learned that there were people out there writing about things that were issues . . . that I was concerned about. And before that time I was really isolated here. Busy correcting papers and doing the best I could. So now I got some names of some authors I knew I wanted to read more of.

Learning about these new authors opened up a whole new world of ideas about teaching.

Second, Michelle was connected with a group of supportive, smart, and committed teachers outside her school. She could have conversations with these teachers that had not been possible with her school colleagues. After participating in the project, Michelle stayed connected with the friends she had made in the program. As a "writing consultant," she was invited to attend summer workshops and winter retreats with other alumni of the program. She got together informally with a group of people over dinner. She also communicated with other writing consultants using an electronic listserv set up for the project.

Third, the writing project helped relieve some of Michelle's resentment toward her fellow teachers. The leader of the project told Michelle that most teachers try to be the best possible teacher, even though they may be at different stages of development.

> I was feeling hurt by other teachers and [the leader] would always [say], "Now this is where they are, this is their belief." . . . It helped me look at where I had been and where other people were through more open eyes and could accept [that] they thought they were doing what was best. . . . When you have [different] philosophical beliefs . . . sometimes you do bump into heads, and not to let it get personal takes skill. (3/30)

She learned to accept that the other teachers may have felt threatened by her energy, or that they simply had different ideas. She no longer felt as upset by their lack of support for her ideas.

Of all Michelle's professional development experiences, the national writing project came the closest to fitting with the "consensus model" of professional development. There was explicit attention devoted to the building of community among the participants, and the involvement with other teachers was a crucial factor in Michelle's enjoyment of the experience. The project offered more than one-shot assistance; teachers stayed connected to the group for a whole summer and beyond. Michelle received support from the other teachers in the writing project that she could not get from teachers in her school. She enjoyed bonding with other teachers who had similar passions and similar struggles. The topic of many group conversations were focused on practice, e.g. sharing of best practices.

After the writing project, Michelle decided to pursue a Master's degree at a nearby university. In her first course, she met Taffy Raphael, whom she had seen at conferences before, and she became excited by Raphael's ideas about book clubs and attending to students' talk (McMahon & Raphael, 1997). Michelle realized how much she had come to value conversation as a teaching tool when she went to her daughter's classroom for a conference and saw "this big face of a child on a mimeographed piece of paper and it had a zipper for a mouth. It had its mouth zipped, and it said, 'No talking'" (3/30). She was horrified and shocked that teachers were still asking students to be quiet when she was learning about "Vygotsky and how learning is socially constructed and . . . young children's main access to understanding and learning was through language" (3/30).

Michelle started book clubs in her classroom, but she was not satisfied by the quality of the students' conversations.

> They were really poor conversations, very shallow. The kids never got into the themes of the books, the meanings of the books. They never made any personal links with the story, so they tried to think of things to say about the story. [One student said] the mayor had a big nose. I mean because they were all surface level because they didn't make any personal links. (3/30)

As part of the research assignment in her Master's courses, Michelle taped the students' conversations. Listening to the tapes, she realized that students did not know how to read books and discuss them meaningfully.

To address the problem, Michelle read a chapter book aloud to the students and stopped occasionally to talk aloud about what she was thinking. She asked the students to brainstorm ideas about good conversations, and the class developed rules for talking in book groups. She asked groups of students to demonstrate book discussions for the class. By the end of the year, Michelle's students were finally talking about the meanings of books and making personal connections. Since she worked with students for two years in the multi-age classroom, she could build on their skills the following year. These examples show how Michelle became "a whole language teacher that does a whole lot of explicit teaching."

Michelle's graduate studies allowed her to establish a professional community for herself outside of her school by meeting other teachers and learning about new authors who wrote about things that concerned her. Meeting with new groups of teachers who shared her commitments about teaching helped Michelle discover new ideas that shaped her teaching, but she also benefited just from having someone with whom to share her concerns and frustrations. A side benefit was that she became less embittered toward the teachers in her own school and began to realize that, like children, teachers are at different stages of development. Becoming connected to other teachers in these ways

gave Michelle a supportive community in which to continue experimenting with her practice.

The Rest of the Story

As with all the teachers in the study, Michelle's critical incidents launched her on a road of continuing change. She continued to try to establish relationships with other teachers within her school and outside her school, and she continued to take risks and experiment with her practice.

Michelle has tried to maintain and initiate collegial involvement with other teachers in her school. Even though the multi-age arrangement ended abruptly, Michelle continued talking with Joan about teaching:

> [Joan] went back to just teaching kindergarten. . . . I went to her house this weekend and we planned to do a book club unit with her kindergarten through the month of March on folk tales. (2/22)

Recently Michelle tried to work with another first grade teacher to teach math:

> Last year . . . we started doing math together. . . .There were some advantages and some disadvantages. I didn't feel like I really knew my first graders as well as I wanted to in the areas of math. And so this year we still teamed but instead of doing an hour a day, it's just a half hour a day. . . .We are giving them experience to do demonstrations together and games together for the [math series]. And then all their journal work they do in their own rooms. (2/22)

Unlike her partnership work with Joan, Michelle's collaboration with the other first grade teacher diminished after the first year. Instead of spending an hour a day together, the classes only spent half an hour together this year, and all of the journals were done in individual classrooms instead of together.

After her graduate studies, Michelle became a member of many more professional associations, with a membership in eight different associations (including

regional affiliates). She said that one of the most valuable parts of these memberships was receiving journals, which she reads regularly, from each of them:

> Once you start getting those journals coming right to your house and you're reading these things, it has you processing more what is going on. It makes you a more reflective teacher. It just gives you a lot more to think about. [What] has been important for me has been the access to different kinds of literature that I didn't have before. I'm sure if I had those kinds of things in my hands [early in my career] I would have been reading them and processing what was going on. (2/22)

Michelle continued to attend at least two conferences hosted by professional associations each year. She recently began presenting her work at conferences and publishing her work in state teaching journals. In many ways, these professional organizations substituted for the professional community Michelle never had with teachers in her own school.

Michelle also continued to take risks and experiment with her teaching. She attributed her ability to take risks to a feeling that she was relatively successful at what she was doing:

> I could really look at what I had accomplished with those kindergarten kids and what, the kind of relationship I had established with parents and say, "I'm successful, I'm good at what I am doing." So now I can look and say, "What are some things I can do better?" Which means I have to look at what I am not doing well.

Michelle's self-confidence enabled her to continue experimenting and learning from experience. For example, she talked about her decision to continue including spelling as a mandatory independent activity:

> [I] did a little experiment two weeks ago. I didn't put spelling down for a "have-to" all week. I put spelling down for a choice. . . . The next week just about all of them had much lower spelling tests, where they were missing six or seven of their words. And so [I] said, "Oh, I think we found out something about practicing at school." Because I was thinking that the time they spent practicing at school was mainly chat time, talking time and they weren't really learning those words. They

> were just having a good time talking with their friends. . . . That was very obvious that the time they spent talking about spelling in the room actually impacted how they did on their tests.

As a result, now she makes spelling a "have-to" activity. This is just one example of how Michelle continues to question her teaching, to examine whether her suspicions are well-founded, and to adjust her teaching to accomplish her goals.

Michelle has always spent a great deal of time preparing for her teaching, between two and five hours every day. She considered herself "blessed" with not needing much sleep. She attributed her willingness to put this kind of time into her teaching because of a dissatisfaction with her personal life:

> [There is a] driven part of me to not be satisfied with what is there. . . . In my own case, I think it's because a discontent in my personal life. . . . As an individual I need to direct my energies some place because my life isn't the fairy tale I would want it to be. [Teaching] is an outlet where I can drive myself really hard and feel good about what I have accomplished and produced. . . . Where I do have control, then I'm going to accomplish all I can possibly accomplish. I'm going to make it perfect as I can make it.

Though none of the other teachers mentioned this, Michelle raised an interesting point about how much effort it takes for a teacher to put in the necessary work to transform one's practice. Why would someone choose to work so hard on one's career, especially in the midst of trying to raise a family? Teaching was one area in Michelle's life where she could excel.

Discussion

As evidenced by her memories of early learning experiences where she pursued independent research projects of her choice, Michelle always had a dominant orientation toward finding ways to allow students opportunities for choice. She studied child development because this discipline focuses on understanding children themselves and

how they develop, rather than how to deliver curriculum. Her ideas were reinforced by her own children's schooling experiences.

Michelle's story breaks Huberman's (1989) pattern of career stages. She has made major changes in her teaching at a time when many teachers disengage. Is it something about what's happening at this point in her life, or is it something about the experiences she's had during this time that have been so energizing that they've managed to overcome the forces that put many teachers into this pattern?

Figure 5 shows Michelle's constellation of professional development experiences:

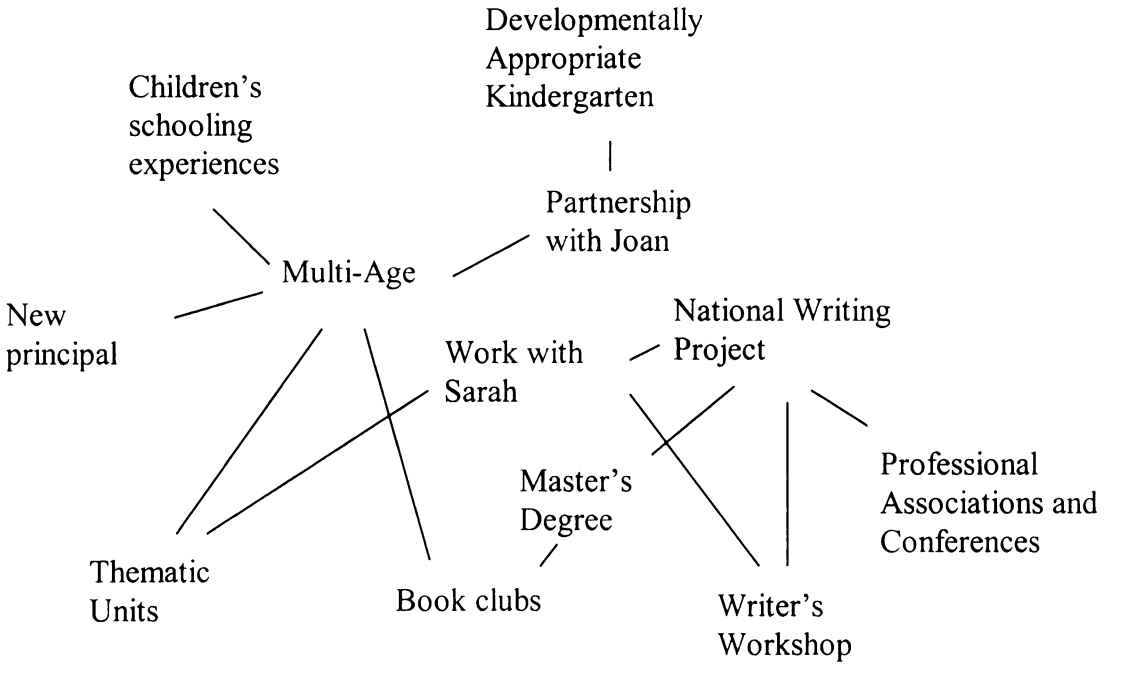


Figure 5: Michelle's Constellation

Michelle's professional development experiences have come from a series of separate events--the age of her children, the availability of a kindergarten position, the fellowship with the other kindergarten teacher--that started her on the road to larger

changes. Her children's schooling experiences and the vagaries of fate led her to teach a developmentally appropriate program. These kindergarten teaching experiences enabled her to develop a partnership with Joan, which ultimately led her to write the grant and teach in a multi-age classroom. Michelle's work with Sarah led to her involvement in the national writing project which led to a graduate degree and Michelle's membership in professional associations.

