

The Expertise in Urban Teaching Project: A Theory-Building Study

by

Charles F. Vanover

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Education)
in The University of Michigan
2009

Doctoral Committee:

Professor Brian P. Rowan, Chair
Professor Jane E. Dutton
Professor Pamela A. Moss
Associate Professor Roger D. Goddard

© Charles F. Vanover
2009

To the Teachers and Students of the Chicago Public Schools

Acknowledgements

I would like to acknowledge the many people who helped me with this dissertation.

At Michigan, I would like to thank my advisor, Brian Rowan, for supporting me and always urging me to do my best. I would like to thank my committee members Jane Dutton, Pamela Moss, and Roger Goddard for the assistance they have given me through the years.

My associates at CPRE deserve many thanks for years of good work studying the problems of urban schools and their potential solutions: In particular I would like to acknowledge Carol Barnes, Diane Massell, Kristi Holmstrom, Danae Del Rios, Sereena Salloum, Paul Perrault, Christine Neumers, Robert Miller, Katherine Mikesel, and Jennifer Smith. In many ways, Jennifer Smith functioned as a second advisor for me, and I cannot thank her enough for her help and friendship.

I would like to thank Barbara Preston and Joan McCoy at the School of Education.

Friends at Michigan who have supported my intellectual growth include David Johnson, Jane Cogshall, Mengli Song, Xu Li, Alexandra Milletta, Guanglei Hong, Tatiana Suspina, Natalia Verbinski, Suzanne Smith, Katherine Lawrence, Christina Marin, Julie McDaniel, Ingrid McGogg, Andrew Babson, and Viticia Thames.

I would like to thank Cathy Lu for being my star.

I would like to thank Robin Meager for cheering me on.

I would also like to acknowledge my debt to Michael Cohen, Jerry Davis, Ruth Behar, Ed Smith, Stephen Raudenbush, Gary Fenstermacher, Duane Alwin, Virginia Richardsen, Dirck Roosevelt, Magdelene Lampert, and Johnny Saldaña.

Friends at Canterbury House Episcopal Foundation include Mathew Lawrence, Rose Lawrence, Steve Rush, Merylynne Rush, Reid Hamilton and the many members of our congregation, especially Tyler, Clair, Joey, Matt, Andrea, Chelsea, Ross, and Winnie.

I would like to thank June Gin for lighting my way and making me laugh.

In Chicago I would like to thank Lynne Cherkasky-Davis, Alan Bearden and everyone at the Quest Center and the Chicago Teachers' Union for their help and support. I will always be thankful for this opportunity.

I would like to acknowledge the teachers who participated in the interviews. Thank you for letting me spend this time living in your stories.

I would like to thank my friends in the Chicago Public Schools for many years of friendship and professional growth: Frances Szymanski, Gloria Henlen-Jones, Patricia Radasov, Janice Bolt, Patricia Kanaze, Tom Starnicky, Dianne Walker and Barbara Fields. Working with Frances Szymanski during my years in CPS was one of the happiest experiences of my life, and I will always be grateful for our time together.

I would like to thank my friends on the Tiki-List.

I would like to thank Charlie, Jeff, and John for being there, always.

I would like to thank my extended family who have given me love and support through the years: Carol Vanover, Neil Vanover, John Vanover, Virginia Vanover, William Vanover, Sandra Campbell and Beth Blacksin. Words cannot express how much you mean to me.

In memoriam, I would like to acknowledge Nancy O'Connor, Stella Raudenbush, Judy Landis, Edward Neely, Pauline Craigo, Henrietta Vanover, and Charles Steinruck.

Table of Contents

Dedication.....	ii
Acknowledgements.....	iii
List of Figures.....	vi
List of Tables.....	vii
List of Appendices.....	ix
Abstract.....	x
Chapter	
I. Introduction: Questions, Theory, Sample, and Design.....	1
II. Literature Review: Experimental and Ethnographic Perspectives on Human Expertise.....	36
III. Methods.....	86
IV. Technical Methods: Constructing the Coding Unit.....	131
V. The Start of the School Year.....	154
VI. Classroom Events and Routines.....	169
VII. Relationships.....	207
VIII. Information-Flow: Content, Pedagogical Content Knowledge, Language, Feedback.....	321
IX. The End of School.....	382
X. Conclusion.....	396
Appendices	
A. Major Coding Tables.....	418
B. Original Prospectus: The Voice of Experience.....	433
C. Original Recruitment Letter and Interview Instrument.....	450

List of Figures

Figure

1 Heuristic Representation of the Cycle of Planning and Interactive Teaching Produced by Expert Teachers.....	18
2 Heuristic Representation of the Cycle of Planning and Interactive Teaching Produced by Novice Teachers.....	19

List of Tables

Table

3.1 Stages of the Analysis.....	95
3.2 Project Sample.....	99
3.3 Interview Experience.....	101
3.4 Types of Revoiced Dialogue Shared in Interview 1.....	107
3.5 Transcribed Interviewer and Respondent Variation.....	113
3.6 Major Coding Waves and Analytic Process.....	122
4.1 Definitions of Labels for Text Units.....	136
4.2 Narrative Unit Count.....	144
6.1 Conflict and Academic Subjects.....	175
6.2 The Intersection of In-class Misbehavior and Core Instruction.....	176
6.3 Routine In-Class Misbehavior.....	192
7.1 Exploratory Analysis of Teachers Reports of Personal Emotion.....	234
7.2 Exploratory Analysis of Teachers' Emotions When Discussing Core Academic Subjects.....	236
7.3 Exploratory Analysis of Teacher Reports of Empathy and Positive Emotion in Others' Accomplishments.....	238
7.4 Exploratory Analysis of the Emotional Quality of Students' Core-Academic Activities.....	240
7.5 Family Conflict, Family Partnership & Advocacy for Students.....	242
8.1 Academic and Non-Academic Work.....	353
8.2 ELA Across the Curriculum.....	354
8.3 Skilled Teaching Moves.....	355
A6.1 Classroom Management Code Definitions.....	418

A6.2 Classroom Management Unit Totals.....	422
A7.1 Emotion and Family Relationship Definitions.....	423
A7.2 Emotion Totals.....	425
A7.3 Family Relationship Totals.....	426
A8.1 Academic, ELA, Skilled Classroom Moves, and Problem Solving Definitions.....	427
A8.2 Academic and ELA Totals.....	430
A8.3 Skilled Classroom Move Totals.....	431
A8.4 Problem Solving Totals.....	432

List of Appendices

Appendices

A. Major Coding Tables.....	418
B. Original Prospectus: The Voice of Experience.....	433
C. Original Recruitment Letter and Interview Instrument.....	450

ABSTRACT

The Expertise in Urban Teaching Project: A Theory-Building Study

by

Charles F. Vanover

Chair: Brian P. Rowan

The Expertise in Urban Teaching Project is a long-term investigation centered on a critical question in the human sciences: How does knowledge change professional performance? This dissertation advances this question in the context of research on teaching. It analyzes qualitative data from interviews conducted with 7 expert and 5 beginning teachers in the Chicago Public Schools at the conclusion of the 2003-2004 school year. The interviews' goal was to sample teachers' *classroom knowledge*: the remembered landscape of lessons, people, and events teachers use to plan and make sense of their daily work. The chief questions addressed are: (1) What is the shape of teachers' classroom knowledge? (2) How does this knowledge vary between teachers of different skill levels?

Experts were defined as National Board for Professional Teaching Standards (NBPTS) certified teachers who taught in urban schools for at least seven years. All were selected by the director of one of Chicago's most respected NBPTS preparation programs: The Chicago Quest Center's Nurturing Teachers' Leadership Program (Nighswander, Cherkasky-Davis, & Bearden, 2001). Novice teachers were chosen with snow-ball sampling techniques. The interview's first question was adapted from Benner's

studies of expertise in critical-care nursing:

- Please tell a story about a student, or a group of students, for whom your teaching made a difference.

Interviews were transcribed verbatim. Teachers' narratives were divided into their component incidents and coded.

Experts discussed peaceful, working classrooms characterized by high levels of reading and writing instruction. Their descriptions of core academic subject matter were frequently imbued with positive emotions such as happiness and joy. Experts frequently shared incidents where they felt proud of their students' academic accomplishments. Beginners told fewer stories about reading and writing instruction. Relationships with students were strained. Children frequently broke classroom rules and argued. Beginners told almost as many stories about student misbehavior as they did of reading, writing, social studies, science, and mathematics instruction combined.

Verbatim transcriptions of the narratives are shared throughout the empirical chapters to allow readers to enter imaginatively, and learn from, the teachers' schoolwork. The conclusion outlines a meta-theory of expertise in classroom teaching.

Chapter I

Introduction: Questions, Theory, Sample, and Design

How does knowledge change professional performance? The Expertise in Urban Teaching Project examines this question by using theory from educational research, cognitive psychology, and organizational studies to investigate how classroom teachers make meaning from their schoolwork. In this dissertation, two critical issues in the field of education are addressed:

- (1) What is the shape of teachers' classroom knowledge?
- (2) How does it vary between teachers of different skill levels?

In the first half of this introduction, I provide an overview of the theoretical frameworks I use to study expertise in teaching. In the last part of this first chapter, I describe a qualitative study I carried out to deepen my insight into this body of research. The goal of this study was to sample expert and beginning teachers' *classroom knowledge*: the remembered landscape of lessons, people and events teachers use to plan their lessons and make sense of their daily work.

In second chapter, I review the literature on expertise and skilled classroom teaching. In the third, I discuss in depth the methods I used to organize this review and conduct the qualitative study. The empirical chapters use the stories of practice I collected during my fieldwork are used to create an 'inner ethnography' of educators' classroom experience which utilizes techniques from oral history studies and qualitative analysis (e. g. Denzin, 2001; Grele & Terkel, 1985; Miles & Huberman, 1994; Ryan, 1970; Wineburg, 1991). The teachers' narratives are quantified to allow readers to see differences between the expert and beginners' stories in breadth. Excerpts from the interviews are also published in verbatim transcriptions to communicate the felt reality of

the teachers' schoolwork and allow the reader to understand the joys and challenges of life in school. The conclusion builds on these findings to construct the outline of a meta-theory of expertise in classroom teaching.

Definition of Knowledge

As Fenstermacher (1994) emphasizes, in the field of education, the concept of knowledge is contested. Individual researchers define knowledge differently. These definitions are used to support alternative research methodologies and programs of investigation.

The Expertise in Urban Teaching Project attempts to reframe this debate by following Simon (1996) and Kintsch (1998) and taking a broad, cognitive perspective on knowledge. Knowledge is defined as the information people use to do the things that matter to them. It is a physical thing that exists in peoples' minds and bodies, and can be modeled and measured experimentally (e. g. Anderson, 2007; Ericsson & Simon, 1993; Slotta, Chi, & Joram, 1995). Some of this information may be validated by experimental research and other standards of evidence. Some of this information is not. Knowledge may be coherent or fragmentary. It may be accurate or false. From a cognitive perspective, emotion may be a form of knowledge as well the perceptual skills necessary to make sense of an object speeding through space (Bechara, Damasio, Tranel, & Damasio, 1997; Williams & Ericsson, 2005).

The Expertise in Urban Teaching Project thus takes a *sensationalist* perspective on knowledge. Perception and experience are understood to be organized by the mind and body into associative networks of ideas, images, and feeling (Anderson, 2007; Anderson & Bower, 1976; Damasio, 1994; Kintsch, 1988, 1998). The information in these networks is more than the small subset of understandings based on hypotheses that have not been falsified. Knowledge is the images, skills, and emotions that shape a person's choices.

This perspective on knowledge comes out of a theory of human cognition that is based on perception and associative networks. In Kintsch's (1998) words, this theory:

..differ(s) considerably from assumption about the representation of meaning in logic or in frameworks based on formal semantics. The mind in this view is not a well-structured, orderly system but is a little chaotic,

being based on perception and experience rather than on logic, being Aristotelian rather than Cartesian. (p. 5)

Thus while human beings can use reason to understand how the mind works, the mind is not viewed to be a logical system. Rather than continually analyzing what they are doing, human beings tend to respond to familiar situations in familiar ways. People pilot themselves through everyday challenges by relying on associations between perception and experience (Klein, 1998), rather than by engaging in deliberate, rational choice. Knowledge is defined as the information that guides human activity.

Theory of Expertise

The Expertise in Urban Teaching Project investigates how excellent, urban educators understand their lessons and students. It examines the shape of the classroom knowledge generated by a year of urban schoolwork and describes how this inner landscape varies in a sample of expert and beginning teachers. The study is designed around the assumption that teachers gain skill similar to other professionals. Classroom teaching is claimed to be what Chase and Simon (1979) describe as a semi-structured task: It is an activity that takes place in an environment with dependable regularities that reward extended commitments to learning. Playing chess is a semi-structured task, as is reading a book, playing basketball, and performing back surgery. All of these activities produce environments—such as a chess match, a page of text, or a surgical incision—where events are structured according to understandable rules and regularities. The human ability to respond to these fields of action and adapt to the demands of a particular task environment is the primary cause of skilled performance (Anderson, 1996; Bransford, Brown, & Cocking, 1999; Ericsson, Krampe, & Tesch-Romer, 1993; Ericsson & Lehmann, 1996; Kintsch, 1998).

Expert chess players, for instance, learn to organize the information they see on the chessboard into meaningful patterns that allow them to respond to their opponents' maneuvers with effective countermoves (Amidzic, Riehle, Fehr, Wienbruch, & Elbert, 2001; De Groot, 1948/1965). Many of the most important actions in a chess game take place in players' imaginations. Players sit in front of the game board and try to see the patterns produced by the chess pieces their *mind's eye*. They visualize and try out

potential moves based the current game position and imagine how their opponent might respond. Experts chess players differ from lesser skilled players primarily in what comes to mind when they imagine these choices (Charness, 1992; Gobet & Simon, 1996). Grandmasters visualize one set of possibilities when they look at a difficult chess position; lesser skilled players see another. The landscape of ideas and images that ‘pop’ into the best players’ minds tend to be more effective responses to the challenges they confront. Grandmasters’ thoughts have been tuned and organized by many years of practice and study (Charness, Krampe, & Mayr, 1996).

Experts use this practiced understanding to adapt to the demands of familiar environments. Rapid pattern recognition is a major support for expert performance in a wide variety of fields (Carter, Cushing, Sabers, Stein, & Berliner, 1987; Norman, Coblenz, Brooks, & Babcock, 1992; Rosch, Mervis, Grey, Johnson, & Boyes-Braem, 1976; Tanaka & Taylor, 1991). Dermatologists learn to see skin cancers. Ornithologists learn to see yellow-tailed swallows. Given sufficient practice, experts within these fields are able to notice and classify important pieces of data more quickly and accurately than novices.

Quick pattern recognition, however, is not the only source of experts’ performance advantage when they work in fields with clear regularities that are stable over time (Ericsson & Charness, 1994; Glaser & Chi, 1988). In history and physics, for instance, experts learn to manage the meta-cognitive demands produced by extended sessions of inquiry. They learn not only how to apply the facts and theories of their specialties, but how to investigate complex challenges within their fields (Chi, Glaser, & Rees, 1982; Hunt, 1989; Larkin, McDermott, Simon, & Simon, 1990; Wineburg, 1991; 1998). Expert physicists and historians learn how to conceptualize the problems that confront them and construct worthwhile preliminary lines of investigation. This learned understanding guides the progress of their inquiry as they bring different forms of evidence to bear. These experts can recognize promising points of investigation and dismiss unfruitful solution paths. They are able make better judgments about the relevance of what they have just learned, and they understand how to use this stream of information more skillfully than people who lack experts’ years of practice and study.