Like the other participants, what she learned through these experiences was aligned with her dominant orientation of wanting to provide choice to her students. Together, the experiences gave her a new idea of how to structure curriculum and a new set of tools for attending to her students. These new tools, and her confidence and willingness to experiment with her practice, allowed her to re-shape her practice dramatically.

Like Huberman's "bricoleur," Michelle enjoyed connecting with other professionals, but only when those relationships benefited her. She only entered into relationships with people that she believed would stimulate her professional growth. In the absence of stimulating relationships with colleagues, Michelle learned equally well alone--reading journals and imagining new teaching practices. She was confident enough to experiment with any idea whose underlying rationale she understood and agreed with. When things did not work as she expected the first time around, she recycled and continued to tinker with them.

What Can We Learn From Vera and Michelle's Stories?

In some ways, Vera and Michelle's career histories contrast with Carrie and Linda's; in other ways, they reinforce ideas from the last chapter.

As for the content of powerful professional development experiences, Vera and Michelle's stories are consistent. They both bring with them a dominant orientation regarding how teachers ought to attend to students that was initially shaped by their experiences as students in school. Their stories of memorable teachers and memorable assignments are consistent with the ways they described the rationale behind their current teaching in chapter 3.

However, regarding the forms of professional development, Vera and Michelle provide an interesting contrast. Vera and Michelle are tinkerers who take bits and pieces of what they find to construct a practice. Neither of them had an intense, focused, long-term professional development opportunity like the TLG, and neither reported the kind of transformative experiences regarding their practice that both Carrie and Linda described. Instead, their pattern of career growth showed more of an evolutionary pattern. There were periods of time when Vera and Michelle made changes more regularly and quickly, but neither Vera nor Michelle described the changes they made as revolutionizing what they did in such a short span of time.

Even though they generally work independently, both Vera and Michelle reported the importance of some relationship with fellow teachers--whether from within or outside their schools--for supporting them during a period of change. Collegial involvement was important for emotional support or commiseration when they were taking risks with their practice. Vera's and Michelle's histories broaden the notion of what counts as a "colleague" and what collegial "support" might entail.

Like Carrie and Linda's stories, neither Vera nor Michelle reported initial frustration making changes that were ultimately sustained in their practice. This suggests

something about readiness. If teachers are ready for something, they make changes much more easily and there is less of a chance that the new practices will "fade away." This raises a further question of what it means for a teacher to be "ready" for something. If powerful professional development is about giving teachers something when they are "ready" for it, then those involved in in-service teacher education must ask themselves how to know when teachers are ready or how teachers' readiness can be developed.

Vera's and Michelle's histories provide some clues. Their professional development experiences were not isolated, one-shot events, even if they were structured in that way. For all four teachers, certain experiences affected how teachers responded to subsequent events. At some point, each of the four teachers became an agent directing her own professional development. Researchers cannot dismiss one-shot workshops as having no long-term effect simply because teachers do not immediately "implement" the ideas learned; instead, we need a better understanding of how different experiences, including one-shot workshops as well as teacher study groups, might be positioned to get teachers "ready" for other experiences.

Chapter 8

Conclusions

> Labels are limiting. They offer a single lens concentrated on a specific deficit when what we need are multiple ways of seeing a child's ever-changing strengths (Ayers, 1993, p. 29).

> In addition to their knowledge of subject matter, teachers' intellectual attentiveness draws on their mindfulness and understanding of psychological, cognitive, cultural, and social aspects of their students' learning. Depending on the situation, a teacher's lens may be cultural . . . , or emotional-developmental . . ., or cognitive . . . More typically, the great variety of pedagogical situations oblige teachers to be open to an always shifting combination of such lenses. (Hansen, 1999, p. 177)

Attention to Students as a Lens for Studying Teaching Practice

Though most research on teaching agrees that teachers must pay attention to students, there have been few attempts to elaborate on differences among what teachers pay attention to about their students, how different views of attention to students influence teachers' practice, or what the relationship is between attention to students and teacher learning. The findings of this research project, which examined the career histories of only four teachers, may or may not generalize to a broader sample of teachers. However, my work does suggest that using "attention to students" as a lens offers a useful method for studying both teaching practice and teacher learning. In this chapter, I use examples from each of the four cases to illustrate the usefulness of the idea of "attention to students" as an analytic tool.

In the first section, I show how "attention to students" can be used to examine teachers' specific practices, and I describe several features of practice common to all four teachers. I conclude the section by offering one way to explain the relationships among teachers' view of teaching, the information they gather about students, and the way they use this information to inform their daily teaching using "attention to students" as a guiding concept. In the second section, I look across the four teachers' career histories to show how the idea of "attention to students" surfaces some common features of the four teachers' learning. I conclude by suggesting that teacher professional development is currently underconceptualized, and I raise a set of promising new questions for researchers of professional development to pursue.

Practices that Facilitate Teachers' Attention to Students

There were several features common to all four teachers' teaching practices. Each teacher came to believe that her students developed at different rates and different times, so she needed to offer more opportunities to individualize instruction. For example, Carrie and Linda used the reader's workshop to allow students to read books at an appropriate level without segregating the class into strict ability groups as they had done with the basal series. More recently, they used running records and the book leveling as tools for matching students to appropriately challenging books.

Vera and Michelle both instituted "developmentally appropriate practice" to gear instruction toward different student abilities. They wanted to ensure that students were taught in ways that were appropriate to the students' ability levels--neither too difficult nor too hard--and that there were ways for students to progress at their own pace. In her

multi-age classroom, Michelle provided opportunities for students to pursue independent research on topics interesting to them.

For all four teachers, attempting to individualize instruction coincided with a movement away from use of the basal reading series towards the use of trade books for reading instruction. Moving away from the basal series freed students from being confined to homogeneous groups that moved together through a prescribed sequence of literature and skills. Students read literature that interested them, and the teachers tried to develop ways to teach necessary skills when they arose naturally in the course of reading.

Another common feature was that all four teachers provided more opportunities for students to write. Since none of the teachers had written much as a student, this was a significant departure from the kind of teaching they received. All four teachers talked about the important shift when they realized that students did not need to be able to spell correctly to write independently. All four teachers devoted class time to a writer's workshop format in which students chose their own topics and revised their writing to produce finished products. Each of the teachers used the writing somewhat differently. Carrie and Linda learned about students' interests. Vera learned about students' interests and their understanding in other subjects. Michelle tapped into students' responses to literature.

Allowing students to choose reading books and to write on topics of their choice both offer students opportunities to choose their own tasks. These teachers believed that giving students more choices enabled them to learn more about what students were thinking about and what was important to them. Each teacher used the available information to tailor learning opportunities for individual students. Second, the teachers

felt that students were more likely to take ownership of their work and stay on task when they chose their own activities. When their students stayed on task, they spent less time figuring out ways to entice students to do their work. They could then use the extra time to learning other things about their students.

All four teachers also made changes that affected the way they taught. First, moving away from the basal readers freed the teachers from being restricted to the pages in the teachers' manuals. They took more ownership for the curriculum. Because they no longer relied on prepared materials, they also took more responsibility for knowing what their students were learning. Each teacher developed new forms of documentation and record keeping, such as individualized conference forms, folders to keep track of what students were working on and what they were capable of, and folders and notebooks for students to keep track of their own work.

Relationship Between Teachers' Orientations and Teaching Practices

Each of the four teachers in this study attended to different aspects of her students. Carrie and Linda both paid attention to the affective dimensions and emotional tones in their classrooms. Both teachers believed that improving the compatibility between the students and the classroom environment would create conditions that would facilitate the success of all students. Vera sought ways to understand what students knew and what they were capable of doing. She believed that if she had good methods for understanding what students knew and could do, she would be better able to tailor learning opportunities according to individual student needs and abilities. Michelle tried to understand her students' interests and how they connected personally with the curriculum. She believed that the key to her students' learning was to build the

curriculum around the students' interests so they would stay engaged and learn the topics more thoroughly.

These different types of attention influenced what the teachers did to gather information about their students and how they used the information they gathered. Table 6 provides some specific examples from the data.

	Questions	Windows	Use of information
Carrie	What problems are my students bringing to school that affect their readiness to learn?	Scanning the students' faces at the beginning of the day	Calming students down before trying to start instruction
Linda	How confident do my students feel in their abilities?	Noticing whether students wrote what the class had already written on the white board or writing on topics of their own choice.	Providing opportunities for independent writing
Vera	What are my students able to do and not able to do?	Careful reading and preparation for writing conferences	Choosing strengths to praise and skills to work on during writing conferences
Michelle	What topics interest my students, and how are they making personal connections to the curriculum?	Tape recording of small group conversations	Assigning independent research projects within the class theme

Table 6: Connection between teachers' questions, windows and use of information

The table shows different types of questions posed by the four teachers. Even though I have argued that each teacher paid attention to different aspects of her students, none of the teachers posed only a single type of question. Each of the teachers also paid attention in other ways, but each expressed a dominant orientation, or stance, about what she believed it was important to pay attention to about students. This dominant stance

seemed to be based in the teacher's pre-teaching experiences and appeared to stay constant throughout her career.

Each teacher's dominant set of questions corresponded with opportunities that matched the questions she posed. Carrie took the opportunity to scan her students' faces at the beginning of the day. Vera spent time after school reading students' written products carefully and deciding how to structure a writing conference with each student. She kept elaborate documentation of students' abilities using skill lists showing what they were working on and what they had already mastered. Michelle listened to student conversations by tape recording small group conversations and playing them in her car. She developed a method for helping students keep track of books they read and ideas they got from those books even before they could write fluently. Each teacher's practice offered her certain vantage points, or windows, through which to see her students. Windows make it possible to see through walls, but things outside the perimeter of the window remain hidden. In the same way, each teacher's choices enabled the teachers to learn additional things about their students, but choosing to pay attention to certain things inevitably constrained their ability to pay attention to other things.

The teachers used the information they gathered differently. Carrie tried to solve problems before they start, and she allowed time to address problems when they arose. Vera's reading of student drafts helped her choose whether to focus on the grammar or content of student writing and to choose strategies for talking to students about their writing. Michelle's information about students shaped the curriculum she planned and taught. When some students became interested in bats and how bats could navigate

through the dark caves, she launched a unit-within-a-unit on sound and how sound waves travel.

The apparent connections between these four teachers' questions, windows, and use of information offers one way to think about teachers' practice. The relationship among teachers' questions, the windows they make available, and the ways they use the information they gather can be represented by the cycle introduced in Chapter 3:

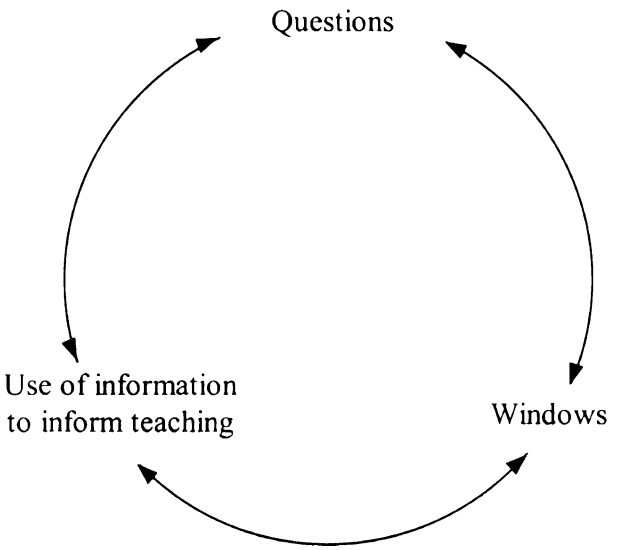


Figure 6: Cycle of Attention to Students

Each of the four teachers attention to particular facets of her students could be represented as a dominant set of questions she asked, explicitly or implicitly. These questions were consistent with their teaching practices which gave them particular "windows," or opportunities, to answer the questions they posed. Each teacher made decisions about how to use what she learned by looking through the windows to shape her teaching. My data suggest that there is a relationship among teachers' questions, their windows on students, and their use of information to shape teaching. The exact nature of this relationship and how it forms is a topic for future study.

Attention to Students as a Lens for Studying Teacher Learning

Researchers of professional development have attempted to identify essential characteristics of powerful professional development based on the effects of particular experiences on teachers' learning or practice. The contrast between Carrie and Linda's histories on one side, and Vera and Michelle's histories on the other, suggests that teachers' career-long professional development may still be under-theorized.

As Dewey's theory of "educative experience" suggests, these four teachers' learning was produced by an interaction of objective conditions and teachers' internal conditions. Working from the teachers' reconstructions of their career history makes it possible to situate experiences the teachers nominated as significant in relation to their orientations and prior experiences. This research suggests that taking such an ecological perspective may enrich our understanding teachers' career-long professional development.

Each of the four teacher participants changed at different points in their career. Vera changed most during her first five years of teaching. Although Carrie and Linda made some changes early, their most significant changes occurred after they had taught for over ten years. Michelle did not change significantly until she had taught for fifteen years. One might expect variation among teachers' stories; however, this wide variation suggests that teachers' professional development may not occur according to some predetermined set of stages. Each of the teachers in this study made their changes as a result of some opportunity combined with being ready for making the changes. When Carrie spoke about her weekend of change, she said, "I was that ready."

In this section, I describe several features of teachers' readiness that the teachers identified. Since the study was only conducted with four teachers, these features should not be mistaken for a blueprint for the design of professional development. However, some of the features, especially those which depart from popular notions of effective professional development, raise questions about the consensus model. Together, they offer a starting point for continued questions about teachers' career-long professional development.

Dissatisfaction with Existing Practice

All four teachers mentioned some form of dissatisfaction with their teaching before they tried something new. Their dissatisfaction stemmed from a range of causes.

Carrie, Linda, and Vera all talked about gut feelings that there must be a better way to teach. Carrie and Linda talked about their nagging feeling that there must be a better way to teach. Even though they felt this way, they never acknowledged this dissatisfaction to one another until the journal sharing incident. When Vera began teaching kindergarten and tried with difficulty to put her kindergartners into ability groups for reading instruction, she felt like that was an instance of how schools and teachers were "rude" to children.

However, dissatisfaction alone was not sufficient for the teachers to make radical changes. Linda said that enough of her time and energy was taken up maintaining her daily and weekly routine to consider ways her teaching might be different. Even though she felt dissatisfied with her teaching at a gut level, she did not see other teachers doing anything different, and her principal never suggested that she was doing anything wrong.

Rather than seeking out new ways to teach, Linda let inertia take over, and her teaching remained essentially the same for over ten years.

Although none of the other teachers spoke explicitly about inertia, all four cited an experience which made them feel more dissatisfied with their existing teaching practice. The most vivid example of such an experience was Carrie's decision to change her teaching over one weekend. She entertained serious questions about her practice when a graduate student commented in her journal that she had seen "nothing educational" happening in Carrie's classroom. Even though Carrie's initial reaction was defensive, she began to wonder whether the graduate student had made a valid point.

Linda's TLG experience in the TLG also raised her consciousness of dissatisfaction with her teaching although she was never challenged directly by the researchers in her classroom. Instead, she was challenged by having to answer questions they asked in their journals about why she did certain activities. Having to answer questions she had never posed for herself forced her to think more about her decisions as a teacher, and she began to be more aware of the dissatisfaction she had experienced for some time. Carrie's and Linda's examples of dissatisfaction also highlight the potential value of writing for raising comments that may lead teachers to question their existing practice.

Finally, Vera and Michelle both described jolting experiences as mothers that caused them to embrace a developmental view of schooling. Vera and Michelle both had one child (not their first) struggle in school. Vera's first child had met all of the school's expectations with little trouble. When her second child struggled, Vera thought about how different children progress at different rates. Since this coincided with her move to

teach kindergarten, Vera became committed to offering experiences that allowed children to develop at their own pace. Michelle also watched one of her children struggle in school. To search for the most appropriate classroom for him, she went to visit kindergarten classrooms which claimed to be developmentally appropriate.

The dissatisfaction the teachers expressed in the interviews may have been partly the result of a reconstruction of distant changes viewed through current perspectives. It is difficult to know how much the dissatisfaction itself caused the teachers to attempt new practices or how much the teachers felt dissatisfied with their former practice after successfully making changes. However, what is striking is that all four teachers described at least one instance of dissatisfaction contributing to some change in their teaching.

Influx of New Ideas

Once the teachers became conscious of their dissatisfaction with their existing practice, they became eager and "ready" to change. All four teachers said that the decision to change had come from within, but each of the four teachers also talked about some external source for new ideas of what to do in their classroom.

One source of new ideas was reading. Once Linda decided to do something different in her classroom, the researchers in the TLG were eager to provide literature offering new ideas about teaching. Vera said that she has always been an avid reader of books about education which she received from principals or purchased for herself through involvement in professional organizations. Michelle said that one of her most important sources for new ideas comes from the journals that she receives each month for being a member of a professional association.

A second source of new ideas for all four teachers were workshops and in-service training with accompanying curriculum materials (even workshops that did not reflect current ideas about effective professional development). Carrie changed her teaching as a result of participating in TESA and the New Zealand Literacy workshop. Vera received many new ideas from workshops that she attended, like the training for Math Their Way or the Michigan Health Model. Those two workshops were particularly influential because the training enabled her to experience what it would feel like to be a student using those materials. The Michigan Health Model provided all the necessary materials she would need to do the activities with her students. The Math Their Way program offered detailed instructions for what to do and say to her students. Unlike the instructions in basal teacher editions, the Math Their Way script led to her to ask the students questions that revealed their thinking in ways that she had never heard before.

A third source of ideas was watching other people teach. For example, after reading the graduate student's journal, Carrie wanted to change her classroom to make it more educational. She got new ideas about teaching by watching the graduate student conduct a sample writing lesson. Michelle said that teaching in the same classroom as Joan allowed her to see things about teaching that she had not seen before.

In two instances, the influx of new ideas and the teachers' implementation itself seemed to cause a jolting experience that provoked dissatisfaction with their teaching. Vera first implemented Math Their Way partly because she was bored with how she had been teaching math, and because she was not satisfied with the students' understanding of difficult mathematical concepts like borrowing. Since she had established enough of a parent volunteer network to make the necessary materials, she decided to try Math Their

Way. In this example, she was slightly dissatisfied, but the dissatisfaction did not seem to be the reason for the change. Instead, she just wanted to try something new, and the change became permanent because she was happy with the results.

Carrie's internalization of the TESA behaviors is another example. She was not extremely dissatisfied with her teaching, but she decided to try the TESA behaviors to see what would happen. When she practiced the new behaviors, she was impressed at how much the tone of her classroom and her relationship with her students changed, so she continued to practice the behaviors.

These examples show the potential value of having specific ideas, or images, of how a classroom can look. Even when these teachers were dissatisfied with their teaching, they seemed to need concrete ideas about what to do differently. Providing teachers with specific techniques, practices, scripts, or materials may be one way to offer powerful new ideas, especially if they help a teacher do something that enables them to see something about their students that they had not seen before (and that they think is worth seeing). Deborah Ball (1996) has made a similar argument that redesigned curriculum materials may provide a "rich site for ongoing teacher learning" (p. 96).

Confidence to Experiment

When each of the four teachers tried to make changes they learned about somewhere else, they had enough control in their classrooms and confidence in their abilities to experience success with the new practice. Each of the four teachers described factors which made it easier for them to experiment with new teaching practices.