Expertise exists in people’s legs, hands, fingers, and muscles as well as their

minds. Strength, speed, and flexibility are forms of scholarship (Ericsson & Lehmann, 1996; Williams & Ericsson, 2005). Success in athletics and other physically demanding tasks is produced primarily by extended effort and learning, rather than genetic gifts. What separates the best basketball players, swimmers, and dancers from other people with the same height is, for the most part, experts' opportunity to learn and their commitment to improving their performance (Charness et al., 1996; Ericsson, 1998; Starkes, 2000).

Expertise in Classroom Teaching

The Expertise in Urban Teaching Project is based on a research-based theory of skilled teaching performance. Classrooms are viewed as systems of activities that surround and regulate participants' behavior (Bossert, 1978; Gump, 1967). They are, to use a term of Simon's (1996), *artificial*. Classroom systems do not occur naturally without educators' agency and decision-making. As much research shows, teachers' knowledge and skill matter (Brophy, 1988; Doyle & Carter, 1987; Hamre & Pianta, 2005; Hanushek, Kain, O'Brian, & Rivkin, 2005; Nye, Konstantopoulos, & Hedges, 2004; Rowan, Correnti, & Miller, 2002). Educators' ability to organize the big, booming confusion of a room crowded with children varies. Some teachers have learned to organize classroom activities in ways that strongly benefit their students and create energizing and caring work places; other educators do not understand how to organize their classrooms in ways that allow them to achieve these goals. Further, educators' knowledge of the subjects they teach and how to deliver this content to children varies (e. g. Hill, Rowan, & Ball, 2005; Lampert & Ball, 1998; Leinhardt, Weidman, & Hammond, 1987; Shulman, 1986). It is not enough to know the mathematics necessary to teach fractions, teachers need to know how to craft lessons about this subject matter and understand how to evaluate their students' learning.

The Expertise in Urban Teaching Project builds on the work of Pianta and his colleagues on classroom quality (see, especially, Justice, Mashburn, Hamre, & Pianta, 2008; La Paro, Pianta, & Stuhlman, 2004; Mashburn et al., 2008) and assumes that skilled teachers construct the everyday life of their classrooms out of three inter-related systems. They are a) the professional practice routines that orchestrate the activity of

teachers' classrooms, b) the relationships that develop within these social structures, c) the classroom's *information-flow*: the content-matter, pedagogical content knowledge, language, and feedback that move through this organization. Beyond these technical dimensions, the Expertise in Urban Teaching Project makes an explicit place for the moral dimension of urban teachers' work as caregivers and advocates.

a. Routines

Professional practice routines are viewed as the primary structures that guide teachers and students' actions across time and space (e. g. Doyle, 1979; Rimm-Kaufman, La Paro, Downer, & Pianta, 2005; Taylor, Person, Clark, & Walpole, 2000). Observational studies of classrooms show that many of the routines that organize classroom life are established quite early in the school year, sometimes on the first day (Bohn, Roehrig, & Pressley, 2004; Evertson & Emmer, 1982; Leinhardt & Greeno, 1986; Leinhardt et al., 1987). Barnes and colleagues in the case studies of the Study of Instructional Improvement (Forthcoming) make routines the primary unit of analysis for their longitudinal investigation of educational change. They argue that most of the activities in the school systems they study can be understood as organized into nested sets of routines that range from the systems of activities teachers employ to teach reading and writing, to principals and coaches' work to lead instruction, to the work of central office staff to guide and evaluate the learning effort.

Routines are defined, with Feldman and Pentland's (2003), as "repetitive, recognizable patterns of interdependent actions involving multiple actors." These recurring events are not automatic, mindless responses to familiar signals. Routines, instead, are collective performances that require some level of improvisation and learning to enact (e. g. Becker, 2004, 2005; Dutton, Worline, Frost, & Lilius, 2006; Feldman & Rafaeli, 2002). Academic hiring is a routine with that includes component structures such as portfolio review, job talk, candidate selection, and negotiation that organize the activities of deans, faculty, and job seekers. The recurring activities that give an organization the means to respond to trauma may also be classified as routines. What matters is not that each component activity is performed in the same way, at the same time, but that there is common *grammar of action* that members use to guide their

choices in response to the familiar demands of the moment (Pentland & Reuter, 1994).

For classroom teaching, this analysis implies the critical unit of analysis is not individual lessons, but the structure of routines that organize the teaching of major subject matter. It is the system that organizes the stream of classroom interactions, rather than an individual lesson produced upon a specific occasion, that is the locus of teachers' expertise. The same set of instructional routines might generate different kinds of lessons on different days depending on the needs of the moment (Raudenbush, 2008). Rowan, Camburn and Correnti's (2004) study of the enacted curriculum shows it might take as many as 20 and 30 separate observations to map the interactions that organize a particular classroom space.

In many ways, this perspective on routines looks back to Goffman's (1959; 1967; 1983) classic works in micro-sociology. Rather than viewing the assembly line as a metaphor for the recurring performances that structure modern life, Goffman's writings examine the highly skilled activities of role players such as comedians, conmen, and funeral directors. In the definition published in The Presentation of Self in Everyday Life, a routine is described as a "pre-established pattern of action which is unfolded during a performance and which may be presented or played through on other occasions." (p. 16). Routines, in this view, may require skill to carry out and generate performances with elements of uncertainty. The conman can never be sure the mark will be duped. The funeral director cannot fully control the actions of the deceased's friends and family. Much of Goffman's work focuses on the experience of individuals working within systems of routines that operate with different levels of risk and reward. What the Expertise in Urban Teaching Project seeks to add to this body of work is a strong focus on the role research-based knowledge plays in the construction of professional practice routines and the way knowledge influences performers' thinking as they work within these structures.

b. Relationships

Classrooms are more than crowded dance parties where members move from one instructional choreography to another. The relationships between teachers and students should be viewed as a major feature of the architecture of a particular classroom space.

Emotional connections between teachers and students have a critical impact on children's achievement, behavior, and emotional well being (e. g. Hamre & Pianta, 2001; Hughes, Cavell, & Willson, 2001; Perry, Donohue, & Weinstein, 2007; Silver, Measelle, Armstrong, & Essex, 2005). Friendships, rivalries, and other bonds play a central role in children's engagement with school learning (Furrer & Skinner, 2003; Ladd, 1990; Pianta & Stuhlman, 2004; Wentzel, 1998).

The primary pathway that relationships impact student learning is through improved academic engagement. A variety of studies shows that students who experience a warm and accepting relationship with their teachers are more willing to comply with classroom rules and are more motivated to meet their teacher's expectations. The increased effort generated by this emotional engagement tends to lead to greater achievement gains (Brophy, 1983; Furrer & Skinner, 2003; Hughes, Lou, Kwok, & Loyd, 2008). Bonds between teachers and students are a particularly important support for students placed at risk (e. g. Hamre & Pianta, 2005; Hughes & Kwok, 2007; Kleinfeld, 1975). Unless vulnerable children believe their teacher cares for them, they tend to have difficulty learning in school.

c. Information-flow: Content-matter, pedagogical content knowledge, language, and feedback

Classrooms process information (Yinger & Hendricks-Lee, 1993): They are organizations that move ideas and other forms of content from teachers to students, from books to students, from students to teachers, and from students to students. All of these information transactions shape the understandings members generate at a particular point in time. High quality instruction is a function of both the content shared during a particular learning activity and the methods used to deliver it (Dolezal, Welsh, Pressley, & Vincent, 2003; Newmann, Marks, & Gamoran, 1996; Porter, 2002; Snow, Griffin, & Burns, 2005; Stigler & Hiebert, 1999). Skills are a form of content as are the procedures necessary to achieve a goal (Anderson, 2007; Kintsch, 1998; Shulman, 1987).

Pedagogical content knowledge is the understandings that enable teachers to plan instruction and effectively teach school subjects. As I will discuss, in the conception of teaching outlined in my thesis, pedagogical content knowledge is both a standardized

form of knowledge that can be learned and measured (e. g. Ball, Lubienski, & Mewborn, 2001; Hill et al., 2005; McCutchen & Berninger, 1999) and the network of memories created when classroom teachers put this knowledge to use. Knowing the content connected to school subjects, knowing the best ways to teach this material, knowing what is easy for young people to learn, knowing children's common misconceptions, and knowing how to evaluate students' growth both in-the-moment and over time are critical dimensions of skilled teaching practice. One of the major aims of the Expertise in Urban Teaching Project is to investigate how this standardized knowledge of subject matter and pedagogy influences the landscape of memories generated by teachers' work over the course of the school year. As will be discussed, the project is designed to compare the remembered work experience of teachers who have passed a nationally recognized assessment of their pedagogy and practice—National Board Certification—with first year teachers who had never previously managed a classroom as a full time job.

Once the content is chosen, the lesson planned, and the day's work begun teachers spend much of their time talking to students and responding to children's remarks and writings. One of the more robust findings of the literature of teacher effectiveness is that teachers' academic proficiency, especially their verbal ability as measured by standardized forms of assessment rather than degrees conferred, tends to be correlated with achievement gains (Goldhaber, 2003; Rowan, 2004). Teachers with high levels of verbal ability seem to be able to press more academic growth out of their interactions with children compared to similar professionals with lower levels of understanding. Teachers' words and ideas, similar to parents' words and ideas, matter. The system of language that grows up in a classroom may influence children's achievement growth (e. g. Huttenlocher, Vasilyeva, Cymerman, & Levine, 2002; Justice et al., 2008; Klibanoff, Levine, Huttenlocher, Vasilyeva, & Hedges, 2006). Hutchenlocher and her colleagues at the University of Chicago show that the quantity of words shared in particular classroom around a particular subject matter—what the researchers describe as the amount of 'language input'—influences student achievement. Richer classroom environments with higher levels of verbal input seem to support higher levels of academic growth. Klibanoff et. al. (2006) shows that these input effects can be found when researchers investigate the amount of mathematical language pressed into classrooms: higher levels of math input

tend to correlate with higher mathematics achievement.

Edelman and Waterfall's (2007) 'Physics of Life Review' creates a framework for these studies. This review contrasts theories of language acquisition organized around innate rules, such as Chomsky's, with current, empirical work which views language acquisition as driven by environmental inputs and participation (e. g. Entwistle, Alexander, & Olsen, 1997; Hart & Risley, 1995; Huttenlocher et al., 2002; Vasilyeva, Waterfall, & Huttenlocher, 2008). In this theory, differences in adults' language abilities are primarily due to environmental factors. Most high-level cognition is claimed to be the result of expertise.

It is not only what teacher's say that is important, but how they say it. A variety of studies emphasize the importance of teachers' use of language and describe the benefits students receive from frequent, well-tuned, verbal interactions with adults (e.g. Justice et al., 2008; Vasilyeva, Huttenlocher, & Waterfall, 2006; Wasik, Bond, & Hindman, 2006). Regularly asking children open-ended questions, summarizing what young people say, and expanding upon their ideas tends to accelerate their language growth. Routines for classroom discussion; shared methods for asking and answering questions; and regular opportunities for storytelling and elaboration all can raise the quality of the system of language that enfolds a particular classroom (Applebee, Langer, Nystrand, & Gamoran, 2003; Baker & Nelson, 1984; Massey, Pence, Justice, & Bowles, 2008; Whitehurst et al., 1988).

One critical area where these three classroom systems—routines, relationships, and information-flow—come together is in the provision of feedback by teachers to students. In skilled educators' classrooms, the activities teachers engage in as they assess their students are knitted into classroom routines that generate up-to-date information about students' progress (e. g. Paredes Scribner, 1999; Pellegrino, Chudowsky, & Glaser, 2001; Shepard, 2000). Regular monitoring of student learning within these routines should not be seen as a discrete act, but as a form of what Weick and Roberts (1993) describe as "mindfulness." Expert educators continually update (Ericsson & Kintsch, 1995) their understanding of their students needs and interests by carefully pulling the facts they have available into representations that enable teachers to understand what they know and what they need to know about the children they serve.

Skilled teachers use assessment routines to analyze students' strengths and weaknesses. They constantly seek to be aware of students' responses to their lessons and alter their efforts based on this changing understanding. In the words of Perry et al. (2007):

It appears that when teachers are more in tune with students as individuals (i.e., aware of what skills they have, what they are interested in, etc.), and when they then use this information to deliver instruction that is in some ways suited to individual needs, more growth is possible for more children. (p. 290)

The ability to provide feedback to students and coach children towards a particular instruction goal is identified as a critical component of teachers' expertise in studies by both Taylor et. al. (2000) and Wharton-McDonald, Pressley, & Hampston (1998). As much research shows (e. g. Bransford et al., 1999; Ericsson et al., 1993; Feldon, 2007), it is not easy for human beings to respond to feedback and change the way they think or act. Motivating children to improve their performance and alter what they know and are able to do seems to require an emotional connection, especially for young persons placed at risk (Hamre & Pianta, 2005; Hughes et al., 2008). Effective feedback thus requires the resources generated by high quality classroom routines, relationships, content, and instructional decision-making as well as a teacher with the skill necessary to deploy those assets as the school day unfolds.

d. Othermothering

Expertise in teaching, however, should not be seen as solely a matter of technical skill. Excellence in professional work requires moral commitment (Ball & Wilson, 1996; Benner, Hooper-Kyriakidis, & Stannard, 1999; Noddings, 2000). The obligation to do what is right and just for the people under one's care weighs especially heavy for professionals who serve vulnerable adults and children. Poverty in America is shocking. The suffering of children living within the systems of injustice created by the nation's long history racism and other forms of exploitation does not stop once young people walk through the schoolhouse door. Instead, children's struggles within these systems of oppression produce daily dilemmas for the educators' who put them under their care (e. g. Hankins, 1998; Kleinfeld, 1992).

Teachers who seek to benefit students who suffer from the pain of racism and poverty often must act out of commitments that carry them beyond a narrow vision of their role. Excellent teachers of children in high poverty U. S. schools act as what Collins (1991) and Irvine (Irvine, 2002) describe as *othermothers*. These dedicated professionals continually advocate for the children they serve. They teach moral and ethical lessons as well as reading and writing. They love their students fiercely and constantly demand young people do their best (Foster, 1997; Ware, 2006).

Ladson-Billings (1994) begins her monograph on teachers' expertise in high poverty, urban classrooms, The Dream-Keepers, with excerpts from an oral history study that asked African-Americans adults to speak about the teachers who mattered most to them in their childhood. The reader is impressed not only by the intense commitment to school learning—reading, writing, social studies, math and science—that runs through these interview excerpts, but also the high levels of conflict. Excellent teachers of African American students discipline children, argue with parents, and tell their administrators that what they are doing is wrong. The stresses generated by U. S. racism are so severe, caring teachers seem to be required to deliver harsh jolts to push their students to live according to their communities' highest aspirations. Students in Foster's (Foster, 1991) study of exemplary African American teachers, for instance, told the author they were "proud of their teacher's meanness." (P. 56).

This conflict, however, springs deep connections with young people. Skilled teachers of students placed at risk respect young persons both as learners and as members of communities whose funds of knowledge are worthwhile assets to students' intellectual and moral growth (Doherty, Hillberg, Pinal, & Tharp, 2003; Gonzales et al., 1995; Ladson-Billings, 2001; Moll, Armanti, Nett, & Gonzales, 1992). Accomplished educators connect school learning to relevant local knowledge and celebrate the resilience and strength of young people's home cultures.

Classroom Knowledge

As will be discussed, the Expertise in Urban Teaching Project uses verbal data collected from end of the school year teacher interviews to study how classroom knowledge varies in a sample of expert and beginning teachers. The study attempts to

investigate how a year of urban schoolwork shapes the understanding of teachers with different levels of experience and pedagogical knowledge. This research design is constructed around the assumption that that teachers' classroom knowledge is similar to, and functions like, physicians' *clinical knowledge* (Boshuizen & Schmidt, 1992; de Bruin, Schmidt, & Rikers, 2006; Rikers, Schmidt, & Moulaert, 2005). When physicians diagnose cases within their specialty, what comes to their minds is a landscape of well-remembered events organized around memories of their work. Physicians see diseases or traumas and make sense of their current case, similar to the way that chessmasters see and respond to familiar chess positions (Norman & Brooks, 1997; Patel, Arocha, & Kaufman, 1994). *Basic science knowledge*—the understandings physicians gain from years of studying physiology, anatomy, and microbiology—is rarely verbalized when experts think-aloud as they diagnose cases in their specialty (Patel, Evans, & Groen, 1989). Expert physicians are guided by the memories of the cases they have diagnosed and the feedback they have received from their work, rather than by explicit references to the lectures they studied in medical school. Boshuizen, Schmidt, and their colleagues (Rikers et al., 2005; Van de Weil, Boshuizen, & Schmidt, 2000) show the knowledge physicians' gain from their years of academic study is encapsulated within a landscape of case-based memories. Formal knowledge thus becomes linked to memories of particular cases. Theory becomes part of the intuitive understanding that guides expert physicians' work (Kintsch, 1998).

The Expertise in Urban Teaching Project argues that teachers' classroom knowledge has a similar shape in their minds. When teachers plan their lessons and reflect on their schoolwork, they think in cases and draw on a landscape of familiar mental and embodied images that supports their decision-making process. Educators create representations of their students and classrooms they can see, touch, hear, and feel (e. g. Connelly & Clandinin, 1999; Doyle & Carter, 2003; Lampert & Ball, 1998; Yinger, 1980). When teachers plan their lesson plans on Sunday afternoon, they might imagine how a specific student might respond to a science lesson. Educators might visualize how a particular math problem looks on the chalkboard and imagine the errors their children might make when they attempt to solve it. They might try out different ways of motivating students who are not focusing on their schoolwork. In Connelly and Clandinin

(1999)'s words;

We came to see teacher knowledge in terms of narrative life history, as storied life-compositions. A landscape metaphor is particularly well suited for our purpose. It allows us to talk about space, place, and time. Furthermore it has the sense of expansiveness and possibility of being filled with diverse people, things, and events in different relationships. Understanding professional knowledge as comprising a landscape calls for a notion of professional knowledge as composed of a wide variety of components and influenced by a wide variety of people, places, and things. Because we see the professional landscape as being composed of relationships among people, places and things we see it as both an intellectual and a moral landscape.... We view the landscape as narratively constructed, as having a history with moral, emotional and aesthetic dimensions. We see it as storied. To enter a professional knowledge landscape is to enter a place of story. (pp. 7-8)

The Expertise in Urban Teaching Project assumes the knowledge expert teachers gain through years of practice, reflection, and study (e. g. Ball et al., 2001; Pressley, Roehrig, Bogner, Raphael, & Dolezal, 2002; Shulman, 1987; Snow et al., 2005) is not lost when educators engage in this scenario-based reasoning process. Similar to physicians (Kintsch, 1998; Rikers et al., 2005), formal, academic knowledge is encapsulated in the landscape of familiar people and events expert teachers use to understand their schoolwork. Expert teachers' many years of study and practice thus shapes the system of classroom activities they visualize into forms sculpted by their daily labor (Hankins, 1998; Lampert & Ball, 1998).

In this account, teachers' professional knowledge landscapes are an example of how the human cognitive system adapts to the demands of a structured work environment. Because teachers' work is organized around routines, relationships, content-matter, moral commitment, and interactive, pedagogically based decision-making educators see and feel these things when they reflect on their schoolwork. Expert teachers' thoughts are shaped by classrooms, similar to the way grandmasters thoughts are shaped by chessboards.

Building Classroom Knowledge

Classroom teaching is more than an imaginative practice; it is physical labor. Problems and solutions do not solely exist in teachers' minds; they are constructed from

the activities of bodies moving through space. The ability to manage the classroom is a critical aspect of teachers' work (Doyle, 1979; Rimm-Kaufman et al., 2005). Education researchers use metaphors such as orchestrators, choreographers, and lead dancers to emphasize the skill required to create the highly patterned movements that organize expert teachers' classrooms. Observers who walk into these workplaces in the last half of the year, describe communities choreographed so skillfully, children almost dance through reading, writing, mathematics, social studies and science (Leinhardt & Greeno, 1986; Taylor et al., 2000; Wharton-McDonald et al., 1998). Less skillful educators lack the knowledge necessary to plan these choreographies and to carry them out in their daily work. Their plans are less effective, their ability to perform them less skilled, and their classroom communities more conflicted (Brophy, 1996; Kounin, 1970; Leinhardt, 1988; Moskowitz & Hayman, 1974, 1976)

Classroom knowledge is created by successful performance, as well as by the study necessary to organize a particular educational choreography. Figure 1 (below) describes how expert teachers create the classroom knowledge that guides their performance over the school year. The diagram illustrates how expert performance builds on itself to create highly choreographed classroom communities. The first part of the diagram shows that before the school year starts, classroom knowledge exists as the plans and mental models teachers use visualize their schoolwork and try out the policies and procedures they might use to organize their lessons. As the year unfolds, the diagram shows how educators' experience becomes integrated into the what Kintsch and colleagues (Butcher & Kintsch, 2004; Kintsch & Greeno, 1985; van Dijk & Kintsch, 1983) describe as *situation models*. In this conception of educators' work, the mental and embodied landscapes that teachers use to understand who their students are, and how their classrooms function should be seen as analogous to what cognitive researchers describe as situational awareness (e. g. Doane, Sohn, & Jodlowski, 2004; Durson & Gronlund, 1999; Klein, 1998).

Figure 2 illustrates how beginners' less effective plans and performances shape their labor. First year teachers lack a deep knowledge of children and instruction (Carter, Sabers, Cushing, Pinnegar, & Berliner, 1987; Ladson-Billings, 1999; Nemser, 1983; Snow, 2001). As a result, beginners tend to have difficulties responding to the demands

of the opening days of school. Instead of organizing classroom management and instructional systems into effective routines for living and learning, beginners tend to make flawed choices that create confusion and conflict (Borko & Livingston, 1989; Leinhardt et al., 1987).

Beginning teachers might misjudge the meaning of their children's actions and make poor decisions based on this lack of understanding. They might craft lessons that bore and bewilder their students. First year teachers might make mistakes about the subjects they deliver or fail to communicate this content matter effectively because they do not understand what they teach, how children learn, or appreciate students' cultural backgrounds (e.g. Ball, 1990; Ladson-Billings, 2001; Moll et al., 1992; Nemser, 1983; Snow et al., 2005; Zeichner & Hoeft, 1996). These flawed choices matter. Classrooms are organized around history driven processes. If students feel confused, frustrated, and disconnected one day, children will tend to feel the same way the next.

Unsuccessful efforts to manage the opening days of school can cause problems throughout the year (Cameron, Connor, & Morrison, 2005; Evertson, Emmer, Sanford, & Clements, 1983; Yates & Yates, 1990). A job begun with hope and optimism in September; may turn into a difficult and arduous labor before October begins. Beginners may spend hours planning lessons that flop. They may spend days struggling to manage discipline problems they can't resolve. In Kauffman et. al.'s (2002) words, first year teachers may find themselves "lost at sea without a map". Their schoolwork might make them angry, exhausted, and sad.

For many beginners, these early difficulties are temporary. As the school year progresses, first year teachers learn on the job and begin to perform more skillfully (Ball & Cohen, 1999; Grossman, 1990; Huberman, 1989). Students respond to their teacher's lessons. The quality of children's written work begins to improve. Discipline problems become less troubling. There are moments when the class comes together and beginners find themselves "really teaching." However, the gap between beginners' expectations and their performance tends to remain large (Veenman, 1984). First year teachers would like to craft better lessons and improve their relationships with the students, but they are not sure how.

Classroom knowledge is generated by both expert and beginning teachers'

performances. Experts visualize memories shaped by realistic plans, skilled choreography, and effective pedagogically based decision-making. Beginners imagine an alternate reality, but the images shaped by their work experience are no less vivid.

**Figure 1: Heuristic Representation of the Cycle of Planning and Interactive Teaching
Produced by Expert Teachers.**

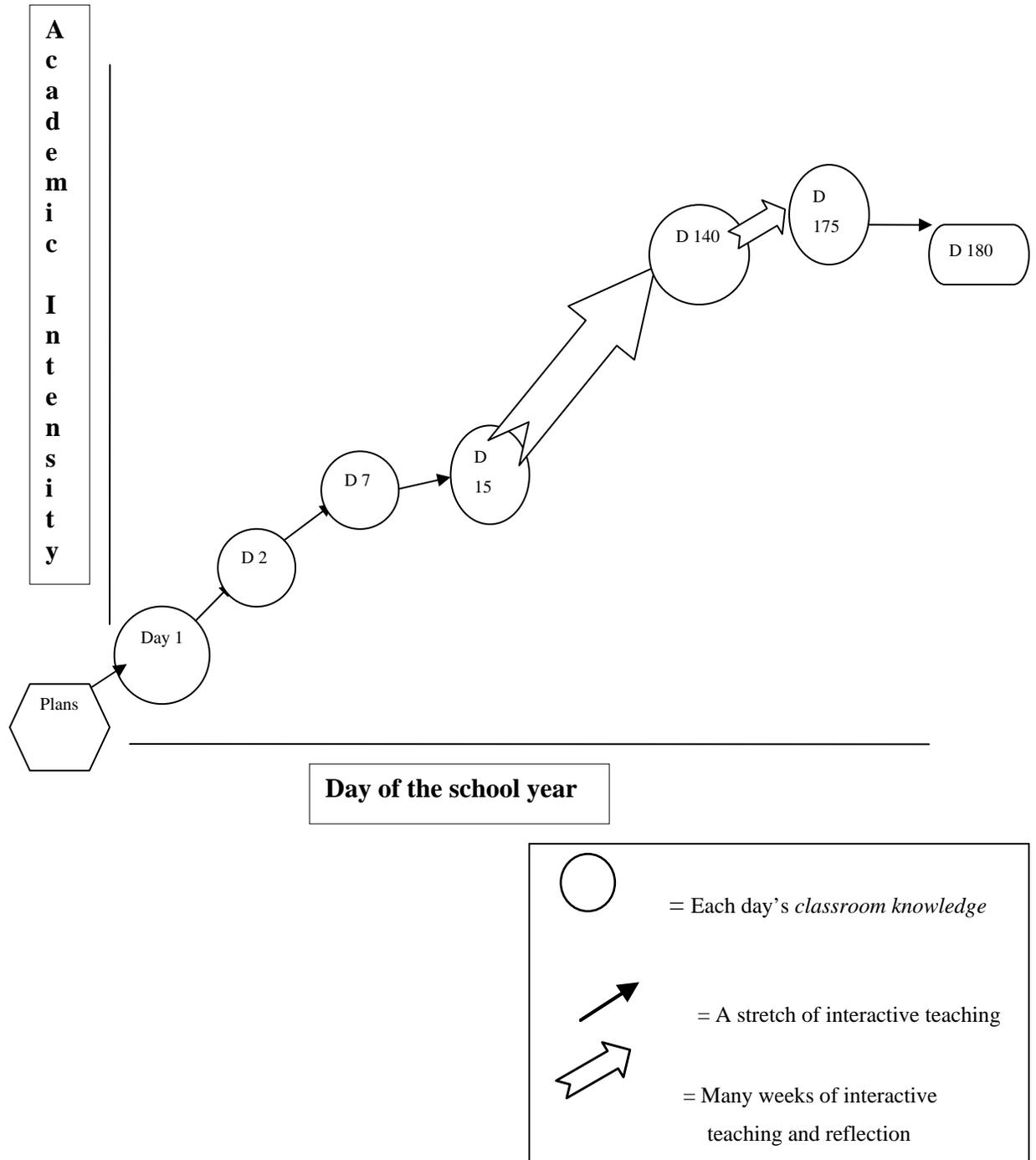
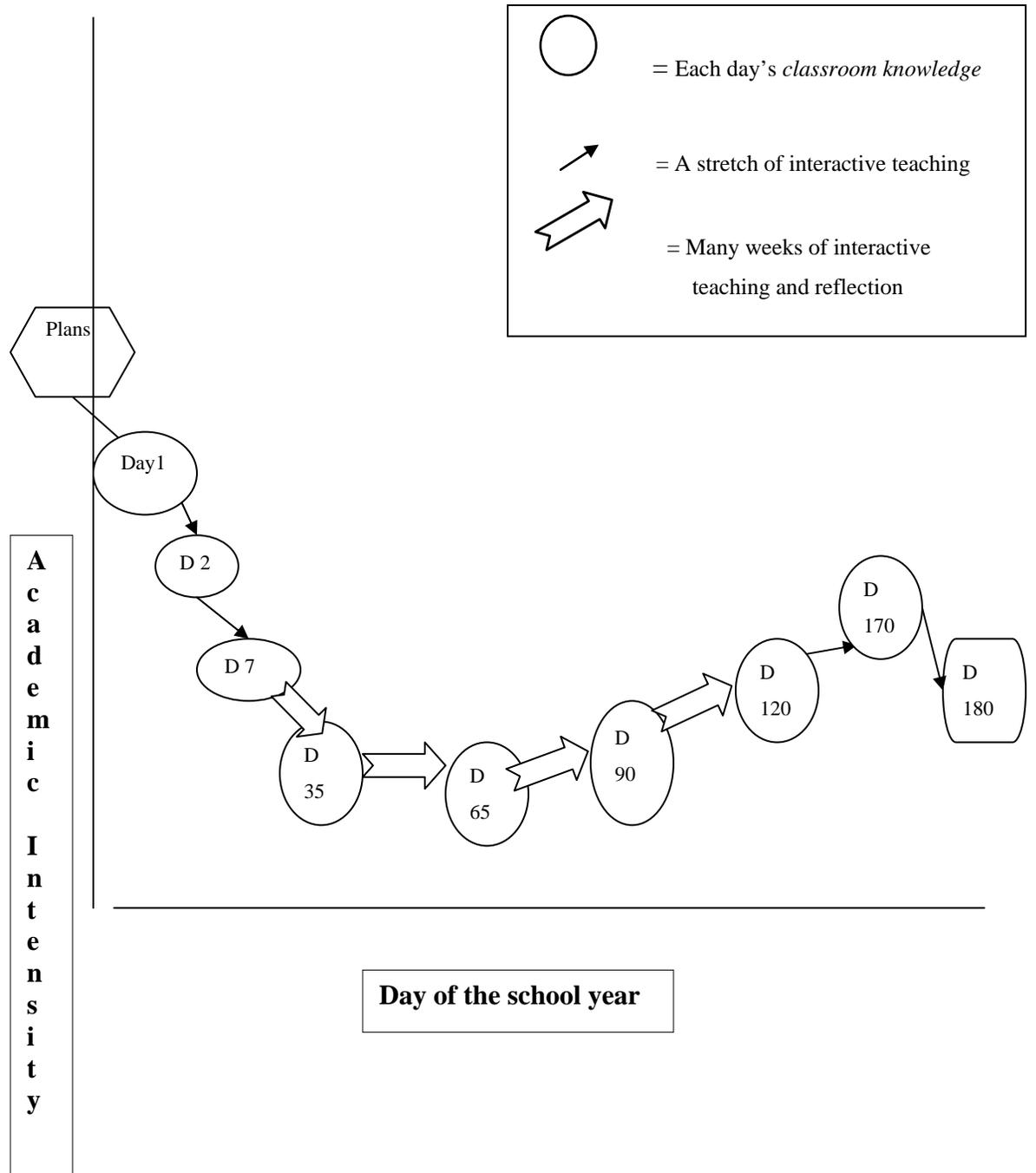


Figure 2: Heuristic Representation of the Cycle of Planning and Interactive Teaching



Participant Selection and Research Design

a. Selection

The goal of my research design was to study how classroom knowledge varied between teachers with different levels of pedagogical knowledge and experience. To that end, I used National Board Certification to choose the experts in my study because that assessment system has been validated by many independent research studies (Amrein-Beardsley, 2008; Goldhaber & Anthony, 2006; Hakel, Koenig, & Elliott, 2008; Hattie, Clinton, Thompson, & Schmidt-Davis, 1996; Vandevort, Amrein-Beardsley, & Berliner, 2004). These studies show that the students who learn in classrooms staffed by Board Certified Teachers tend to learn a faster rate than students who attend similar classrooms whose teachers did not pass the test. Over the course of a school year, most studies show that students in classrooms where the teacher was certified by NBPTS tend to gain about a month's achievement growth over students in classrooms where the teacher failed to pass the National Boards' assessments and was not certified.