First, a good grasp on classroom management and student discipline helped the teachers. Carrie and Vera both felt confident in their classroom management, and this

confidence enabled them to experiment with new behaviors (like Math Their Way or TESA), even when they were not frustrated with their teaching. Linda's confidence to experiment came after she was shown a videotape of her classroom and she began to realize that there was such a thing as productive noise. After watching the videotape, she "gave herself permission" to teach differently. Michelle felt confident to experiment with a new ideas as long as she believed in the underlying philosophy behind a new idea.

Second, the teachers usually made changes after they had been teaching the same grade level for at least one year. Carrie and Linda had both been teaching first grade for over ten years before they changed during the TLG experience. Knowing what skills they were expected to teach bolstered their confidence that they would still be able to teach the skills once they left the basal readers behind. When Vera switched to kindergarten, she adopted the former kindergarten teacher's format. Even though she made it work, she decided to make significant changes the following year. One exception was when Michelle began teaching the developmentally appropriate kindergarten. During that year, she instituted many changes even though it was the first time she had taught kindergarten since her first year of teaching. However, even though she was new to kindergarten teaching, she had fifteen years of teaching experience by that time, and she had taught first grade for many years.

Third, the teachers felt supported by their principals to experiment with new practices. All four teachers described the principal as someone who could convey clear expectations about their classrooms. When the principals' expectations differed from the teachers', the teachers were responsive to the principal's expectations, especially early in their careers. The principal could also be someone who could give the teachers freedom

and space to experiment with their practice; all four teachers mentioned having this kind of principal during the times when they made the greatest changes.

Finally, all four teachers said that significant changes were those which resulted in a new feeling in their classroom, when they felt their relationships with students changing. Both teachers and students were excited and having fun with the changes. Even when the changes required them to "jump into the abyss" and move away from prepared curriculum materials or taking more responsibility for keeping track of students' progress by completing more paperwork or using multiple methods of assessment, the teachers were happy about changes they made (even though they felt some sense of loss). Even when their jobs ostensibly became more difficult or time consuming, they became more engaged and interested in their work.

When the teachers made changes which seemed to increase their "psychic rewards" (Lortie, 1975) by changing their relationships with their students or with trusted colleagues, the changes were sustained. These teachers' experiences suggest that how new practices influence teachers' feelings about their work may be a very powerful predictor of which changes will become permanent features of teachers' practices. The initial reason for these four teachers making and sustaining the changes may not have come from a sense that their students would learn more material more deeply, but the changes they made did allow them to spend less time managing student behavior and more time paying attention to students' feelings, knowledge, thinking, and interests.

Meaningful Collegial Interaction

All four teachers reported involvement with colleagues that was linked to their critical events. However, the types of collegial relations varied widely. The critical

incidents did not occur because people learned how to collaborate with one another; they occurred because they were built on instances of meaningful collegial interactions. In these teachers' career histories, there were four different types of meaningful collegial interactions: (a) stimulating commitment; (b) commiserating to experiment; (c) gathering data and providing feedback; and (d) providing space and freedom.

An example of stimulating commitment was Carrie and Linda's participation in the TLG. Their involvement with the TLG was built on a previously existing relationship that had evolved over many years. During the TLG experience, they both said they wrote in their journals partly because they felt obligated to the other participants in the group. As a result, they began to think more about their practice, but the initial impetus was to fulfill their obligations to the group. Michelle's relationship with Sarah led her to apply to participate in the National Writing Project. These close personal relationships with other adults led the teachers to do things that strengthened an existing personal bond. Most of the examples of teachers working together successfully in this dissertation came out of relationships that developed spontaneously rather than orchestrated (or contrived) collegiality (see Hargreaves & Dawe, 1990 for an explanation of "contrived collegiality). The relationships existed before they became a tool for the teachers' professional learning.

Two examples of commiseration for experimentation were when the teachers in the TLG shared their insecurities and feelings of frustration with one another, or when Vera talked with the other teachers in her school about what she was doing in her class. In these instances, the other teachers did little to stimulate new learning, but they made it

acceptable for the teachers to try new things in their classroom without feeling guilty if they did not succeed.

The third type, data gathering and providing feedback, occurred when teachers entered into one another's classrooms and talked about what they saw. For example, the TESA observers recorded target behaviors with tally marks. The researchers videotaped Linda's classroom and showed her the videotape. Michelle and Joan taught together and Michelle watched Joan use chants and songs. These arrangements allowed the teachers to watch their own teaching, and they were also able to see other teachers teaching in ways they may not have imagined.

Finally the fourth type of collegial influence occurred when teachers stayed out of other teachers' way. For example, the first grade teachers in Vera's school did not support her changed practices, but they appreciated it when Vera's students came to their classrooms ready to learn, so they left Vera alone.

Although work with colleagues was a characteristic of many significant changes, some relationships--even long-term relationships--were not always a force for change. Carrie and Linda worked together for many years and had the best intentions of trying to improve their practice. However, neither made substantial changes until they participated in the TLG. Their experience suggests that just working together is no guarantee of professional development or change in teaching, although existing relationships like Carrie and Linda's provide promising ground for opportunities like the TLG when they become available.

This research shows the multiple functions that colleagues can serve as part of teachers' professional development, but the functions described above are highly context specific and would be impossible to replicate on a broad scale.

Alignment with Orientations Toward Attending to Students

Some of the experiences that the teachers remembered and retold as significant did not reflect did not all reflect the "consensus model" for professional development. One common feature of the experiences was that they all promoted changes that facilitated the teachers' attention to their students consistent with their dominant orientations.

For example, Carrie's TESA training was quite behaviorist with its specific behaviors coded by trained teacher observers. Comparing the TESA workshop to the consensus model of professional development might suggest that TESA was likely to be a weak intervention. However, because of Carrie's commitment to the project, she dutifully practiced and internalized the new behaviors. When Carrie began to practice the TESA behaviors, she felt that her relationship with students was changed. Students responded more positively to her and were more willing to do what she asked. She no longer had to spend as much time trying to convince her students to stay on task, so she could spend more time attending to other aspects of her students. The TESA workshop helped Carrie learn new teaching practices, but the practices stayed permanent because Carrie felt better about her relationships with students when she practiced the new behaviors.

Another example was when Vera began to use the Math Their Way materials and questions. After using the activities and following the questions, Vera learned that her

students had different, but sensible, ideas about multiplication. Previously, she had only focused on whether students learned the material, not how they were thinking about it. The Math Their Way practices allowed her to see something about students that she had not been able to see before, and this was consistent with her idea of a good teacher as someone who pays attention to what students understand.

These examples suggest that teachers' personal orientations may be more important predictors of teachers' satisfaction with different types of professional development experiences than the characteristics of the experiences themselves.

Part of a Constellation

The experiences that Carrie, Linda, Vera and Michelle described as powerful took a range of forms. Their stories suggest that what may be powerful professional development for one teacher may be meaningless to another. The significance of any event appeared to depend on more than the characteristics of the event. The significance of the events also depended on where the teachers were in their careers, their personal lives, and their prior experiences.

The teachers' changes did not happen as a result of single events or the additive effect of multiple events. Although many experiences were important in themselves, they were also important for their influence on one another. Their collections of experiences were like constellations, in which groups of stars in fixed locations can be viewed together to form a picture. In the same way, these four teachers' experiences make more sense when viewed as a whole group rather than just as separate, isolated experiences.

For example, the TLG experience was important for Carrie and Linda, but when this experience is viewed in light of other experiences, it becomes more obvious how the experience fit differently into each teacher's constellation of experiences. When Carrie changed in one weekend, she was ready to try something new in her classroom, and the graduate student showed her a new way to keep her students engaged. Linda had a gut feeling that there might be better ways to teach, but she was paralyzed by her feeling that she had to keep students silent and still. The TLG group for her was important in unlocking her confidence to rely on her own judgment about how to teach.

The writer's workshop is the highlight of Vera's classroom, and yet her experiences of change originated with her attempts to use the Michigan Health Model and teach Math Their Way. Her son's kindergarten experiences coincided with Vera's early frustration trying to teach kindergartners in a way which did not acknowledge developmental readiness, and she began to experiment with new practices as a kindergarten teacher. Even though these changes cannot all be traced directly to the writer's workshop structure in Vera's classroom, she connects them in her mind. Vera's experiences show that the line of change is not easily traced.

When Michelle began teaching kindergarten alongside Joan, she wanted to offer a developmentally appropriate kindergarten curriculum. Little did she know that she and Joan both had children who struggled in school and that they both brought the same commitments to the kindergarten teaching jobs. Their similar orientations and parenting experiences strengthened their relationships and made it possible for them to plan and teach together. Michelle learned new things from watching Joan teach, but the partnership was also important because it made the multi-age teaching possible.

Michelle's move to a multi-age classroom led her to seek new sources of ideas and ultimately took her back to graduate school. Graduate school opened up a whole new set of ideas from books she read, and through her graduate work she became connected with a whole new group of colleagues.

The connection between different experiences suggest that the significance of any individual experience can only be viewed as part of a constellation of experiences situated in individual teachers' lives, their careers, and historical events. The impact of any single experience can only be judged by individual teachers. These teachers' stories also show that even when experiences are significant in themselves, they may be equally important because they prepare teachers for subsequent experiences. When studying teachers' professional growth, researchers would benefit by considering the immediate outcomes of particular experiences, the importance that teachers themselves attach to particular experiences (immediately after the experience as well as years later), and the influence of different experiences on one another.

Further Questions

This research raises a new set of questions about teachers' professional development. In the sections below, I offer a set of descriptive and normative questions which still remain.

Descriptive Questions

I have argued that these four teachers demonstrated some inclination to attend to their students and a dominant orientation about what they prefer to pay attention to. I have named three different ways of paying attention to students and described how those forms of attention looked in these teachers' teaching practice. Distinguishing types of

attention in this way raises a further question about whether there may be other types of attention. What other things might teachers pay attention to about their students? If teachers pay attention to multiple things simultaneously, how do they manage these different types of attention? Do they pay different types of attention at different times, or do they pay attention to different aspects of different students?

I also wonder whether teachers with different characteristics pay attention to students in different ways. Except for Vera, all four teachers were early elementary teachers for their entire teaching careers. Early elementary teaching may attract particular types of people who bring a desire to pay attention to their students. All four teachers were also women, whom some have suggested have their own ways of "caring" (Noddings, 1984). How would men pay attention to their students? I studied early elementary teachers, who work with fewer than thirty students every day. How might attention to students look different for upper elementary teachers? How do secondary teachers, who see many more students, manage to pay attention to their students?