I further required that all the veteran educators in my sample had taught in urban schools for at least seven years, and that they were recommended for the study by the head of one of Chicago's most prestigious NBPTS preparation programs, the Chicago Quest Center's Nurturing Teacher Leadership Program (Nighswander, Cherkasky-Davis, & Bearden, 2001). This selection process allows me to claim the 7 accomplished teachers in my study are able to teach urban classrooms in a manner that meets national standards of excellence.

One of the major advances of the National Board Certification Process is that it is based on an explicit understanding of what teachers should know and be able to do (National Board of Professional Teaching Standards, 2004). Educators who elect to become candidates are required to prove that they understand the subjects they teach and the pedagogy necessary to teach this content to children. Candidates are also required to demonstrate that they can use this knowledge in their own classrooms by videotaping their lessons and creating portfolios of the work their students produce during these lessons. As a result of these assessments, I can claim that the National Board Certified

teachers in my research sample have learned from the experience of spending their careers in urban schools and from the extensive academic study the NBPTS assessment process demands. Their schoolwork is shaped not only by the local contingencies of a particular time and place (Elmore, 2002), but by the formal knowledge of teaching produced by an international research community that has spent hundreds of millions of dollars in an almost century-long effort to improve what teachers know and are able to do.

National Board Certification allows me to examine teachers' expertise in a much more controlled fashion than previous researchers. Instead of relying on administrators' reports of effectiveness or collecting data on their students' performance on standardized tests that do not always measure a unified set of skills, the National Board Certification process gives me the means to select teachers for my study using a theory-based assessment.

The beginning teachers were selected from the population of first year teachers in the Chicago Public Schools with snowball sampling techniques (Atkinson & Flint, 2001). While their experiences during their first year of schoolwork varied, as I will discuss, their induction into urban teaching was in no way outside that discussed in many published studies of beginning teachers' first year in school (e. g. Codell, 1999; Coggshall, 2006; Herbst, 1989; Roehrig, Pressley, & Talotta, 2002; Ryan, 1970, 1980).

b. Design

I lacked the resources necessary to investigate the growth and development of teachers' classroom knowledge across the school year. I could not measure the creation, growth, and development of the systems of routines, relationships, and content-matter that organize teachers and students' lives. As I will discuss in my methods section, I did not have the funds to shadow the expert and beginning teachers in my study and collect observational data about their work from the first day of school until the year's end. Instead, I chose to study teachers' classroom knowledge and sampled the memories that guided teachers' work using ethnographic interviewing techniques (Biklen, 1995; Czarniawska, 2004; Weiss, 1995). I asked 7 expert and 5 beginning teachers to tell stories about their work once school had ended, within two weeks of the last day of school. All

teachers were given an interview guide with the same five questions. The first two items were adapted from Benner's (1984; 1996) studies of expertise:

- Please tell a story about a student, or a group of students, for whom your teaching made a difference during the 2003-2004 school year.
- Please tell a story about a unit, or series of lessons, where you made a difference during the 2003-2004 year.

Once the educators shared their initial response to these questions and started telling stories, I asked them to expand their answers in keeping with Weiss' (1995) interviewing techniques.

The goal of interviews was to encourage teachers to move from one remembered incident to another in order to sample the case-based knowledge they used to manage their classrooms. During our interview sessions, the teachers spoke, and I mostly listened. My goal as an interviewer was to help teachers to talk about their lessons in their own words and in their own way. I made these intentions explicit in the interview guide I sent to the teachers when I asked them to participate in the Expertise in Urban Teaching Project. I wrote:

My goal as interviewer is to ask you to describe specific events and incidents...Please don't worry about telling your stories in the specific order that they happened. My goal is for you to feel relaxed enough to speak naturally about the work you've done. Feel free to move forward and backwards in time and to come back to incidents that you've brought up before. I hope you will feel comfortable enough to tell your story to me in the same way you would tell it to teacher you trust.

During their interview sessions, whenever teachers discussed their students or their lessons, I asked them to fill in the details about a particular incident and/or clarify how a particular classroom activity worked. All teachers spoke for at least 90 minutes.

I asked the teachers to tell stories because narrative is the principal form of thought human beings use to understand social reality (Baumeister & Newman, 1994; Brunner, 1986; Pennington & Hastie, 1993). Stories allow people to organize their experience working with other people into causal accounts that help them predict if a particular plan of action will succeed or fail. Narrative allows people to organize visual, auditory, and emotional memories into coherent accounts of past and potential actions (Klein, 1998). In Benner's (1984) words

...narratives provide practical accounts of the logic of practice. Narratives demonstrate the ways that ethical, clinical, and scientific reasoning are linked in actual practice. They allow [people] to prepare for actual temporalities and ambiguities of practice, complete with the inherent contingencies and imperfections. Feeling the risks and ambiguities as well as the possibilities in actual clinical situations allows [people] to imagine better possibilities while preparing for current realities. (p. 21)

Stories reveal the way personal and formal knowledge combine into the intuitive and scenario-based reasoning processes that guide professional work.

As many researchers emphasize, (e. g. Connelly & Clandinin, 1999; Doyle & Carter, 2003; Van Manen, 1994) narrative is central to teachers' work. Teachers tell stories when they plan, they live these stories when they teach, and they make sense of their work experience by creating narratives about those happenings. By asking teachers to tell stories at the end of the year, my research design taps directly into the classroom knowledge they use to plan their lessons and understand their students. While language is not same as the images that come to people's minds when they plan or reflect upon a course of action, narrative can be used, as Kintsch (1998) emphasizes, to represent this inner landscape. The interview data I collected allows me, to paraphrase Anderson and Schooler (1991), to examine the reflection of the environment constructed in teachers' memories from a year of urban schoolwork.

My research design is an ethnographic variation of a common experimental design that has been used in hundreds of published research studies (For reviews see: Bransford et al., 1999; Ericsson & Charness, 1994; Ericsson & Lehmann, 1996; Hogan, Rabinowitz, & Cravan, 2003). As Ericsson and Smith (1991) recommend, I asked experts who possess a measurable performance advantage over other practitioners in their field to verbalize their efforts to perform one of the critical tasks of their profession. I then compared the experts' accounts with those of beginners. However, instead of asking teachers to verbalize their performance on laboratory tasks, I asked them to reflect on their teaching over the entire 2003-2004 school year.

I do not claim that the correspondence between the stories teachers tell and the classroom environments they experience is perfect, nor do I claim that the narratives I collected are not susceptible to measurement error. However, I do claim that the stories I transcribed may be analyzed to create hypotheses that can be tested by other research

methods (e. g. Creswell, 2003; Tashakkori & Teddlie, 2003). My study marks the beginning of a long program of research: It is not the final word. By studying samples of what teachers think and feel, I hope to create theories of how knowledge changes professional performance that will guide the efforts of educators, administrators, and instructional designers who strive to make a difference in the real world of urban classrooms.

References

- Amidzic, O., Riehle, H. J., Fehr, T., Wienbruch, C., & Elbert, T. (2001). Pattern of focal theta-bursts in chess players. *Nature*, *412*(603).
- Amrein-Beardsley, A. (2008). Methodological concerns about the education value-added assessment system. *Educational Researcher*, *37*(2), 65.
- Anderson, J. R. (1996). ACT: A simple theory of complex cognition: Award for Distinguished Scientific Contributions Address. *American Psychologist*, *51*(4), 355-365.
- Anderson, J. R. (2007). *How can the human mind occur in the physical universe?* New York: Oxford University Press.
- Anderson, J. R., & Bower. (1976). *Human associative memory*. New York: John Wiley.
- Anderson, J. R., & Schooler, L. J. (1991). Reflections of the environment in memory. *Psychological Science*, *2*, 396-408.
- Applebee, A. N., Langer, J., Nystrand, M., & Gamoran, A. (2003). Discussion-based approaches to developing understanding: Classroom instruction and student performance in middle and high school English. *American Educational Research Journal*, *40*, 685-730.
- Atkinson, R., & Flint, J. (2001). *Accessing hidden and hard-to-read populations: snowball research strategies* (Social Research Update Issue 33). Guildford, UK: Department of Sociology, University of Surrey.
- Baker, N., D., & Nelson, K. E. (1984). Recasting and related conversational techniques for triggering syntactic advances by young children. *First Language*, *5*(3-22).
- Ball, D. L. (1990). Breaking with experience in learning to teach mathematics: The role of a preservice methods course. *For the Learning of Mathematics*, *10*(2), 10-16.
- Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practitioners: Towards a practice-based theory of professional education. In L. Darling-Hamond & G. Sykes (Eds.), *Teaching as the learning profession*. New York: Jossey-Bass.
- Ball, D. L., Lubienski, S. T., & Mewborn, D. S. (2001). Research on teaching mathematics: The unsolved problem of teachers' mathematical knowledge. In V. Richardsen (Ed.), *Handbook of Research on Teaching* (4th ed.). Washington, D. C.: American Educational Research Association.
- Ball, D. L., & Wilson, S. M. (1996). Integrity in teaching: Recognizing the fusion of the moral and intellectual. *American Educational Research Journal*, *33*(1), 155-192.
- Baumeister, R. F., & Newman, L. S. (1994). How stories make sense of personal experiences: Motives that shape autobiographical narratives. *Personality and Social Psychology Bulletin*, *20*(6), 676-690.
- Bechara, A., Damasio, H., Tranel, D., & Damasio, A. R. (1997). Deciding advantageously before knowing the advantageous strategy. *Science*, *275*(February), 1293-1295.
- Becker, M. C. (2004). Organizational routines: A review of the literature. *Industrial and Corporate Change*, *13*, 643-678.
- Becker, M. C. (2005). Organizational routines: Some clarifications. *Cambridge Journal of*

- Economics*, 29, 249-262.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Menlo Park, Calif.: Addison-Wesley Pub. Co. Nursing Division.
- Benner, P. E., Hooper-Kyriakidis, P. L., & Stannard, D. (1999). *Clinical wisdom and interventions in critical care: A thinking-in-action approach*. Philadelphia: Saunders.
- Benner, P. E., Tanner, C. A., & Chelsea, C. (1996). *Expertise in nursing practice: Caring, clinical judgment, and ethics*. New York: Springer Publishing Company.
- Biklen, S. K. (1995). *School Work: Gender and the cultural construction of teaching*. New York: Teacher's College Press.
- Bohn, C. M., Roehrig, A. D., & Pressley, M. (2004). The first days of school in the classrooms of two more effective and four less effective primary-grades teachers. *The Elementary School Journal*, 104(4), 269-287.
- Borko, H., & Livingston, L. (1989). Cognition and improvisation: Differences in mathematics instruction by expert and novice teachers. *American Educational Research Journal*, 26(4), 473-498.
- Boshuizen, H. P. A., & Schmidt, H. G. (1992). The role of biomedical knowledge in clinical reasoning by experts, intermediaries, and novices. *Cognitive Science*, 16, 153-184.
- Bossert, S. T. (1978). *Activity structures and student outcomes*. Paper presented at the National Institute of Education: Conference on School Organization and Effects, San Diego, CA.
- Bransford, J., Brown, A. L., & Cocking, R. R. (Eds.). (1999). *How people learn: Brain, mind, experience, and school*. Washington, D.C.: National Academy Press.
- Brophy, J. (1983). Research on the self-fulfilling prophecy and teacher expectations. *Journal of Educational Psychology*, 75, 631-661.
- Brophy, J. (1988). Research linking teacher behavior to student achievement: Potential implications for the instruction of Chapter 1 students. *Educational Psychologist*, 23(3), 235-286.
- Brophy, J. (1996). *Teaching problem students*. New York: Guilford.
- Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.
- Butcher, K., & Kintsch, W. (2004). Text comprehension and discourse processing. In A. F. Healy & R. W. Proctor & I. B. Weiner (Eds.), *Handbook of Psychology* (Vol. 4: Experimental Psychology). New York: John Wiley & Sons.
- Cameron, C., Connor, C. M., & Morrison, F. (2005). Effects of variation in teacher organization on classroom functioning. *Journal of School Psychology*, 43(2005), 61-85.
- Carter, K., Cushing, K., Sabers, D., Stein, P., & Berliner, D. (1987). Expert-novice differences in perceiving and processing visual information. *Educational Researcher*, 3, 147-157.
- Carter, K., Sabers, D., Cushing, K., Pinnegar, S., & Berliner, D. (1987). Processing and using information about students: A study of expert, novice and postulant teachers. *Teaching and Teacher Education*, 3, 147-157.
- Charness, N. (1992). The impact of chess research on cognitive science. *Psychological Research*, 54(5-9).