There may also be some teachers for whom paying attention to students is not a significant part of the way they view their job. How do teachers respond to professional development if they have little or no inclination to attend to their students? If learning experiences build on natural inclinations, then teachers who are less inclined to attend to their students may have greater difficulty making substantive and generative changes in their teaching practices.

Finally, these four teachers were close in age. They did their undergraduate education and began teaching at almost the same time. I have told the teachers' career histories from an individual perspective. However, it seems likely that some of the

teachers' commitments and the changes in their practices may have been influenced by historical events and educational trends. What will the careers of other teachers look like in the future? How important are historical events or educational trends for shaping teachers' careers?

Normative Questions

A second set of questions are normative. I have written about what the teachers told me without making judgments about what teachers should do. The fact that the four teachers paid attention to different facets of students immediately raises the questions of whether particular forms of attention are better, or more helpful, than others. Do teachers need to develop particular types of attention, or is it enough that they are trying to develop some form of attention? If some types of attention are better than others, then how do professional developers help teachers embrace new forms of attention, especially considering the stability of the four teacher participants' orientations throughout their careers?

These questions also have implications for teacher educators. If attention to students is an important aspect of reform-oriented teaching, but there are different types of attention to students, should teacher educators help teachers learn to pay attention in multiple ways, or should they foster teachers' individual attempts to shape their practice according to their own dominant questions? Is it even possible for teachers to pay attention in multiple ways?

One way to begin answering these questions is to ask whether teachers' attention to their students results in any differences in student achievement or other positive outcomes for students. Since I did not speak to students in these classes, and since I have

no basis for judging whether the teachers' methods were more or less effective for helping students learn academic material, I cannot make claims about these sorts of questions. They provide intriguing problems worthy of further research.

Concluding Thoughts

This research suggests that current research identifying features of effective professional development needs to be broadened. In addition to identifying powerful structures and characteristics of professional development to design and evaluate professional development opportunities, researchers may benefit by asking how all of a teacher's experiences--individual and collective, formal and informal, personal and professional--influence one another and shape teachers' careers. Researchers might then begin to ask: How can school districts offer a variety of potentially powerful structures, and how can professional developers help teachers purposefully navigate the available opportunities?

One way to pursue these questions would be to continue the kind of biographical inquiry offered in this dissertation. This kind of inquiry would provide more examples of how teachers actually do learn throughout their careers. Another way would be to experiment with new models of professional development. For example, what if all teachers in a school were provided the opportunity to work and think together about what it means to pay attention to students, what kinds of questions they ask about students, and how they gather information about their own students. What would happen if teachers became more explicit about what they notice about students? Would they begin to think about what they do not pay attention to? Would they begin to ask new questions about their students? Would they imagine other possibilities for learning new things about their

students? How would such teacher inquiry affect teachers' ability to direct their own professional growth? Would they be jolted into dissatisfaction with their existing practice and be driven to seek out new images of teaching, or would these inquiries reinforce their existing views of teaching?

Posing these questions offers new images of possibility for how principals, staff developers, and university professors might promote teachers' professional development. In The Child and the Curriculum, Dewey argued in that teachers need to see "how the [child's] experience already contains within itself elements--facts and truths--of just the same sort as those entering into the formulated study" (p. 189). Just as Dewey argued that teachers need to pay attention to children's experiences, this study suggests that those interested in promoting teacher development would do well to attend to teachers to understand how teacher's experiences and concerns can be shaped and moved forward. "Guidance," Dewey says, "is not external imposition. It is freeing the life-process for its own most adequate fulfillment" (p. 195). Teacher educators who hope to offer teachers "guidance" must continue to examine how varied professional development opportunities free teachers' "life processes" to develop teaching practices which facilitate attention to their students.

APPENDIX A

Methodology

Narrative-based biographical inquiry offers great potential for learning about teachers' perceptions of their own career-long professional development, but this method also has pitfalls and shortcomings. When I began, I wanted to learn about which kinds of experiences helped teachers make enduring changes in their teaching which placed greater emphasis on attention to student thinking as a guide for their planning and teaching. To pursue that topic, I needed to make several methodological choices. First, since I only interviewed four teachers, I needed a defensible strategy for selecting participants who paid attention to their students in their practice. Second, I needed to decide how to structure the interviews. Should I begin with the teachers' current practice, or should I ask them to start at the beginning of their careers? Should I ask the teachers to recount their development chronologically or let them associate freely among experiences? Should I ask open-ended questions that let the teachers reconstruct their own experiences, or should I guide the interviews with more structured questions? Third, I had to decide how to analyze and write about the teachers' stories. Should I reconstruct their stories chronologically or thematically? Which stories were most important to share? When I wrote the stories, should I use only the teachers' language or take a more active role in the reconstruction? These are questions which I believe must be continually asked by any researcher attempting to conduct narrative-based biographical inquiry.

In this appendix, I describe my research design as well as my evolving decisions about participant selection, data collection and analysis. Drawing from the literature and from my own experiences, I describe some of the challenges involved in conducting narrative-based biographical research, and I highlight some of the pitfalls. In the final section, I acknowledge the unavoidable limitations of the data available for this study. I offer this record of my research journey and reflections on methodological issues for two purposes: (a) to share my research decisions with other researchers conducting this type of research; and (b) to raise questions that I hope will promote continued discussion of narrative-based biographical inquiry as a form of research.

Participant Selection

Given the time-consuming nature of the data collection, I could only study four teachers. Since I was interested in teachers who had changed in a particular way, I could not rely on random sampling. I needed to select teachers who taught in ways that I sought. Since I was still forming my own ideas of what it would look like to "pay attention" to students, I had to figure out a way to describe teachers whose practice had those characteristics. In my proposal, I stated that I would seek the following kinds of teachers:

- Teachers who were experienced enough to have made changes in their practice that may or may not have been sustained (more than five years of experience)
- Teachers who had, at some point, been active learners, as witnessed by at least one observer
- Teachers who had, at some point, engaged in teaching practices which gave prominence to student thinking in planning and teaching

Committee members pressed me to decide which variables I would hold constant. For example, would I seek only elementary teachers? If so, upper or lower? Secondary

teachers? Would I seek only female or male teachers? Did I want teachers who taught in suburban or urban contexts? Since I was only studying four teachers, they reasoned, if there was significant variation among these aspects of the teachers I would have difficulty determining whether the learning was peculiar to characteristics of the teachers that may have been unrelated to their professional development experiences. I decided to choose elementary school language arts teachers, and, if possible, keep other variables such as gender, grade level, and school location (i.e. rural, suburban or urban) constant.

Because I wanted to learn about as many kinds of professional development experiences that could be powerful, I decided that the most important variation should be in the kinds of experiences they had. In particular, I was interested in teachers who had learned through the company of other teachers and teachers who seemed to learn more on their own. To avoid falling into the trap of previous research on groups by studying only people who participated in groups, I planned to seek two individuals who had not participated in group experiences. I hoped to identify some teachers that Huberman (1989) described as people who have been content to "tend [their] private garden, pedagogically speaking" (Huberman, 1989).

For the remaining two participants, I wanted to identify teachers who had participated in group experiences consistent with the "consensus model" of professional development. I used Lieberman's (1996) list of promising new professional development practices as a starting point (p. 188):

In-School	Out-of-School
Teacher Scholars	Reform Networks
Teacher Leaders	School/University Partnerships
Critical Friends	Subject-Matter Networks
Peer Coaching	Informal Groups
Action Research	Collaborations
Story Telling	Teacher Centers
Sharing Experience	Impact II
Teaching Each Other	NEA and AFT Collaborations
Problem Solving Groups	
Descriptive Reviews	
Portfolio Assessment	
Experiencing Self as Learner	
Proposal Writing	
Case Studies of Practice	
Standard Setting	
Journal Writing	
Working on Tasks Together	
Writing for Journals	
On-line Conversation	
School Site Management Team	
Curriculum Writing	

Table 7: Promising Practices for Teacher Development and Professional Learning. Adapted from Lieberman (1996)

I hoped to find people who had participated in these experiences more than two years ago, to avoid the frustration of wondering about the long-term effects of experiences that were too recent.

To locate participants which met these criteria, I contacted university professors who had worked closely with local teachers and had written about the teachers' practices and their learning. I also spoke to my wife who worked as an elementary school teacher. I provided them with the above criteria and solicited nominations from them. I read dissertations and other research describing teachers who had changed their practices. When I identified promising candidates, I asked the researchers to contact the teachers

for permission to contact them directly. In two instances, teachers had taken jobs outside the classroom, but they provided me with additional nominations for other teachers. Through these methods, I gathered a list of seventeen teachers whom I began contacting by mail, by phone, or by e-mail and invited them to participate. Once I identified four teachers from the list who were willing to participate, I stopped contacting teachers.

Participants

Through this method, I was able to meet most of my criteria for participant selection. Table 8 shows some of the important characteristics of the participants.

	Years of experience	Grades taught	Community	First year of teaching
Carrie	27	4, 1, 2	Suburban	1973
Linda	26	1	Suburban	1973
Michelle	24	K, 1, 2/3, K, 1, 1-2*	Suburban/Rural	1975
Vera	21	3, K, 5, 6, 8	Rural	1977

Table 8: Characteristics of teacher participants

All four teachers were women who began teaching between 1973 and 1977 at around the same age. Vera began teaching slightly later than the others because she waited until her first child entered kindergarten to begin teaching. All four teachers have worked in small, rural/suburban, predominantly white communities. Besides Vera, all the teachers taught early elementary grades for their entire careers. Vera spent twelve years teaching early elementary students before moving to the upper elementary grades.

All four teachers entered teaching because they felt it was the best option available to them as women at that time. They all described having to choose between being a limited number of options. As Carrie describes it, she "fell into" teaching:

> In high school we had to do career reports. And the girls did stewardess, secretary, teacher, nurse. . . . I thought I don't want to be a secretary or a nurse or a stewardess. So I'll be a teacher. My mom had been a teacher. My family were teachers. I liked kids. I did a lot of baby-sitting and I knew I loved kids (5/12).

Linda was encouraged by her family to enter teaching. Like Carrie, she chose teaching as the most palatable alternative to other career options for women at that time.