- Charness, N., Krampe, R., & Mayr, U. (1996). The role of practice and coaching in entrepreneurial skill domains: An international comparison of life-span chess skill acquisition. In A. K. Ericsson (Ed.), *The road to excellence: The acquisition of expert performance in the arts and sciences, sports and games*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Chase, W. G., & Simon, H. A. (1979). The mind's eye in chess. In H. A. Simon (Ed.), *Models of thought* (pp. 404-427). New Haven: Yale University Press.
- Chi, M. T. H., Glaser, R., & Rees, E. (1982). Expertise in problem solving. In R. Sternberg (Ed.), *Advances in the psychology of human intelligence: volume 1*. Hillsdale, New Jersey: Lawrence Erlbaum.
- Codell, E. R. (1999). *Educating Esmé: Diary of a teacher's first year*. Chapel Hill, N.C: Algonquin Books of Chapel Hill.
- Coggshall, J. G. (2006). *Prospects for the profession: Public opinion research on teachers*. National Comprehensive Center for Teacher Quality. Retrieved 6/7/2007, from the World Wide Web:
- Collins, M. (1991). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. New York: Routledge.
- Connelly, F. M., & Clandinin, D. J. (Eds.). (1999). *Shaping a professional identity: Stories of educational practice*. New York: Teacher's College Press.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks: Sage Publications.
- Czarniawska, B. (2004). *Narratives in social science research*. London: Sage.
- Damasio, A. R. (1994). *Descartes' error: Emotion, reason and the human brain*. New York: Gosset /Putnam.
- de Bruin, A. B. H., Schmidt, H. G., & Rikers, R. J. P. (2006). The role of basic science knowledge and clinical knowledge in diagnostic reasoning: A structural equation modeling approach. *Academic Medicine*, 80(8), 765-775.
- De Groot, A. D. (1948/1965). *Thought and choice in chess* (G. W. Baylor, Trans.). The Hague: Mouton & Company.
- Denzin, N. (2001). The reflexive interview and a performative social science. *Qualitative Research*, 1(1), 23-46.
- Doane, S. M., Sohn, Y. W., & Jodlowski, M. T. (2004). Pilot ability to anticipate the consequences of flight actions as a function of expertise. *Human Factors*, 46(1), 92-103.
- Doherty, R. W., Hillberg, R. S., Pinal, A., & Tharp, R. (2003). Five standards and student achievement. *NABE Journal of Research and Practice*, 1(1), 1-24.
- Dolezal, S., Welsh, L. M., Pressley, M., & Vincent, M. M. (2003). How nine third-grade teachers motivate student academic engagement. *The Elementary School Journal*, 103(3), 239.
- Doyle, W. (1979). Making managerial decisions in classrooms. In D. L. Duke (Ed.), *Classroom management: The seventy-eighth yearbook of the National Society for the Study of Education*. Chicago: University of Chicago Press.
- Doyle, W., & Carter, K. (1987). Choosing the means of instruction. In V. Richardson-Koehler (Ed.), *Educators' handbook: A research prospective*. New York: Longman.
- Doyle, W., & Carter, K. (2003). Narrative and learning to teach: Implications for teacher-

- education curriculum. *Journal of Curriculum Studies*, 35(2), 129-137.
- Durson, F. T., & Gronlund, S. D. (1999). Situation awareness. In D. S. Linsay & M. T. H. Chi (Eds.), *Handbook of applied cognition* (pp. 283-314). New York: Wiley.
- Dutton, J., Worline, M., Frost, P., & Lilius, J. (2006). Explaining compassion organizing. *Administrative Science Quarterly*, 51(2006), 59-96.
- Edelman, S., & Waterfall, H. (2007). Behavioral and computational aspects of language and its acquisition. *Physics of Life Reviews*, 4(2007), 253-277.
- Elmore, R. F. (2002). *Bridging the gap between standards and achievement: Report on the imperative for professional development in education*. Washington, D. C.: Albert Shanker Institute.
- Entwistle, D., Alexander, K. L., & Olsen, L. S. (1997). *Children, schools and inequality*. Boulder, CO: Westview.
- Ericsson, K. A. (1998). Basic capacities can be modified or circumvented by deliberate practice: A rejection of talent accounts of expert performance. *Behavior and Brain Sciences*, 21(3), 413-414.
- Ericsson, K. A., & Charness, N. (1994). Expert performance: Its structure and acquisition. *American Psychologist*(August), 725-745.
- Ericsson, K. A., & Kintsch, W. (1995). Long term working memory. *Psychological Review*, 102(2), 211-245.
- Ericsson, K. A., Krampe, R. T., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363-406.
- Ericsson, K. A., & Lehmann, A. C. (1996). Expert and exceptional performance: Evidence of maximal adaptation to task constraints. *Annual Review of Psychology*, 47, 273-305.
- Ericsson, K. A., & Simon, H. A. (1993). *Protocol Analysis* (Revised Edition ed.). Cambridge, Massachusetts: The MIT Press.
- Ericsson, K. A., & Smith, J. (1991). Prospects and limits in the empirical study of expertise: An introduction. In K. A. Ericsson & J. Smith (Eds.), *Toward a general theory of expertise: prospects and limits*. Cambridge, England: Cambridge University Press.
- Evertson, C. M., & Emmer, E. T. (1982). Effective management at the beginning of the school year in junior high classes. *Journal of Educational Psychology*, 74(4), 485-498.
- Evertson, C. M., Emmer, E. T., Sanford, J. P., & Clements, B. S. (1983). Improving classroom management: An experiment in elementary school classrooms. *Elementary School Journal*, 84(2), 173-188.
- Feldman, M. S., & Pentland, B. T. (2003). Reconceptualizing organizational routines as a source of flexibility and change. *Administrative Science Quarterly*, 48(1), 94-118.
- Feldman, M. S., & Rafaeli, A. (2002). Organizational routines as sources of connections and understandings. *Journal of Management Studies*, 39, 309-331.
- Feldon, D. F. (2007). Cognitive load and classroom teaching: The double-edged sword of automaticity. *Educational Psychologist*, 42(3), 123-137.
- Fenstermacher, G. (1994). The knower and the known: The nature of knowledge in research on teaching. In L. Darling-Hammond (Ed.), *Review of research in education*. Washington: AERA.

- Foster, M. (1991). "Just got to find a way": Case studies of the lives and practices of exemplarily Black high school teachers. In M. Foster (Ed.), *Qualitative investigations into schools and schooling* (pp. 273-309). New York: Aims.
- Foster, M. (1997). *Black teachers on teaching*. New York: The New Press.
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 2003(1), 148-162.
- Glaser, R., & Chi, M. T. H. (1988). Overview. In M. T. H. Chi & R. Glaser & M. J. Farr (Eds.), *The nature of expertise*. Hillsdale New Jersey: Lawrence Erlbaum.
- Gobet, F., & Simon, H. A. (1996). The roles of recognition processes and look ahead search in time constrained expert problem-solving: Evidence from grandmaster level chess. *Psychological Science*, 7(1), 52-55.
- Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, N.Y.: Doubleday.
- Goffman, E. (1967). *Interaction ritual: Essays on face-to-face behavior*. Garden City, N.Y.: Anchor Books.
- Goffman, E. (1983). The interaction order: American Sociological Association 1982 Presidential Address. *American Sociological Review*, 48(1), 1-17.
- Goldhaber, D. (2003). *Indicators of teacher quality* (Digest: ERIC Clearinghouse on Urban Education 184). New York: Institute for Urban and Minority Education: Teachers College, Columbia University.
- Goldhaber, D., & Anthony, E. (2006). *Can teacher quality be effectively assessed? National Board Certification as a signal of effective teaching*. Seattle: Urban Institute.
- Gonzales, N., Moll, L. C., Tenery, M., Rivera, A., Rendon, P., Gonzales, R., & Armanti, C. (1995). Funds of knowledge for teaching in Latino households. *Urban Education*, 29(443-47).
- Grele, R. J., & Terkel, S. (1985). *Envelopes of sound: The art of oral history* (2nd , rev. and enl. ed.). Chicago, Ill.: Precedent Pub. : Distributed by Transaction Books.
- Grossman, P. (1990). *The making of a teacher*. New York: Teachers College Press.
- Gump, P. V. (1967). *The classroom behavior setting: Its nature and relation to student behavior: Final Report* (ERIC Document Reprint Service No. ED 015 515). Washington, DC: Department of Education, Bureau of Research.
- Hakel, M. D., Koenig, J. A., & Elliott, S. W. (Eds.). (2008). *Assessing accomplished teaching: Advanced-level certification programs: A report of the National Research Council of the National Academies* (Advanced Copy ed.). Washington, D. C.: The National Academies Press.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625-638.
- Hamre, B. K., & Pianta, R. C. (2005). Can instructional and emotional support in the first grade classroom make a difference for children at risk of school failure? *Child Development*, 76(5), 949-967.
- Hankins, K. H. (1998). Cacophony to symphony: Memoirs in teacher research. *Harvard Educational Review*, 68(1), 80-95.
- Hanushek, E. A., Kain, J. F., O'Brian, D. M., & Rivkin, S. G. (2005). *The market for*

- teacher quality* (NBER WORKING PAPERS Working Paper 11154). Cambridge, MA: National Bureau of Economic Research.
- Hart, B., & Risley, T. (1995). *Meaningful differences in the everyday experience of young American Children*. Baltimore: Brookes.
- Hattie, J., Clinton, J., Thompson, M., & Schmidt-Davis, H. (1996). *Identifying highly accomplished teachers: a validation study*. Arlington, VA: National Board for Professional Teaching Standards.
- Herbst, J. (1989). *And sadly teach: Teacher education and professionalization in American culture*. Madison, Wis.: University of Wisconsin Press.
- Hill, H. C., Rowan, B., & Ball, D. L. (2005). Effects of teachers' mathematical knowledge for teaching on student achievement. *American Educational Research Journal*, 42(2), 371-406.
- Hogan, T., Rabinowitz, M., & Cravan, J. A. (2003). Representation in teaching: Inferences from research of expert and novice teachers. *Educational Psychologist*, 38(4), 235-247.
- Huberman, M. (1989). The professional life cycle of teachers. *Teachers College Record*, 91(1), 31-57.
- Hughes, J., & Kwok, O. (2007). Influence of student–teacher and parent–teacher relationships on lower achieving readers' engagement and achievement in the primary grades. *Journal of Educational Psychology*, 99(1), 39=51.
- Hughes, J. N., Cavell, T. A., & Willson, V. (2001). Further support for the developmental significance of the quality of the student-teacher relationship. *Journal of School Psychology*, 30(4), 289-301.
- Hughes, J. N., Lou, W., Kwok, O., & Loyd, L. K. (2008). Teacher-student support, effortful engagement, and achievement: A 3-year longitudinal study. *Journal of Educational Psychology*, 2008(1), 1-14.
- Hunt, E. (1989). Cognitive science: definition, status, and questions. *Annual Review of Psychology*, 40, 603-629.
- Huttenlocher, J., Vasilyeva, M., Cymerman, E., & Levine, S. (2002). Language input and child syntax. *Cognitive Psychology*, 45, 337-374.
- Irvine, J. J. (Ed.). (2002). *In search of wholeness: African American teachers and their culturally responsive practices*. New York: Palgrave.
- Justice, L. M., Mashburn, A. J., Hamre, B. K., & Pianta, R. C. (2008). Quality of language and literacy instruction in preschool classrooms serving at-risk pupils. *Early Childhood Research Quarterly*, 23(1), 51-68.
- Kauffman, D., Moore Johnson, S., Kardos, S. M., Liu, E., & Peske, H. (2002). "Lost at Sea": New teachers' experiences with curriculum and assessment. *Teachers College Record*, 104(2), 273-300.
- Kintsch, W. (1988). The use of knowledge in discourse comprehension: A construction integration model. *Psychological Review*, 95(2), 163-182.
- Kintsch, W. (1998). *Comprehension: A paradigm for cognition*. Cambridge, UK: Cambridge University Press.
- Kintsch, W., & Greeno, J. G. (1985). Understanding and solving word arithmetic problems. *Psychological Review*, 92, 109-129.
- Klein, G. A. (1998). *Sources of power: How people make decisions*. Cambridge, MA: MIT Press.

- Kleinfeld, J. (1975). Effective teachers of Eskimo and Indian students. *School Review*, 83(2), 301-344.
- Kleinfeld, J. (1992). Learning to think like a teacher: The study of cases. In J. H. Shulman (Ed.), *Case methods in teacher education*. New York: Teachers College Press.
- Klibanoff, R. S., Levine, S., Huttenlocher, J., Vasilyeva, M., & Hedges, L. V. (2006). Preschool children's mathematical knowledge: The effect of teacher "math talk". *Developmental Psychology*, 42(1), 59-69.
- Kounin, J. (1970). *Discipline and group management in classrooms*. New York: Holt, Rinehart & Winston.
- La Paro, K. M., Pianta, R. C., & Stuhlman, M. W. (2004). The Classroom Assessment Scoring System: Findings from the pre-kindergarten year. *The Elementary School Journal*, 104(5), 409-427.
- Ladd, G. W. (1990). Having friends, keeping friends, making friends, and being liked by peers in the classroom: Predictors of children's early school adjustment? *Child Development*, 61, 1081-1100.
- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American children*. San Francisco: Jossey-Bass.
- Ladson-Billings, G. (1999). Preparing teachers for diversity: Historical perspectives, current trends, and future directions. In L. D.-H. G. Sykes (Ed.), *Teaching as the learning profession: Handbook of policy and practice*. San Francisco: Jossey-Bass.
- Ladson-Billings, G. (2001). *Crossing over to Canaan: The journey of new teachers in diverse classrooms*. San Francisco: Jossey-Bass.
- Lampert, M., & Ball, D. (1998). *Teaching, multimedia and mathematics: Investigations of real practice*. New York: Teachers College Press.
- Larkin, J. H., McDermott, J., Simon, D. P., & Simon, H. A. (1990). Expert and novice performance in solving physics problems. *Science*, 208, 1335-1342.
- Leinhardt, G. (1988). Expertise in instructional lessons: An example from fractions. In G. Cooney (Ed.), *Effective mathematics teaching* (pp. 47-66). Reston, VA: NCTM.
- Leinhardt, G., & Greeno, J. G. (1986). The cognitive skill of teaching. *Journal of Educational Psychology*, 78(2), 75-95.
- Leinhardt, G., Weidman, C., & Hammond, K. M. (1987). Introduction and integration of classroom routines by expert teachers. *Curriculum Inquiry*, 17(2), 135-176.
- Mashburn, A. J., Pianta, R. C., Hamre, B. K., Downer, J. T., Barbarin, O. A., Bryant, D., Burchinal, M., Early, D. M., & Howes, C. (2008). Measures of classroom quality in pre-kindergarten and children's development of academic, language, and social skills. *Child Development*, 79(3), 732-749.
- Massey, S. L., Pence, K. L., Justice, L. M., & Bowles, R. P. (2008). Educators' use of cognitively challenging questions in economically disadvantaged preschool classroom contexts. *Early Education & Development*, 19(2), 340-360.
- McCutchen, D., & Berninger, V. W. (1999). Those who know, teach well: Helping teachers master literacy-related subject-matter knowledge. *Learning Disabilities Research & Practice*, 14(4), 215-226.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks: Sage.

- Moll, L. C., Armanti, C., Nett, D., & Gonzales, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice*, 31, 132-141.
- Moskowitz, G., & Hayman, J. L. (1974). Interaction patterns of first year typical, and "best" teachers in inner-city schools. *Journal of Educational Research*, 67, 224-230.
- Moskowitz, G., & Hayman, J. L. (1976). Success strategies of inner-city teachers: A year-long study. *Journal of Educational Research*, 69, 283-289.
- National Board of Professional Teaching Standards. (2004). *Q & A: Questions and answers about National Board Certification*. Arlington, VA: National Board of Professional Teaching Standards.
- Nemser, S. (1983). Learning to teach. In S. L. & G. Sykes (Eds.), *Handbook of research and policy*. New York: Longman.
- Newmann, F. M., Marks, H. M., & Gamoran, A. (1996). Authentic pedagogy and student performance. *American Journal of Education*, 104(4), 280-312.
- Nighswander, J. K., Cherkasky-Davis, L., & Bearden, A. (2001). *Chicago Teachers' Union Quest Center "Nurturing Teacher Leadership" evaluation study* (Eric Document ED46707). Chicago: Educational Learning Resources.
- Noddings, N. (2000). The caring teacher. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed., pp. 1278). Washington, D. C.: American Educational Research Association.
- Norman, G. R., & Brooks, L. R. (1997). The non-analytical basis of clinical reasoning. *Advances in Health Sciences*, 2, 173-184.
- Norman, G. R., Coblenz, C. L., Brooks, L. R., & Babcock, C. J. (1992). Expertise in visual diagnosis: a review of the literature. *Academic Medicine*, 67(October Supplement), S79-S83.
- Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis*, 2004(3), 237-257.
- Paredes Scribner, A. (1999). Using student advocacy assessment practices. In P. Reyes & J. D. Scribner & A. Paredes Scribner (Eds.), *Lessons from High-Performing Schools: Creating Learning Communities* (pp. 169-187). New York: Teacher's College Press.
- Patel, V. L., Arocha, J. F., & Kaufman, D. R. (1994). Diagnostic reasoning and medical expertise. *The Psychology of Learning and Motivation*, 31, 187-251.
- Patel, V. L., Evans, D. A., & Groen, G. J. (1989). Reconciling basic science and clinical reasoning. *Teaching and learning in medicine*, 1(3), 116-121.
- Pellegrino, J. W., Chudowsky, N., & Glaser, R. (Eds.). (2001). *Knowing what students know: The science and design of educational assessment*. Washington, D. C.: National Academy Press.
- Pennington, N., & Hastie, R. (1993). Explanation-based decision making: Effects of memory structure on judgment. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 14, 521-533.
- Pentland, B. T., & Reuter, H. (1994). Organizational routines as grammars of action. *Administrative Science Quarterly*, 39(3), 484-510.
- Perry, K. E., Donohue, K. M., & Weinstein, R. S. (2007). Teaching practices and the promotion of achievement and adjustment in first grade. *Journal of School*

- Psychology*, 45(2007), 269-292.
- Pianta, R. C., & Stuhlman, M. W. (2004). Teacher-child relationships and children's success in the first years of school. *School Psychology Review*, 33(3), 444-458.
- Porter, A. (2002). Measuring the content of instruction: Uses in research and practice. *Educational Researcher*, 31(7), 3-14.
- Pressley, M., Roehrig, A. D., Bogner, K., Raphael, L. M., & Dolezal, S. (2002). Balanced literacy instruction. *Focus on Exceptional Children*, 34(5).
- Raudenbush, S. W. (2008). Advancing educational policy by advancing research in instruction. *American Educational Research Journal*, 45(1), 100.
- Rikers, R. J. P., Schmidt, H. G., & Moulart, V. (2005). Biomedical knowledge: Encapsulated or two worlds apart? *Applied Cognitive Psychology*, 19(2), 223-231.
- Rimm-Kaufman, S. E., La Paro, K. M., Downer, J. T., & Pianta, R. C. (2005). The contribution of classroom setting and quality of instruction to children's behavior in kindergarten classrooms. *The Elementary School Journal*, 105(4), 377-395.
- Roehrig, A. D., Pressley, M., & Talotta, D. A. (2002). *Stories of beginning teachers: First-year challenges and beyond*. Notre Dame, Ind.: University of Notre Dame Press.
- Rosch, E., Mervis, C. B., Grey, W. D., Johnson, D. M., & Boyes-Braem, P. (1976). Basic objects in natural categories. *Cognitive Psychology*, 8, 382-439.
- Rowan, B. (2004). Teachers matter: Evidence from value-added assessments. *Research Points: Essential Information for Educational Policy*, 2(2).
- Rowan, B., Camburn, E., & Correnti, R. (2004). Using teacher logs to measure the enacted curriculum in large-scale surveys: Insights from the Study of Instructional Improvement. *Elementary School Journal*, 105, 75-102.
- Rowan, B., Correnti, R., & Miller, R. J. (2002). What large-scale, survey research tells us about teacher effects on student achievement: Insights from the Prospects study of elementary schools. *Teachers College Record*, 104(8), 1525-1567.
- Ryan, K. (1970). *Don't smile until Christmas: Accounts of the first year of teaching*. Chicago: University of Chicago Press.
- Ryan, K. (1980). *Biting the apple: Accounts of first year teachers*. New York: Longman.
- Shepard, L. A. (2000). The role of classroom assessment in teaching and learning. In V. Richardsen (Ed.), *Handbook of Educational Research*.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.
- Shulman, L. S. (1987). Knowledge and teaching: The foundations of the new reform. *Harvard Educational Review*, 57(1), 1-22.
- Silver, R., Measelle, J., Armstrong, J., & Essex, M. (2005). Trajectories of classroom externalizing behavior: Contributions of child characteristics, family characteristics, and the teacher-child relationship during the school transition. *Journal of School Psychology*, 43, 39-60.
- Simon, H. A. (1996). *The sciences of the artificial* (3rd ed.). Cambridge, Massachusetts: The MIT Press.
- Slotta, J. D., Chi, M. T. H., & Joram, E. (1995). Assessing student's misconceptions of physics concepts. *Cognition and Instruction*, 13(3), 373-400.
- Snow, C. E. (2001). Knowing what we know: Children, teachers, researchers. *Educational Researcher*, 30(7), 3-9.

- Snow, C. E., Griffin, P., & Burns, M. S. (Eds.). (2005). *Knowledge to support the teaching of reading: Preparing teachers for a changing world*. San Francisco: Jossey-Bass.
- Starkes, J. (2000). The road to expertise: Is practice the only determinant? *International Journal of Sports Psychology*, 31, 431-451.
- Stigler, J. W., & Hiebert, J. (1999). *The teaching gap: Best ideas from the world's teachers for improving education in the classroom*. New York: The Free Press.
- Tanaka, J. W., & Taylor, M. (1991). Object categories and expertise: Is the basic level in the eye of the beholder? *Cognitive Psychology*, 23, 457-482.
- Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social and behavioral research*. Thousand Oaks, CA: Sage.
- Taylor, B. M., Person, D. P., Clark, K., & Walpole, S. (2000). Effective schools and accomplished teachers: Lessons about primary-grade reading instruction in low income schools. *The Elementary School Journal*, 101(2), 121-165.
- Van de Weil, M. W. J., Boshuizen, H. P. A., & Schmidt, H. G. (2000). Knowledge restructuring in expertise development: Evidence from pathophysiological representations of clinical cases by students and physicians. *European Journal of Cognitive Psychology*, 12(3), 323-355.
- van Dijk, T. A., & Kintsch, W. (1983). *Strategies of discourse comprehension*. New York: Academic Press.
- Van Manen, M. (1994). Pedagogy, virtue and narrative identity in teaching. *Curriculum Inquiry*, 4(2), 135-175.
- Vandevoort, L. G., Amrein-Beardsley, A., & Berliner, D. C. (2004). National Board Certified Teachers and their students' achievement. *Education Policy Analysis Archives*, 12(6), 1-116.
- Vasilyeva, M., Huttenlocher, J., & Waterfall, H. (2006). Effects of language intervention on syntactic skill levels in preschoolers. *Developmental Psychology*, 42, 164-174.
- Vasilyeva, M., Waterfall, H., & Huttenlocher, J. (2008). Emergence of syntax: Commonalities and differences across children. *Developmental Science*, 11(1), 84-97.
- Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research*, 54(2), 143-178.
- Ware, F. (2006). Warm demander pedagogy: Culturally responsive teaching that supports a culture of achievement for African American students. *Urban Education*, 41, 427.
- Wasik, B. A., Bond, M. A., & Hindman, A. (2006). The effects of a language intervention on Head Start children and teachers. *Journal of Educational Psychology*, 98, 63-74.
- Weick, K. E., & Roberts, K. H. (1993). Collective mind in organizations: Heedful interrelating on flight decks. *Administrative Science Quarterly*, 38(3), 357-381.
- Weiss, R. S. (1995). *Learning from strangers: The art and method of qualitative interview studies* (1st Free Press pbk. ed.). New York: Free Press.
- Wentzel, K. R. (1998). Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of Educational Psychology*, 90, 202-209.
- Wharton-McDonald, R., Pressley, M., & Hampston, J. M. (1998). Literacy instruction in nine first grade classrooms: Teacher characteristics and student achievement.

- Elementary School Journal*, 99(2), 101-128.
- Whitehurst, G. J., Falco, F. F., Lonigan, C. J., Fischel, J. E., DeBaryshe, B. D., & Valdez-Menchaca, M. C., et. al. (1988). Accelerating language development through picture book reading. *Developmental Psychology*, 24, 552-559.
- Williams, A. M., & Ericsson, K. A. (2005). Perceptual-cognitive expertise in sport: Some considerations when applying the expert performance approach. *Human Movement Science*, 24, 283-307.
- Wineburg, S. (1991). Historical problem solving: A study of the cognitive processes used in the evaluation of documentary and pictorial evidence. *Journal of Educational Psychology*, 83(1), 73-87.
- Wineburg, S. (1998). Reading Abraham Lincoln: An expert/expert study in the interpretation of historical texts. *Cognitive Science*, 22(3), 319-346.
- Yates, G. C., & Yates, S. M. (1990). Teacher effectiveness research: Towards describing userfriendly classroom instruction. *Educational Psychology*, 10(3), 225-238.
- Yinger, R. J. (1980). A study of teacher planning. *The Elementary School Journal*, 80(3), 197-127.
- Yinger, R. J., & Hendricks-Lee, M. (1993). Working knowledge in teaching. In C. Day & P. Calderhead & P. Denlco (Eds.), *Research on teacher thinking: Understanding professional development*. London: Falmer.
- Zeichner, K. M., & Hoeft, K. (1996). Teacher socialization for cultural diversity. In J. Sikula (Ed.), *Handbook of research on teacher education* (pp. 525-547). New York: Macmillan.

Chapter II

Literature Review: Experimental and Ethnographic Perspectives on Human Expertise

The major finding of the cognitive literature on expertise is that knowledge is the cause of skilled performance (Anderson, 1996; Bransford, Brown, & Cocking, 1999a; Chase & Simon, 1979; Ericsson & Lehmann, 1996; Snow, Griffin, & Burns, 2005). People are not born with talents that allow them to master the violin or compete as Olympic swimmers. The best athletes, the most competent physicians, and the most skillful teachers succeed in their fields because they have learned unique bodies of knowledge. Highly skilled performance is caused by regular learning that takes place over an extended period of time.

Expertise is the human capacity to see and respond to patterns produced by familiar events and to learn from that history to alter one's subsequent performance to produce better outcomes (Anderson, 2000; De Groot, 1948/1965; Ericsson, 2004; Ericsson, Krampe, & Tesch-Romer, 1993). The ability to skillfully act within a familiar environment and learn from instruction is not a talent reserved for the few. It is, instead, the shared birthright of all normal human beings. Expert basketball players, chess players and dermatologists demonstrate high and consistent levels of performance because they have spent many years studying their chosen field (Charness, Krampe, & Mayr, 1996; Norman, Brooks, Allen, & Muzzin, 1989; Starkes, Deakin, Allard, Hodges, & Hayes, 1996). In fields with stable environments and standardized challenges, expert practitioners perform better because they know more. Among normal persons, with the exception of the benefits and disadvantages produced by height and age, knowledge is the primary cause of measurably high levels of performance (Ericsson, 1998). Abilities, such as the cognitive skills measured on standardized tests, are learned capacities produced by

instruction within the family and the school; they are not primarily the result of inherited genetic traits (Sternberg, 1998; Trzeniewski, Moffitt, Caspi, Taylor, & Maughan, 2006).

As Anderson (1996) emphasizes in his Distinguished Scientific Contributions address:

All there is to intelligence is the simple accrual and tuning of many small units of knowledge that in total produce complex cognition. The whole is no more than the sum of its parts, but it has a lot of parts. (p.356)

The cognitive work on skilled performance implies that, among normal people with sufficient motivation and opportunity to learn, anyone can learn to do anything.

Cognitive science has identified a specific form of learning—deliberate practice—as the primary cause of high and measurable individual performance in stable fields with a developed knowledge base (Ericsson et al., 1993). The most beneficial form of study is for practitioners to receive immediate feedback on their choices and the information necessary to create better outcomes when similar situations come up again. Statistically reliable skilled performance is produced by an individual's willingness to engage in thousands of hours of practice (Ericsson, 2004). It is caused by an almost obsessive desire to improve and refine skills.

Deliberate practice may be very mundane (Chambliss, 1989). Olympic swimmers, for instance, may spend many hours each week working with coaches to improve how they dive in the pool, kick their legs, and move their arms through the water. Each aspect of performance is continually rehearsed and optimized. In chess, developing players study each move and counter move in grandmaster games to test their choices against those made by more skillful players (Charness et al., 1996). These learners will follow each round of play in a particular game from beginning to end and compare their proposed moves with the experts' choices. When their moves are different than those of grandmasters, developing chess players are motivated to re-examine the line of reasoning that resulted in that particular choice and alter the strategies they use to guide their choices. This form of study allows developing performers to learn to see the same patterns that more knowledgeable performers see and respond to common challenges—such as a particular middle game position—the same way that the best players respond to them. They begin to think and reason like a grandmaster.

Deliberate practice changes not only what people think and do; it alters their physical and mental capacity to engage in a particular endeavor (Ericsson & Kintsch,

1995; Ericsson & Lehmann, 1996). The muscles of Olympic athletes are not the cause of their accomplished performance. Strength and speed are forms of knowledge produced by many years of coaching and practice. Ballet dancers' flowing movements and surgeons' skilled hands are the result of similar forms of scholarship.

Expertise also improves people's skill at processing information. When highly skilled performers engage in their chosen activity, they are able to process more information about the aspects of the situation that matter to them than people who possess a less developed understanding. Airplane mechanics do not see jet engines; they see detailed assemblies of components that relate to each other in specified ways (Johnson & Mervis, 1997; Rosch, Mervis, Grey, Johnson, & Boyes-Braem, 1976; Tanaka & Taylor, 1991). This knowledge gives these practitioners the ability to focus on the most critical aspects of the problems that they face—such as an engine's fuel lines—rather than staring blankly at large collections of machinery. In many fields, this learned way of making sense of the world accounts for a large portion of skilled practitioners' performance advantage. Much of the clinical knowledge of doctors and nurses is non-analytical (Norman & Brooks, 1997). Dermatologists see skin cancers. Radiologists notice irregular cells. When diagnosing familiar cases, these skilled practitioners do not consciously apply this knowledge. They have learned to respond to what they *see*.

Expertise should not be confused with mindlessness. Non-analytical does not mean irrational. Experts' performance is caused by a knowledgeable understanding of how the world works that can be learned from instruction and experience (Ceci & Liker, 1986; Rikers, Schmidt, & Moulaert, 2005). Consistently high performance in athletics and many other fields requires intensive self-monitoring. Expert distance runners, for instance, do not “zone out” during a race: They continually monitor their physical condition, the demands of their course, and the performance of their competitors in order to evaluate the effectiveness of their racing strategy (O'Connor, 1992). One of the primary functions of deliberate practice is to update and improve the mental models experts rely on to make these judgments. Practice allows people to change the meaning they create from a situation and to improve their ability to act within it (Carter, Sabers, Cushing, Pinnegar, & Berliner, 1987; Coulson, Feltovich, & Spiro, 1997; Starkes et al., 1996). It allows people to create highly developed models of the ecology of particular

situations that allow them to act more skillfully than people without this knowledge (Anderson, Reder, & Lebiere, 1996; Ericsson & Kintsch, 1995).

Gobet and Simon (1996) show the importance of these *situation models* to skilled, expert judgment in a paper that analyzes a series of speed chess matches played between Grandmaster Gary Kasparov and teams of lower-ranked Grandmasters. In conventional tournament chess, players have an average of three minutes to make a single move, but in these speed matches Kasparov had three minutes to make an entire set of chess moves in games against four to eight skilled opponents. The number of competitions Kasparov played under these conditions was large enough to allow Gobet and Simon to generate statistically reliable comparisons between Kasparov's chess ranking (Elo, 1986) in regular tournament games and his skill level during these speeded matches. As a result, the researchers were able to measure the added value that extended planning time provides problem-solvers in highly pressured situations. Gobet and Simon found that Kasparov lost little chess ability when he played speed chess. His ranking declined from 2750, which at that time made him the world's best chess-player, to about 2650, which made Kasparov one of the world's best half dozen.