> You could be a nurse or you could be a teacher. . . . My mom always said, "Teaching would be just be such a good job to have to fall back on when you have kids" . . . . It was kind of my environment anyway, because my dad worked with the schools and my mom was a school secretary before she got married. . . . I did this volunteer work at the hospital and I hated it. So I just knew that [being a nurse] wasn't going to be my choice. I always liked kids . . . and I knew I didn't want to be a secretary and do business classes. (5/3)

Michelle said:

> I didn't really want to teach, but I didn't know what else I could do. I didn't know what options were there. I knew I liked kids and I was interested in children and so I got involved in child development. . . . I've had younger brothers and sisters, [and I wanted to] investigate kids and find out what makes them like they are. . . . By going through [Child Development] . . . I also fulfilled what I would need to earn a teaching certificate. When I graduated, I sent out applications to daycare centers, and went in for job interviews and found out they paid minimum wage. . . . I said, "My goodness, I have three years of college debts here. I can't do minimum wage." . . . So I applied and I got hired here in Riley for a kindergarten job (5/3)

Vera's decision was based on her enjoyment of and skill at baby-sitting, and because teaching was a common career for women at the time. Susan thought to herself:

> Well, yeah, I think I'll be a teacher. I mean that was the trend of the times. You know, I had baby-sat. . . . There was no rhyme or reason for it. It was just something I was good at and so I did it. (3/24)

Vera's mother reinforced her decision by calling attention to Vera's skills with the children. Vera decided to teach at the early elementary level, since she had little interest in teaching a specific subject. She wanted to work with the kind of children she enjoyed baby-sitting.

None of the four teachers were particularly enthusiastic about entering teaching as a career, but they were much less interested in other typical women's careers during that

era, such as nursing or secretarial work. They each enjoyed working with children and felt that teaching would capitalize on their strengths.

These stories of the teachers' decisions to enter teaching may indicate the importance of acknowledging that they were members of a sort of "cohort," moving through teaching careers along similar timelines. Their similar reasons for entering teaching, and some of their similar changes over time raise legitimate questions about the shaping influences of history in their careers. How much were historical factors responsible for the fact that their early teaching looked like it did? If they had begun teaching at a different point in time, would they have had different experiences as students? Would they have had discovered different models of teaching among their colleagues? Would they have entered teaching at all?

These stories also serve as a reminder that participant selection influenced what I was able to learn from this research. If we followed a group of teachers who began teaching today, we might see something very different. Expectations of teachers and modal teaching practices might look different. Textbooks and curriculum materials might promote different views of teaching. Teacher education might prepare teachers differently, and schools might be structured differently than they were then. What new teachers today need to learn might differ from what Carrie, Linda, Vera and Michelle needed to learn.

Besides the similarities, there were also important differences among the teachers. These differences were very interesting, but they also make it more difficult to know which factors are the most important to consider when analyzing different teachers' experiences.

According to my plan for identifying participants, I wanted to identify two teachers who had participated in group experiences and two teachers who had not. To some degree, I succeeded in doing this. Carrie and Linda had both participated in the TLG, which they both described as the most significant professional experience in both of their careers. After their TLG experience, both became actively involved in activities connected to the designation of their school as a professional development school (PDS). In Carrie and Linda I had found two teachers who were living the consensus model of professional development. Carrie was relatively isolated in her school from other teachers, and her recent efforts to teach a multi-age class were met with resistance from administrators and fellow teachers. Of all the teachers, Vera seemed to be the most isolated from fellow teachers and had made most of her changes as a result of her own initiatives.

However, after a second look, the teachers could not be grouped so neatly. Even though Carrie said that the TLG experience was so significant, her story about the weekend of change came out of her relationship with one graduate student who challenged her teaching. Linda emphasized how the changes that each teacher made in the TLG were based on individual choices they had made. Both Carrie and Linda's changes seemed supported by a strongly individualistic stance. Michelle and Vera, the teachers who were supposed to the be "loners," also turned out to have close affiliations with other teachers. Even though Michelle was distanced from many of her fellow teachers, her co-teaching with Joan and Sarah was very significant. Her experience with the National Writing Project and her pursuit of the graduate degree were both built around close relationships with other teachers. Even Vera, seemingly the most isolated,

talked about conversing with other kindergarten teachers in the district who wanted developmentally appropriate programs. She talked about the importance of one of the second grade teachers who was also experimenting with writer's workshop in her classroom. This blurring of the distinction between group learners and lone learners made it difficult to categorize particular experiences as primarily collective or individual.

One unexpected variation among the teachers that emerged as significant was their different orientations towards paying attention to their students. When I proposed to study teachers who had developed practices that facilitated attention to students, I imagined that the most difficult task would be to locate teachers who clearly demonstrated attention to students. As I began to realize that "paying attention" looked different in each teacher's classroom, I began to realize that I had not bargained for enough time in each classroom to understand subtle differences in the kind of attention that each teacher paid to her students.

There were other unexpected differences as well. For example, Carrie never had any children. Linda did not have any children until after she had been teaching for over fifteen years. Michelle had four children spread out during her first thirteen years of teaching. Vera had her first child immediately after graduating, and her second child five years later.

These differences in the timing of the teachers' children roughly corresponds with differences in their pursuit of graduate degrees and participation in professional development experiences. Neither Carrie nor Linda had children during their involvement with the TLG, so they may have had more time available to participate in the group's activities. Michelle began working on her master's degree after her last child

was old enough to stay home alone while she attended graduate classes. Vera began a Master's degree program when her children were very young. She never finished the program and has not pursued one since. Differences in personal lives may not have caused different professional paths, but the differences in their personal lives may have created conditions that were more or less favorable for professional growth and development at different times in their lives.

The similarities and differences among the four teachers highlight the challenges faced by all researchers, but for biographical researchers and other qualitative researchers working with very small samples, the importance of thoughtful participant selection becomes very crucial. Once participants are selected, researchers must thoughtfully take similarities and differences among participants into consideration and make decisions about which are the most important to consider when trying to make sense of people's stories.

Data Collection

In my data collection, I needed to accomplish three things: (a) observing and characterizing the teachers' current practices in terms of attention to students; (b) reconstructing the teachers' earliest practices and locating specific changes; and (c) isolating particular professional development experiences and learning about them in sufficient detail to understand their importance in the teachers' career-span professional development. Since the original focus of the study was to document the kinds of experiences that helped the teachers experiment with and adopt new practices, the methods were focused on helping teachers identify and describe those experiences. I spent less time developing a sophisticated study of the teachers' practices.

Describing his strategy of biographical research on the life course, Levinson (1981) says:

> First, I decided not to commit myself in advance to any specific hypotheses, variables, or measuring instruments...
>
> Second, in a spirit of exploration, I decided to cast as wide a net as possible, gathering rich material and then seeing what concepts, principles and specific findings might emerge. Theoretical considerations were of great importance in the planning, but they operated as broad guidelines rather than as a tight, explicit structure for data collection. The primary aim of the study was to produce new concepts and a theoretical framework within which specific variables and hypotheses could be derived (p. 60-1).

Like Levinson, I originally cast a wide net guided by the desire to learn how the teachers had made significant and lasting changes in their language arts instruction, specifically regarding the ways they paid attention to individual students. I adopted the perspective that life histories are an adequate way of understanding teachers' practices, and the best way to reconstruct teachers' career development. I used the literature on professional development to inform my thinking about potentially powerful influences, but I did not use my framework as a tight structure for data collection. Instead, I tried to create opportunities that would allow the teachers to share their stories of personally significant events and to describe what they felt was significant about those events.

Watson (1976), an anthropologist, argues that

> that the philosophical disciplines of hermeneutics and phenomenology provide the necessary frame of orientation for, respectively, (1) overarching the gap between oneself and the subject of the life history, thus making interpretation possible; and (2) understanding the nature of subjective experience as a phenomenon in its own right. (p. 98)

Life history allows researchers to step outside their frame of reference and understand a sequence of events from the perspective of the person who actually experienced those events. Bruner (1985) describes the type of knowledge revealed by life history as a

"narrative mode of thought," which offers insight into events *as well as* what the participants in those events know, think, or feel.

My decision to use life history methods to study teachers' professional growth was based on three premises:

- Teachers are a relatively accurate (but not infallible) source of information for describing their past and present teaching practices
- Teachers are the only reliable source for recounting how different experiences influenced their thinking
- The professional development experiences that teachers most easily recall were significant

Teachers might not be able to recall the "truth" about specific events. They might not even be able to identify all of the experiences that had a lasting impact on their teaching. However, I believed that the experiences they could recall would surely be influential, and the teachers themselves were the only ones in a position to recount their subjective experiences of those events.

My purpose for using life history was not to uncover some objective "truth" of what happened to different teachers. I sought to learn how they, over the span of a career, reconstructed, for themselves and in my company, the significant influences that shaped their teaching at different points in the past that have led them to where they are today. The success of my work depended on my ability to create situations where people felt comfortable to speak, to prompt them with questions that enable the teachers to speak freely without feeling put on the spot, and to provide multiple opportunities to fill in gaps or add to things they said previously.

Schwille (1998) argues that the value of biography is that "we can learn from the insights and meanings that both the teller and listeners extract from the story" (p. 10). It

is important to understand how a person subjectively makes sense and reconstructs their career in an organized way. Even though their reconstructions are fictions, the stories people tell about themselves, their lives, and their careers, have a real influence on who they are and what they do. Kelchtermans and Vandenberghe (1994) say that the professional story must be "a narrative retrospective reconstruction of a career," since "it is the respondent who organizes his or her career along subjective criteria of meaningfulness in a story with a certain coherence and consistency" (p. 47).

The study of teachers' lives and careers is not new. There has been growing interest throughout the past two decades in narrative research methods for studying teachers (Casey, 1996; Gudmundsdottir, 1997; Goodson, 1992). Researchers have used narrative methods to investigate the career stages and general patterns of teachers' careers (Fessler & Christensen, 1992; Fessler, 1995; Huberman, 1989, 1995). Others have sought to use teachers' stories to gain insight into the types of knowledge teachers hold and the ways they hold it (Clandinin & Connelly, 1996; Elbaz, 1983). Still others have examined the career trajectories of educational "innovators" (Smith et al., 1986).

Much of this research has pursed one of two tasks: 1) developing stage theories and patterns of teacher careers; and 2) identifying and describing teachers' knowledge. Fessler (1995) uses a model of the "teacher career cycle" to propose individualization of professional development by offering stage-appropriate learning opportunities. Huberman (1995) proposes a matrix of individual and collective, closed and open cycles of teachers' experimentation and mastery of new practices. Though these ideas are intriguing, both sets of suggestions are hypothetical ideas, not directly grounded in the empirical data that generated them. My research draws on these traditions but pursues a

different task: using life history to understand teachers' professional growth, learning, and changes in teaching practice.

Surprisingly few researchers have explicitly used life history methods to understand the stimuli for teachers' learning and changed practice over time and also to understand what happens to those changes over time. One notable exception is Schwille's (1998) biographical study of one teachers' tremendous professional growth over a six year period. Drawing from fourteen interviews, extensive journals kept by the teacher during that period of time, interviews with the teachers' colleagues, and observations that had been conducted as part of a previous research project, Schwille offers a detailed analysis of the Courtney's challenges and eventual success in transforming her practice. My research follows a similar strategy. By studying four teachers' careers instead of one, I created the possibility for cross-case comparisons, even though I was more limited in the amount of data I could collect for each teacher.

Observation

My strategy for data collection was to ground the initial interview in a concrete and immediate event: an observation of one language arts period in their own classroom. When the teachers agreed to participate in the study, I asked them to choose a day and time for me to visit their classroom when I would be able to see a "typical day of language arts instruction." Carrie, Linda, and Michelle had some difficulty choosing a time because they integrated language arts in their other subject areas.

As I observed in each teacher's classroom, I adopted an open stance of trying to learn how the classrooms functioned for all of the participants: teacher and students. First I paid attention to the physical layout of the classrooms. I made a map of each

room, noting the placement of furniture, contents of shelves (e.g. what kinds of books were on shelves, what were the contents of student spaces), and evidence of recent topics the class had been studying (e.g. posters or objects placed around the room). I took note of papers on student desks and tables and made a list of posters and student work posted throughout the room.

As I watched each teacher teach, I took open-ended field notes with a particular focus on trying to find instances of the teachers paying attention to their students. To guide my field notes, I created a list of potentially attentive behaviors based on descriptions of standards-based teaching found in the Standards for the English Language Arts (National Council of Teachers of English, 1996):

- Teacher acknowledging student reading/writing responses in ways other than evaluative or corrective
- Students making connections between reading or writing and personal lives
- Discussion in which students offered different viewpoints, addressed one another
- Students sharing writing with one another, on paper or verbally
- Students editing work with peers or teacher, preparing work for a particular audience
- Student choice of writing topics
- Flexibility of structure for writing allowed for different students (different types of pre-writing activities, time allowed for thinking about things)

When the teacher or students were reading, I wrote down what they were reading and how they interspersed reading and talking. When students or the teacher was speaking, I wrote segments of their conversations, taking verbatim notes when possible. When students were writing, I noticed what they wrote, and occasionally I was able to ask them questions about what they were writing.

In all four classrooms, there were times when there were multiple activities occurring at the same time, when some students worked independently while the teacher

worked with groups or circulated around to speak to individual students. In these cases, I tried to balance attending to what the teacher did and watching individuals or groups of students who were working away from the teacher. Dividing my attention in this way enabled me to see a range of activities in each classroom, but it also prevented me from paying attention to any of the activities in depth.

I planned to use the observation as a jumping-off point for the first interview and as a way to document specific lasting changes the teachers made. I originally hoped that a single observation would serve as a baseline for documenting whether or not the teachers paid attention to their students. When I was analyzing my interviews, I began to realize that the teachers paid attention to different things about their students, and that their decisions about what to pay attention to affected what they did in their classrooms. Because this realization shaped the rest of my analysis, I decided to write a chapter about those differences even though did not have as much observation data to support my claims as I would have liked. In a future study it would be valuable to gather observational data that would enable me to explore how different teaching practices facilitate particular types of attention to students, what kinds of information teachers actually gather about individual students, and how they use the information they gather to shape their teaching.

Interviews

I placed the brunt of responsibility for learning about the teachers' learning and practice on interviews. I designed a series of interviews which corresponded roughly with Kelchtermans and Vandenberghe's (1994) cycle of life history interviews. The interviews were structured as follows:

Initial Interview:	Current language arts teaching practices, past practices, identification of critical incidents/persons/phases
Development/Clarification Interviews:	Nature of critical incidents/persons/phases, nature of learning from these experiences
Biographical Interview:	Personal biography (pre-teaching significant life events, teacher preparation, dispositions, views of language arts teaching and learning), other influences on teaching and learning
Follow-up Interview:	Response to my narrative analysis, correction of inaccuracies, reflection on participation in the study

The actual number and time of the interviews varied according to the number of stories each teacher told, how detailed the teachers were about their stories, how clearly they were able to recall incidents, and how conversational we were. Interviews ranged from thirty minutes to almost two hours. The total interview time ranged from five to ten hours.

The initial interview was conducted immediately after the classroom observation. I asked each teacher to walk me through the events of the day and to describe to me how typical the day's lesson had been. If the teacher said I had missed some particular activity, I asked her to describe the activity to me. In one case I scheduled an additional observation to an important part of Vera's writer's workshop that I had not seen. Using their descriptions as a basis, I asked each teacher how their current practice differed from the ways they used to teach. On a piece of blank paper I asked the teachers to draw a timeline showing times in their career when they had made significant changes in their teaching practices. This discussion allowed the participant to nominate experiences which stimulated and supported changed practices at different times throughout the career.

In the clarification/development interviews, I brought the timeline which the teacher had constructed during the first interview and a list of experiences the teacher had mentioned during the first interview. If something came up during these interviews that was not on my list of events from the original interview, I added it to my list. I conducted as many interviews as it took to get through my the list of experiences.

Beginning with experiences that seemed the most important, I asked questions to elicit further descriptions of the experiences and to invite the teachers to say why the experience had been significant. I also examined my developing hypotheses about the teachers' involvement or non-involvement with colleagues, why they decided to change their practices, and how different experiences supported them as they made changes in their practice. I let the teachers speak as long as they chose about each experience. When they wanted to share specific stories from those experiences, I asked them to tell their stories even when they did not fit my questions. These opportunities allowed the teachers to share their own interpretations about what had made some events so significant, e.g. Carrie and Linda's journal sharing story, Carrie's story of change in one weekend, Vera's Math Their Way story.

In the biographical interview, after I had established some rapport with the participants, I asked questions about the teachers' experiences as students. I asked them to tell stories about memorable teachers and memorable assignments, especially in language arts, from elementary school through college. I asked them to tell me their reasons for entering teaching and what they remembered most about their preservice teacher preparation.

To conclude my series of interviews, I provided each participant with my initial "narrative analysis" as the basis for a follow-up interview to give participants the opportunities to confirm, question, or disconfirm my analyses. I also used this opportunity to ask unanswered questions of the participants.

Where available, I collected other information about their career histories (e.g. teaching files, observations, videotapes of their teaching, data from previous research, documentation of significant professional development experiences). In most cases, this kind of data was not available. Some of the teachers said they had some records stored "somewhere in their basement," but I was reluctant to ask the teachers to spend their time digging out old records. Some of the teachers did search out some old records to show me. Linda and Carrie had each written parts of articles published by the group. Carrie let me copy chapters from her old TESA notebook. Michelle gave me copies of her Master's thesis and papers she had published in state journals. Vera brought books that she had considered influential. Since there was little opportunity to triangulate the data in the study, I had to learn what I could from the teachers' accounts.

Analysis

Managing and configuring the data for each participant was a major analytic task, which was concurrent with the data collection and continued reading.

Through the course of the interviews, I identified two or three vivid stories from each teacher. Kelchtermans and Vandenberghe (1994) describe these vivid stories of change as "critical incidents," or "key events in an individual's life, around which pivotal decisions revolve. They provoke the individual into selecting particular kinds of actions which lead in a particular direction" (p. 48).

Critical incidents are important for two reasons: a) they lead to decisions that may represent a departure from prior ways of doing things; and b) they change the course of a career by influencing later decisions. In terms of Dewey's "educative experience," a "critical incident" is an objective condition which has an immediate and direct influence over the learner, but it also changes the way the learner responds to subsequent experiences. Even though the incident alone may actually represent the culmination of a series of events, these stories of critical incidents are important because they capture some event during which the teacher feels like his or her subjective reality was changed.

First, I made a list of everything that each teacher said was influential. Looking across the lists, I developed a set of categories of potentially influential events. These categories included:

Contextual factors:
- School
- Grade taught
- Classroom
- Principal
- Funding available
- Students
- Colleagues

Formal professional development:
- Courses
- Workshops/conferences
- Membership in professional associations

Personal factors:
- Family/children
- Independent reading

Using these categories as a guide, I constructed a chronological timeline which situated everything the teachers said was influential. Looking across the timelines showed that the most critical events seemed to occur during times when many other things were also happening, such as changes in principals or other faculty at their school, children being

born or going to school, attendance at particular workshops or other formal professional development events. Rather than writing about each incident and theorizing about its significance, I wanted to represent how, just as multiple stars combine to form a constellation in the sky, multiple experiences combined to promote the teachers' changes.

While I was writing about these collections of experiences as constellations, I was reading Dewey's (1938) Experience and Education in which he argues that all experiences shape how people respond to subsequent experiences. Experiences shape each person's perception of and response to subsequent experiences. I began to think that constellations were not simply collections of events during a short span of time, but that they could also be represented as collections of events throughout each teacher's career. Not only did simultaneous events influence one another, but events also influenced teachers' experiences of subsequent events across long periods of time. I began to think of constellations as something which could be represented spatially, as a pattern of fixed stars forming a picture in the sky, as well as temporally, as the patterns change over time in response to one another.

Using this notion of a constellation, I pursued what Polkinghorne (1995) calls a "narrative analysis." Polkinghorne says the purpose of the narrative analysis is "to configure the data elements into a story that unites and gives meaning to the data as contributors to a goal or purpose" (p. 15). To do this, Polkinghorne argues that the researcher "develop or discover a plot that displays the linkage among the data elements as parts of an unfolding temporal development culminating in the denouement" (p. 15). The end result of the narrative analysis is a story created using a variety of data. Through the creation of the story, data are selected, integrated, and given coherence in a

way that is not inconsistent with each teacher herself might have told the story, even though she may never have actually told the story from beginning to end.

I first wrote a complete narrative analysis of Vera. The structure of this analysis ended up shaping the structure of the entire dissertation. I characterized her current teaching and how her current practices differed from her former practices, and then told a story of how she had developed her current practices. As I wrote this analysis, I realized that I was asking how the teachers' current practices enabled the teachers to attend to students (as if their earlier practices prevented them from attending). Bob Floden forced me to consider whether the early practices represented inattention or simply a different kind of attention. When I changed the kind of question I was asking of my data, I began to see that the teachers' earliest practices did not prevent attention; they enabled particular kinds of attention which did not allow the teachers to learn the same things as their current practices did. This led me to think that teachers' practices are like windows which enable them to learn particular things while preventing them from learning others.