Gobet and Simon (1996)'s description of how Kasparov prepared for these matches further emphasizes the fast and intuitive nature of expert judgment. Before he would agree to a match, Kasparov required his opponents send him the moves from their last 100 chess games in a format that he could program into his computer. Kasparov used this information to analyze his adversaries' strengths and weaknesses to create a specific strategy for each opposing player. The Grandmaster then used that strategy in simulated chess games where his computer mimicked his opponents' style of play. He used opening strategies that Kasparov's researches showed his opponents were not familiar and attempted to drive the action towards endgame positions his opponents lacked skill defending. Kasparov could not prepare for every aspect of these matches, but he could tailor his play based on a highly developed understanding of his opponents' styles of play. During tournament matches, Kasparov used what he learned during these practice sessions to attack opponents' weaknesses and neutralize their strengths. As Gobet and Simon's statistical analysis shows, Kasparov's performance declined very slightly in these pressured matches. The moment-to-moment knowledge people use to solve

problems thus might be seen to be distributed (Hutchins, 1995) in time. Experts can accurately respond to familiar challenges because they have spent a great deal of time mulling them over at other times and places (Amidzic, Riehle, Fehr, Wienbruch, & Elbert, 2001).

When experts cannot solve problems intuitively, they tend to engage in what cognitive scientists describe as forward reasoning (Anzai, 1991; Hunt, 1989). When skilled individuals confront difficult challenges they generate a preliminary understanding of the issues they face based on their prior knowledge. This representation provides information not only on the nature of the problem they face, but on how to solve it. These thoughts and memories guide experts' preliminary efforts to search for clues and to come up with a set of likely explanations. As more information becomes available, experts are able to update what they have learned to take into account the facts of the case. Skilled physicists, for instance, are able to organize the information offered by physics problems quickly and intuitively (Larkin, McDermott, Simon, & Simon, 1990). This cognitive skill gives them the capacity to solve common problems from memory. It also alerts them to strategies and tactics that may help them overcome less familiar challenges. These experts' practical knowledge allows them to monitor their progress as they work to solve problems and alerts them to possible difficulties or opportunities as they move towards their goals. Beginning practitioners do not have the knowledge to engage in this forward reasoning process (Patel, Arocha, & Kaufman, 1994; Patel, Groen, & Arocha, 1990). Their judgments about the nature of the problems they face are both less accurate and less stable than those of skilled performers. As Paige and Simon (1966) show with math problems, beginners may attempt to solve problems that do not make any sense because they do not understand the meaning of the questions they attempt to answer. Their definition of the situation (De Groot, 1948/1965) tends to be inaccurate. They flounder, rather than moving smoothly towards their goal.

In fields where experts are not required to work rapidly, making sense of the situation and planning how to solve a given set of problems may take a considerable amount of time. Expert writers tend to solve problems significantly more slowly than less skilled writers. As Scardamalia and Berietier (Scardamalia & Berieiter, 1991) show, these accomplished performers tend to agonize over every step of the writing process. It takes

expert writers longer to define the problems they face and longer to decide what to put down on paper. Once they have started working, it takes skilled writers longer to solve the dilemmas they have created for themselves and produce the piece they planned. Scardamalia and Berietier argue that less skilled writers lack the knowledge to be aware of the potential problems and possibilities posed by a given assignment; they produce faster, but less interesting, work. This type of highly aware and careful problem solving is also found in Wineburg's studies of historians (Wineburg, 1991; 1998).

Recent work in cognitive science and the study of medical expertise provides a model for how practical knowledge for daily problem solving is organized in experts' minds (Ericsson & Kintsch, 1995; Kintsch, 1998; Rikers et al., 2005). Physicians do not think like scientists (Patel, Evans, & Groen, 1989). When they are asked to think-aloud as they diagnose an illness or other medical problems, what is verbalized is their descriptions of the clinical cases they have experienced or read about in their studies. Physicians do not tend to organize their problem solving around the formal, biomedical knowledge they learned from medical school (Patel et al., 1994; Patel et al., 1989). Instead they *think like* a doctor and make sense of what they see based on their previous experience working with that particular disease or illness. These non-analytic forms of thought can be highly accurate. Physicians' diagnostic skill declines when they are asked to rely on formal, biomedical knowledge when they diagnose a medical problem (Patel et al., 1990). When they *think in cases*, they tend to make more accurate diagnoses.

The knowledge physicians learned through formal, academic study, however, is not lost as they gain expertise (Boshuizen, Schmidt, Custers, & Van de Weil, 1995; de Bruin, Van De Weil, Rikers, & Schmidt, 2005; Rikers et al., 2005). Formal knowledge is encapsulated in the remembered cases medical doctors verbalize when they think a-loud. For these skilled workers, event-based knowledge and propositionally stored, formal knowledge are thus linked. Theory is not cut off from experience; instead it becomes part of the way physicians intuitively understand the world. When expert physicians diagnose a particular case, formal and experiential knowledge resonate to create highly meaningful states of mind.

The cognitive literature also emphasizes that expertise has clear limits (Ericsson & Smith, 1991; Robert J. Sternberg, 1996). Experts are specialists; they are not

generalists. Skill in chess does not translate into skill in mathematics. Success in hockey does not correlate with success playing the violin. Experts are also dependent on their environments. Practice and experience give the human mind the capacity to apply yesterday's solutions to today's problems. People use this capacity to create extensive inferences based on small samples of data that allow them to act quickly and intuitively (Chase & Simon, 1979; Ericsson & Lehmann, 1996). In hunting, medicine and figuring-skating this problem-solving strategy holds the possibility of creating accomplished performances. In stock-picking and other practices that take place within rapidly changing environments, it does not. When there are no stable rules of the game the same categorization processes that create measurable advantages in stable fields of play may cause practitioners to misunderstand events. Yesterday's winning strategy may become today's failed move.

A Narrative Perspective on Professional Practice

Outside psychological laboratories, highly skilled practitioners learn to produce the situation they act within as well as respond to it. They learn how to intervene in their environment to alter the likely course of events, as well as how to react to "naturally" occurring stimuli. Accomplished professionals learn how to change the rules, as well as skillfully follow them. Expert performance thus becomes a form of agency. Knowledge and skill give experienced professionals the means not only to solve isolated problems, but to create different career histories. Expertise becomes a way of life, instead of an isolated problem-solving strategy (Aristotle, 2000; Benner, Tanner, & Chelsea, 1996). Flexible approaches to complex situations become a critical aspect of expert practice (Bransford et al., 1999a; Coulson et al., 1997; Feltovitch, Spiro, & Coulson, 1989)

Benner and her colleagues explore the nature of human expertise by studying critical-care, nursing practice in a series of narrative and ethnographic studies (Benner, 1984a; Benner, Hooper-Kyriakidis, & Stannard, 1999; Benner et al., 1996). Given this work's influence on the methodological choices I made when I created the research design for the Expertise in Urban Teaching Project, I will discuss these findings in depth. In Benner and her research team's account, accomplished, critical-care nurses do more than provide effective treatments to their patients. Expert nurses create better

environments in which to conduct those treatments, and their efforts' generate resources that improve other aspects of their patients' lives. Reflection and practice gives these practitioners the ability to engage in complex healing performances that are beyond the capacity of nurses with little skill.

Benner's ethnographic studies show that expert nurses' professional judgment resembles the engaged, practical reasoning theorized by Aristotle. Expert nurses do not stand outside the flow of events and dispassionately apply rules based on pre-existing criteria. They learn to achieve the best good they can attain given the changing system of possibilities generated by the hospital environments where they work. Experts learn how to orchestrate the complex social and technical environments created by modern medicine one moment at a time to change their unit's system of activities for their patients' benefit. Benner and her colleagues' ethnographic work shows that expert nurses working in neonatal intensive care units, for instance, do more than engage in the hundreds of skilled actions required to keep infants alive. They continually strive to produce a work environment that supports good outcomes and skilled practice. Expert nurses continually monitor their unit for safety and possible sources of infection. They find the time to train other members of the health care team to improve their unit's ability to solve common problems. Accomplished neonatal nurses care for families as well as infants. They work to ensure that future caregivers bond with their child and teach them the skills required to care for their newborn.

Patients in modern critical care units may possess multiple medical problems that interact in unfamiliar ways. As a result, skilled nurses must constantly monitor their patients' condition to ensure that the current diagnosis makes sense. Benner's ethnographic works shows that knowing when a treatment is working and when, instead, that treatment does not benefit a particular patient is an important aspect of professional judgment. They learn to flexibly respond to the situations they face. Expert nurses learn to foresee the demands produced by typical medical trajectories and quickly respond to unexpected changes in their patients' health. They learn to read their patients' eyes and respond to changes in the color of their skin while making sense of the data generated by complex medical equipment. Expert nurses become skilled at monitoring their patients' relationships as well as their vital signs. They focus on the needs and concerns of family

members because loved ones can have a major influence on their patients' recoveries both in the hospital and outside its walls. Highly skilled practitioners thus learn to *see* and act within the big picture created by health care situations produced by many social forces.

Benner and her colleagues' ethnographic studies (Benner et al., 1999; Benner et al., 1996) show that emotional intelligence is a major aspect of expert critical care nurses' practical knowledge base. Feeling creates an inner compass that guides skilled practitioners' work as they move from one set of events to another. Accomplished nurses learn to feel good when their practice is going well and their patients are benefiting from their care. They learn to feel uncomfortable when their patients' conditions deteriorate, especially if the cause of the problem is not clear. This emotional intelligence motivates expert nurses to search for alternative explanations for the events around them that fit their current understanding. As a result, they may "feel that something's wrong" long before they know exactly what that "something" is. Benner argues that expert nurses tend to solve problems like detectives (Bourdieu, 1990); they search for clues that will allow them to make sense of the case while working within situations they shape and influence. What are experienced as good outcomes create positive emotions that motivate further excellent practice. Poor outcomes motivate efforts to discover what went wrong. Accomplished practice requires skilled practitioners to work towards the best good possible in the particular situations they experience. Expertise thus requires not only knowing how, but understanding what might be.

Narrative, in Benner's account, is the primary way critical care nurses organize their evolving understanding of their professional experience. Practice is not experienced as an isolated set of problems that can be solved one at a time. Instead nurses work within a "moving picture show" created by many developing stories about patients, other health care workers, and other aspects of their work. This narrative sense of the possibilities and limits of a particular moment in time changes and develops as time passes and new facts become available. Formal knowledge is part of the background of this knowledge base, but what shows up when nurses talk about their work is the vivid knowledge generated by working in emergency rooms and neo-natal intensive care units. Nurses do not spend their working lives calculating their choices and reasoning from precepts. They organize

the knowledge of their practice around the experience of healing the sick; comforting the dying; working with other professionals with unique skills and personalities; and advocating for patients in organizations that do not always treat sick people fairly. Medical and ethical knowledge weave through the narratives nurses create from this history.

The following interview data from Benner, Tanner and Chelsea (1996) exemplifies this storied sense of the world. It illustrates the expertise an advanced practice nurse draws on to help a patient die with dignity. From the moment the nurse sees her patient, she is able to read his condition and respond to it as it changes:

He came up looking about as orange as that orange juice, but not in any real distress. I got him about 3 O'clock in the afternoon so I had him for about 4 hours that day. Then the next morning when I came in to report, they had just intubated him. By the time I got out of report they were setting up to put invasive lines in and by 10:30 in the morning he was being dialyzed. So all of this in a space of 5 hours really kind of overpowered this guy who was still quite with it. He knew everything that was going on even though his liver enzymes were just sky high. I really thought that he should have been encephalopathic by then but he wasn't. And his family was all here. But none of it made any difference in his clinical picture. He continued to deteriorate and after being on dialysis for 4 hours and not having that make any difference at all. (p. 149)

The nurse's knowledge is encapsulated in her understanding of her patient. She doesn't explain what 'liver enzymes' are, what it means to be 'encephalopathic', or how the two concepts relate. Many years of study and practice allow her to infuse this knowledge into her intuitive sense of her workplace. The nurse is able to combine formal and experiential knowledge into a representation that describes the progress of a particular human being. In the next part of the narrative, the nurse describes a crucial moment. Even though she has known the patient for a very short time, she has the skill necessary to speak as a trusted and caring professional. It is important for the reader to imagine how difficult it would be to say the right thing at the right moment at the appropriate time to a very sick man while monitoring complex equipment in a unit filled with other highly pressured workers:

At this point, this was the first time I had ever, ever, ever said this to a patient. And I knew he could hear me. He responded to me. I said, "*You're going to be taken off dialysis and you're probably going to die in the next couple of hours.*" His eyes just popped open, and then just this peaceful look came over his face. It was an amazing transition. He finally died at about 6:30 that evening. And to have been with him through that really very critical period and make sure that he knew everything that was going on and make sure that his family knew what was going on. And to help him into the most peaceful death that could happen under those circumstances...It seemed that he really did let go very soon on after his family had come into the room. He became unresponsive probably within an hour of that and I think having the permission... his family came in and said "*we love you, we'll miss you, but we know you're going to die.*" I think having that realization from the family and having it spoken to him [gave him permission to let go.] (pp. 149-150)

The nurse's experience allows her to turn what a beginning nurse might perceive as a tragedy into a source of pride. The expert is able create history as well as respond to it. Her judgments and actions are based on her ability to read and respond to her environment and use this knowledge to determine the best action for a particular moment in time.

NURSE: I tried very hard to have [the family] be in the room as much as possible so they could see what was going on. See what I was doing. See what all the other technical people were doing.

INTERVIEWER: Because?

NURSE: I think so it wouldn't be a shock to them when the decision had to come that he was going to be allowed to die.

INTERVIEWER: Did you have the sense that was the case in the morning?

NURSE: Yeah, it was real vague. A real vague sense of doom at the beginning of the day, but when everything happened in a short time it really knocked me over the head...His lines were in by 9 AM, he was on dialysis by 10:30. You know, I think probably not seeing his eyes nearly as much as I had the day before.

INTERVIEWER: Talk about that a little more

NURSE: He kept them closed most of the time. He was exhausted. I'm sure. But not seeing his eyes. He would

open his eyes once in a while when I would talk to him. But most of the time he would just nod or squeeze my hand or help me turn him or whatever.

The nurse's experience allows her focus on areas of her patient's body—such his eyes—that enable her to read how he reacts to changes in his illness. The information she gains changes the way she responds to the changes in his condition. The expert nurse has skill required to orchestrate her patient's death. The nurse's narrative continues when, under the interviewer's probing, she surfaces many of the specific steps she takes to support the family's grief work:

INTERVIEWER: Did you have any interchanges with the family, did you talk with the family?

NURSE: O yeah, as much as possible. In the morning it was real hard. I was really caught up in the technical stuff that was going on and it had to be. I tried to get them into the room as much as possible, but they would stay just for a couple of minutes and leave. Finally, after about the first 3 hours of dialysis, we knew things weren't going real well and I tried to get them in. I went out to the lounge and talked with them a bit. That was pretty low keyed because there wasn't anything that I could tell them yet. Just kind of getting a feeling of what was going on and how scared they were. Dealing with them in the afternoon was much different. Of course, I could see them more and pay a lot more attention to them and kind of interpret what had gone on during the day. I felt a great urgency to get all the peripheral junk out of the room, as many machines as possible. *"Get some chairs in there. Just a different accoutrement in the room."* Instead of having all the technical equipment in there, to just get rid of all that as much as possible, leaving just one IV pole, the pump, and the ventilator, and kind of hiding the arterial and PA lines. And then setting up the room with some chairs and making sure that there was several strategically placed boxes of Kleenex and his water pitcher and several glasses. And then being able to leave the family for, say half-hour periods and just kind of keep an ear out for what was going on and keep an eye on the monitor, then go back occasionally and see how everybody was doing. (p. 150)

Creating humane outcomes is highly skilled work. Throughout the narrative, knowledge and skill; ethics and action; the technology and caring are fused. Each element interrelates as part of a system that would not function without the nurse's agency. Events would not unfold in the way they do without the expert's knowledge, skill and judgment.