While I was writing the narrative analyses of the four teachers, I was teaching an introductory teacher preparation course in which we read much of the literature from Chapter 2 about paying attention to students. I wanted to help my students examine the idea of paying attention to students in more depth. The combination of writing analyses and preparing to teach this course led me to realize that different teachers paid attention to their students in different ways. This realization led me to realize that I needed to write Chapter 3, in which I differentiated between how each of the four teachers paid attention to her students. In turn, writing Chapter 3 provided me with a new understanding of the teachers' stories of their critical events, and I began to see that there

was a connection between the teachers' orientations and the experiences that were most influential for them.

Once the cases were complete, I looked across the cases to conduct an "analysis of narratives" (Polkinghorne, 1995). What was common to all four, how were they different? What themes recurred through the stories? Re-reading all four cases, I listed salient details and compared the teachers' reconstructed stories with the "consensus model" for professional development. This final analysis enabled me to write the conclusion.

Methodological Issues

Inevitably, there are limitations and methodological considerations involved in using narrative biographical methods to study teachers' career-long professional development. The greatest challenge for researchers using these methods to answer are the charges that people's stories may or may be true (Phillips, 1994, 1997). There are several reasons to question the veracity of first-person narratives. First, there are questions about whether learners themselves are in the best position to understand how they learned something. Second, there are questions about the nature of teachers' stories. How are teachers' stories reconstructed, and under what circumstances? How do these circumstances affect the stories that are told (and untold)? Once researchers' gather teachers' stories, they must decide how to make sense of them, and this raises a whole new set of questions. In the following section, I describe these considerations in more detail, and I conclude that of narrative inquiry offers the best chance to learn about experiences that stimulate teachers' long-term development.

Self-awareness

D.C. Phillips (1994, 1997) argued that "we do not always know, or are not always conscious of, or honest about, the reasons underlying our own actions" (Phillips, 1994, p. 102). Asking people about how they learned to change may seem to participants to be an overwhelmingly unapproachable topic. For an extreme version of this problem, imagine someone asking another person to answer the question, "How did you learn to read?" The person may be able to offer some stories of learning to read and to offer some conjectures about the kinds of things that seemed most helpful. Should researchers of reading accept these kinds of responses as evidence of how people best learn to read? This kind of evidence about learning to be read would be highly questioned and criticized.

This example illustrates a problem that also exists for narrative inquiry about professional development. Even when people can recall specific experiences that supported their learning, they may have a difficult time explaining how those experiences were helpful to them. They may have personal theories about why some experiences were more important, but those theories may cause them to forget some details and to give others undeserved weight. For example, in the follow-up interview, Linda told me that Carrie's TESA stories had reminded her how much she had learned from TESA. She said she regularly uses some of the TESA behaviors in her classroom today without even realizing that they originated with TESA. This example serves as a reminder that even when they try in earnest, people are not always able to identify factors most crucial for learning, especially the learning of things that become the most deeply embedded.

Memory

A second challenge to the truth of narratives is the inconsistency of memory. Each of the four teachers had some difficulties recalling details about their learning experiences and their changes in practice. This was especially true of changes that happened in subtle ways over many years and changes that occurred long ago. Compounding the problem of memory was my decision to begin asking the teachers about their career histories immediately during the first interview. Although I had told them in advance what we would be talking about, they may not have had time to reflect on their career timelines before the first interview.

I tried to temper this challenge by offering the teachers multiple opportunities to tell and retell stories of significant experiences. I also asked the teachers frequently if they wanted to add anything to my list of important experiences. Since the interviews were conducted over a period of over a month, the teachers did have some time to recall and share things that they had thought about since the previous interview. For example, Carrie took the opportunity to locate her old TESA binder, which she shared with me. Michelle located articles that she had written for publication in regional journals. After a two-week interval between interviews, Carrie started an interview by sharing a revelation she had just had: all of her changes had been in response to a formal professional development experiences.

The final challenge of memory is that people tend to tell stories of their lives through the lenses of their current ways of thinking. As Floden and Huberman (1989) point out, "when people recall past events, they amend and elaborate their feelings and perceptions from that time, so that the story they tell fits better into their recollections of

other events" (p. 459). People tend to see the events of their lives as continuous and linked in a logical narrative structure. Huberman argues that people's lives are filled with more discontinuity than they relate:

> Discontinuity is typically underestimated by individuals who recount their own lives and who tend to use the lens of their present life to make sense of their past--and to do it in a coherent, internally consistent way, as if today were the almost inevitable product of the chain of events of one's yesterdays. (p. 195)

These charges raise questions about the teachers' narratives in this study. One might argue that the critical events fit with the teachers' dominant orientations precisely *because* the people make sense of prior experiences using the lenses of their current orientation. However, Floden and Huberman (1989) argue that teachers' stories may be a better reflection of teachers' current beliefs and ways of thinking. The teachers' stories are still important for showing that they have a dominant orientation that may be useful for making sense of past experience.

Audience

Finally, the teachers' narratives are oral texts that they constructed for an audience. Stephen Swidler (1995) argues that

> All that we have to account for another's experience is what she tells us. What a person tells us of a given experience is not the experience itself. Rather, it is a presentation of that experience, a text, an artifice. Communication of experience is always a creation and presentation of artifice. (Swidler, 1995, p. 1)

Swidler's statement is a reminder that all stories are told for an audience. As a researcher, I was the primary audience, but the teachers also knew that I would be writing about them and sharing my writing with other university professors and maybe even a broader community of educational researchers. As researchers, we must be aware of these stories as constructed texts, complete with authorial intention.

Clandinin and Connelly (1996) argue that people may create "cover stories," or well-rehearsed stories that quickly and easily arrange surface details to convey an intended message. People may choose to tell such cover stories because they are more efficient, or because they want to maintain control over the representation of their story. When cover stories are told and retold many times, people may leave out details that may have been important.

Except for Vera, each of the four teachers has had some opportunities to rehearse her story. Carrie's and Linda's stories about the TLG are well-rehearsed stories that they have written about, told to other interviewers, and shared with a variety of audiences. Their stories are part of the folklore of the group that contains crystallized images of how the group functioned and continues to shape their professional growth. Michelle wrote a Master's thesis in which she imagined herself explaining the development of her teaching philosophy to a journalist. Many of the stories she shared with me closely parallel the stories she wrote about in her thesis.

One way to address this concern is to ask questions that attempt to get beneath their cover stories so that I would have access to as much information as possible. However, good questions and repeated probing cannot guarantee that researchers will get beneath cover stories. For example, Errante (2000) described her revelations about the complexities of collecting oral histories during a historical study of people's schooling experiences in Mozambique. During the interviews, she discovered particular "watershed" questions which "seemed to unlock a stream of memory" (p. 19). She also realized that the participants themselves helped to shape the interviews by suggesting questions she should have asked. Some participants were reluctant, not believing that

they had anything worthwhile to offer. After the country had been inundated with international groups of researchers representing aid organizations, Errante began to notice that people's oral histories tended to contain elements that the people thought might help their community get international assistance.

Errante's experiences show that the oral history interview, like the collection of teacher narratives, is affected by what the interviewee wants to share, what the interviewee wants the researcher to tell someone else, and what the interviewee feels comfortable sharing. These influences suggest the importance of the relationship between the researcher and the research participants and how that relationship can affect the kind of data gathered. However, as Errante argues, not all stories are accessible, even to the interested and probing researcher.

Life History: The Best Alternative

This dissertation is based on teachers' stories of learning, which are re-creations of events only partially reconstructed twenty or more years later. These partial reconstructions are unavoidably affected by people's self-awareness, the limitations of memory, a desire to convey a particular message or self-image for a particular audience. The complexity of the stories themselves and the limitations of the method make it impossible to draw causal inferences about how teachers learn best.

In spite of these limitations, teachers' stories are valuable and important sources of information about teachers' professional development. Other research methods may fail to remedy the weaknesses of life history. Of course it would be wonderful if researchers could be present in the moment as teachers learned, perhaps by observing teachers participate in particular interventions or surveying them afterwards. However,

the stories of the four teachers in this dissertation indicate that it would be difficult to know in advance which experiences are most likely to stimulate change, especially taken out of the context of the teachers' personal lives and orientations. We also know from these teachers' stories that the moment of learning may come at unpredictable times--sometimes years after the experience. Vera did not experience her revelation about students' mathematical ideas until she began using the Math Their Way activities years after she took the first workshop. Sometimes the greatest value of an experience is in its role in preparing the way for future experiences, e.g. Carrie and Linda's partnership was an important foundation for the TLG. Direct observational studies or surveys about particular interventions would fail to capture these kinds of influences. Another cumbersome method would be to conduct longitudinal studies which follow teachers through their entire careers. Such studies would entail much hard work with dubious results. Who would we choose? What if they left teaching, never changed their practice, or never participated in the kinds of experiences researchers want to learn about?

To discount teachers' stories is to overemphasize the validity of other stories (i.e. researchers' stories). Teachers' stories of their own growth and development offer a unique and important perspective. Through teachers' stories, researchers can get a glimpse of past events, even though the glimpse may be vague, subjective, and not error-free. More importantly, teachers' stories give insight into teachers' "subjective reality," which Fullan (1991) argues is the only place where real change occurs. Deeply rooted learning takes place on some level inside one's head, and only teachers themselves are in a position to tell how experiences transform their thinking. Only teachers are able to tell how experiences are connected in their thinking. For example, only Vera could have told

how her Math Their Way revelation led her to use writing in a new way in her classroom. Only Michelle could have identified the connection between her own children's school experiences and her decisions to try to create a "developmentally appropriate" classroom. Teachers' stories show how teachers themselves make sense of their experiences through the lenses of their current reality. Even though teachers may not remember every event that influenced their thinking, and even though there may be gaps in their memories, the experiences they do remember and what they remember about those experiences are surely worth careful study.

When asked for his opinions about democracy, George Washington reportedly said that "Democracy is the worst form of government--except for all the other kinds." One might also say that "life history is the worst method for studying teachers' professional development across the career span--except for all the others." Narrative, biographical methods are the best alternative for studying genuine, lasting learning that makes real differences in teachers' lives. As researchers we must, however, acknowledge the limitations of our methods and temper our conclusions accordingly.

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