Further, this knowledge is not cut up and decontextualized. It is woven through the nurse's understanding of these events and the stories she creates as she responds to them.

A Cognitive Frame for the Ethnographic Findings on Human Performance

The goal of the Expertise in Teaching Project is to describe how knowledge changes professional performance. Its objective is to explain how the knowledge of teaching changes teachers' practical consciousness and alters the history of their classrooms. By studying detailed narratives of the lessons and relationships created by expert and beginning educators, the project aims to create a series of hypotheses on how knowledge changes teachers and students' lives in school that will not be falsified by future studies using other research methods.

In the review I wrote for my comprehensive exams (Vanover, 2003), I described the different cognitive and ethnographic models of expert practice. Rather than existing as two worlds apart, I asserted that ethnographic and cognitive approaches to expertise could be combined into a single account of human performance. The dynamic, narrative-based reasoning processes that lie at the heart of Benner's ethnographic work thus can be analyzed like other psychological processes.

That review's main argument was that Kintsch's (Kintsch, 1988, 1998; Kintsch & Rawson, 2005; van Dijk & Kintsch, 1983) construction integration theory can be used to understand aspects of human performance that Hubert Dreyfus (1992) once argued could not be modeled by cognitive science. Experts do not move through familiar environments by consciously calculating their moves and countermoves, as Dreyfus correctly argues. Accomplished moment-to-moment performance is not caused by deliberate problem solving or conscious, rational choice. Instead, expertise is caused, in cognitive terminology, by preconscious thinking processes. The mind has evolved in such a way that, given sufficient learning, it automatically deciphers and responds to familiar patterns in the environment (Ericsson & Kintsch, 1995). When working within their field of practice, experts seamlessly merge information from their surroundings with information from their memories to create highly meaningful understandings of that present instant. They intuitively notice patterns that less skilled performers miss or must calculate out.

This *knowledgeable-perception* (De Groot, 1948/1965) lies at the heart of their performance advantage. In teaching, perceptual differences between teachers with different types of experience have been discussed extensively by Carter and colleagues (Carter, Cushing, Sabers, Stein, & Berliner, 1987; Carter & Doyle, 1986; Carter, Sabers et al., 1987). Their researches show that these perceptual processes operate in classrooms. Expert teachers see their classrooms differently than non-educators. They interpret the moment to moment flow of events with different knowledge structures. Their knowledge changes their intuitive understanding of their students and their lessons.

Kintsch's construction integration theory models explicitly how this human information processing capacity allows people to go beyond automatic reactions to familiar stimuli and create knowledge structures that allow them to see deeply into familiar events. His computer simulations and theoretical work show how people integrate information from their minds, bodies and their environments into meaningful representations that allow them to respond fluidly and flexibly to different types of problems (Doane, McNamara, Kintsch, Polson, & Clawson, 1992; Kintsch & Greeno, 1985; Mannes & Kintsch, 1987; Singer & Kintsch, 2001). Knowledge and practice allow experts to understand familiar environments using forms of thought Kintsch (1998) describes as comprehension processes. Experts make sense of contradictory environmental cues by constructing a representation of the possible meanings of that situation and then integrating it into a coherent *understanding*. This capacity allows people to make sense of what James Greeno (1994; 1998) calls the affordances and constraints of a particular situation. Experts are able to make sense of what they see and act within a changing context, not because they calculate each choice, but because they *understand* that particular moment in time.

Comprehension processes allow people to access information they have learned in other situations and use this knowledge to make sense of a particular instant.

Construction integration theory claims that experts understand familiar environments analogous to skilled readers (Kintsch, 1998; Kintsch & Kintsch, 2005). Experts make sense of the worlds they work within by drawing on the understandings created by many years of experience acting within a particular domain and seamlessly combining that knowledge with perceptual information from their environment. Physicians read their

patients' injuries in the way that skilled readers process lines of text (Arocha & Patel, 1995; Patel, Arocha, & Kaufman, 1999). These experts' prior learning interacts with the environment to create non-analytical frames of meaning that deepen and change as they exam their patients' injuries, study the results of the medical tests they ordered, and listen to information communicated by other members of the health care team. In Benner and her colleagues' (1996) words, highly skilled practice is experienced as a "*moving picture show*." The rich sets of representations experts use to *understand* their choices have visual, auditory, and emotional dimensions (Ericsson & Kintsch, 1995; Kintsch, 1998; Patel et al., 1994). Construction-integration theory models how experts weave memory and perception into a flexible, and historically situated, understanding that changes as events unfold. In teaching, this facility might allow a teacher to organize her knowledge of pedagogical systems such as Writer's Workshop or Inquiry-based Science into memories of her work using that design (Van Manen, 1994). Students' actions on specific occasions might be read as more or less appropriate given the teacher's background knowledge of pedagogy and her experience using the design. In the highly routinized classrooms produced by expert teachers (e. g. Borko & Livingston, 1989; Leinhardt & Greeno, 1986; Taylor, Person, Clark, & Walpole, 2000) students actions might become so familiar that they can be read similar to the words on a page.

Practice is vivid; it is not abstract. When physicians think a-loud as they diagnose a familiar case what comes to mind is not their memories of their classes in medical school, but their years of experience working with patients and practicing their craft (Patel et al., 1989; Van de Weil, Boshuizen, & Schmidt, 2000). Highly skilled performers such as chess players, physicians, and poets draw on this landscape or, to use Kintsch (1998)'s term, "knowledge net," to create the scenarios they use to make decisions. Experts tend not reason abstractly. When faced with a particular choice, they see, feel, hear, and even smell what might happen and mentally try-out different sets of actions. Highly respected Iowa neurologist Antoine Damasio (1994) describes this embodied form of decision-making with these words:

the brain of a normal, intelligent, and educated adult reacts to the situation by rapidly creating scenarios of possible response options and related outcomes. To our consciousness, the scenarios are made of multiple imaginary scenes, not really a smooth film, but rather pictorial flashes of

key images in those scenes, jump cut from one frame to another, in quick juxtapositions. (p.170)

Emotion is a key aspect of this dynamic reasoning process. Damasio argues that the human mind has evolved to allow skilled performers to accurately respond to the problems they face by doing what feels good and avoiding what feels anxious and uncomfortable. Instead of calculating their choices, people feel them out. Emotion shapes activity during moment-to-moment decision making and in the enactment of long-term programs of action. Beneficial possibilities act as beacons that inspire people to work towards a chosen goal. Threats inspire efforts to avoid a particular outcome.

Damasio and his colleagues (Tranel, Bechara, & Damasio, 1999) provide the example of a tense faculty meeting where tenure and work assignments are discussed. When planning for this situation, the decision-maker creates a physical and embodied problem-space where she speculates extensively about the motives of other parties and on those persons' potential actions and alliances. As the problem solver's attention moves through the memories and possibilities that make up this landscape, she may produce somato-sensory images of the voices of different faculty members as they argue against some of the proposals. She may also create brief visual images of the speakers' faces and even olfactory memories of their perfume. These sensory-representations are linked with the feelings these memories evoke (Bechara, Damasio, Tranel, & Damasio, 1997; Damasio, 1994; Tranel et al., 1999). A particular face may make the problem solver feel anxious. The image of a successful outcome may generate positive emotions. These "somatic markers" allow people to draw on mental and emotional knowledge when they make decisions. As Damasio (1994) writes:

Somatic markers are a special instance of feelings generated from secondary emotions. Those emotions and feelings have been connected by learning to predicted future outcomes of certain scenarios. When a negative somatic marker is juxtaposed to a particular future outcome the combination functions as an alarm bell. When a positive somatic marker is juxtaposed instead, it becomes a beacon of incentive. (p. 174)

Damasio and his associates argue that decision situations generate so many potential choices that the only way human beings can evaluate them is to filter alternatives with emotional cues. Emotion thus becomes part of information people rely on to act in the moment. It helps organize the comprehension processes skilled performers use to

understand the possibilities and constraints of a particular stretch of activity.

This emotionally laden comprehension process is a learned response to familiar environments. There is nothing mystical about it. If people learn the wrong lessons from the events they experience, or if the environment changes in ways that decision-makers do not understand, emotion becomes a faulty guide. Human beings can learn to feel good when they do things that are harmful; they can learn to avoid opportunities that might benefit them. In-the-moment understandings are not always accurate; particularly when people act in situations where they have not engaged in extensive deliberate practice. Damasio and his colleagues (Tranel et al., 1999) emphasize that emotion is not the only resource people use in decision-making. When human beings have time to think through their choices, they can evaluate the scenarios their minds and bodies create by using reason and logic to estimate risks, rewards, costs and benefits.

Comprehension processes are found among all skilled performers (Ericsson & Kintsch, 1995; Ericsson, Patel, & Kintsch, 2000; Kintsch, 1998). In medicine, Kintsch (1998) argues that the concepts and categories created by a medical students' course work allow her to construct a highly meaningful landscape when she looks at her patients' bodies. This knowledge allows her to see a case of measles when she looks at the spots on a patient's back, or to hear a particular type of heart murmur when she listens to the sounds streaming through her stethoscope. If the physician has difficulty making a particular diagnosis, she will create a problem space filled primarily with experiential memories of other cases. This inner landscape might contain the memories a case of shingles that she diagnosed two years before, or the sound of a heart murmur she misdiagnosed (Ericsson, 2004; Norman et al., 1989). Boshuizen, Schmidt and their colleagues (Boshuizen et al., 1995; Rikers et al., 2005; Van de Weil et al., 2000) show that this experiential landscape encapsulates the formal knowledge physicians learn in medical school. When physicians create a diagnosis, their knowledge of disease and biomedical science combine with memories of cases they have experienced to produce a highly meaningful state of mind. Multiple forms of formal and experiential knowledge thus are integrated into experts' *knowledge nets*.

Conscious problem solving might be seen, in Kintsch's (1998) words, as a "repair" process. It is a form of thought that allows people to make sense of unfamiliar

phenomenon and/or unforeseen chains of events. Instead of acting in the moment and allowing one's intuition to guide a particular set of moves and counter moves, problem-solving gives people the ability to focus their attention on a particular issue and calculate a particular choice. It is form of thought that allows people to break free of past understandings and see the world in a different way (Anderson, 1993; Chi, Feltovich, & Glaser, 1981; Larkin et al., 1990). Analytic reasoning processes allow a person to make what is strange into what is familiar. Given sufficient time and practice, problem solving is the first step in a process that transforms an action that requires conscious calculation into an intuitive response (Anderson, 1983; Anderson et al., 1996; Fitts & Posner, 1967).

Problem solving takes effort. It requires high levels of cognitive resources and tends to lower performers' effectiveness during a particular engagement. Amidiz and colleagues (2001) neurological studies show, for instance, that when grandmasters play each other, the losing player tends to engage in more problem solving. Losers find themselves in situations where they cannot rely on their previous experience to guide their play; they must calculate their choices because what comes naturally does not work. Winning players, on the other hand, are free to act in the moment. They have the knowledge and skill required to push the moves and counter moves that make up a particular chess game towards positions they find familiar. They do not have to engage in extensive problem solving because the matter is rarely in doubt. Instead, that particular encounter takes place in what Bourdieu (1990) might describe as "a planless improvisation that proceeds as if there was a plan". Parts of the game might be routine, others lit up by moments of positive feeling and inspiration, but there are few unexpected turns of play.

The preceding account of human action is, in no way, a new departure. It aligns closely with pre-World War II models of human decision-making, particularly Max Weber (1978)'s. As the German sociologist emphasizes, the meanings people create as they make their way through the world must be taken into account when creating causal models of their behavior. Weber's theory emphasizes that the understandings people use to make choices are created by growing up in a particular culture and by the many institutions that order and regulate a people's behavior in the modern world. Meaning may also be created by an individual's commitment to a particular ideal or by that

person's calculation of the costs and benefits of a particular choice.

The cognitive account of expert practice sketched out in this chapter, thus provides experimental evidence to support and clarify a perspective on human behavior that has a long history in the social sciences. As Weber emphasizes, people can respond to their environments with calculated actions or emotional responses, but mostly human beings do the things they do because they have done them that way many times before. There is a further benefit for using Weberian sociology as the ground for a theory of expertise, particularly one that focuses on the meanings created by urban schoolteachers. Unlike the Heideggerian vision that lies at the core of Dreyfus (1991)'s work, many researchers find Weber's work particularly well suited for understanding people's actions in the modern world (Scott, 2005): especially those working to understand vast bureaucracies such as the Chicago Public Schools.

Routine Educational Practice

The account of expert practice described above has a major omission. It describes decision making as an almost entirely individual-level phenomenon. Choice and activity are created in the head, and not in the world. I described how experts learn to act within familiar environments. I did not discuss how they create these spaces. Further, my account can only be applied to teachers' work by making a key assumption: Classrooms must be viewed as stable, familiar environments or the cognitive work that I have discussed in the previous sections will not apply to interactive, classroom teaching. Expertise is the ability to manage familiar challenges with in-the-moment responses and learned problem solving strategies that take advantage of reflection and deliberate practice (Ericsson & Charness, 1994; Schön, 1983). If environments are erratic or unpredictable, prior learning provides little, if any, performance advantage. People cannot automate problem-solving strategies if they are constantly faced with new challenges. Professionals cannot intuitively manage environments they do not understand. Skilled-workers who base decisions on their intuitive, prior knowledge in these circumstances may find themselves similar to stock-brokers who go broke skillfully using obsolete tactics (Robert J. Sternberg, 1996).

The literature on expertise in teaching, however, demonstrates that skilled

educators can organize their classrooms into stable, familiar environments (Berliner, 1986; Leinhardt & Greeno, 1978; Leinhardt, Weidman, & Hammond, 1987; Taylor et al., 2000; Wharton-McDonald, Pressley, & Hampston, 1998). Knowledge and practice give expert instructors the power to arrange students' actions into sets of repeated activities for living and learning in school. Instead of spending time worrying about how to begin the school day, for instance, teachers can routinize this activity. Skilled educators can teach their students how to walk to their lockers, put their coats away, drop off their homework and sit in their seats. Once school begins, they can teach their students how to take their writing journals out, focus on a 10 to 15 minute mini-lesson and then work together on their writing assignments. The children who live and learn within a particular classroom may not do the same thing, the same way, every hour of the school day, but given a teacher who possesses sufficient knowledge and skill, much of their actions may be highly predictable. Like a chess match, parts of the school day might be routine, others lit up by moments of inspiration and positive feeling, but there will be few unexpected turns of play.

Highly productive classroom communities are designed and planned environments (Clark & Yinger, 1987; Doyle, 1986; Yinger, 1980). They do not arise from chance, but are created by professionals' knowledge and skill. In these routinized classroom spaces, students spend their time engaging in many academically challenging tasks without having to slow down and figure out what to do (Brophy, 1988; Wharton-McDonald et al., 1998). Children spend class time working in groups discussing the books they have read because their teacher has taught them common procedures to work together for reading. They spend their morning writing rough drafts and editing each others' work because their teacher has taught them the skills required to take a piece of writing from a set of brainstorm to a published copy. These well-practiced activity structures create the map that guides teachers and students' choices as they move from writing to reading to math to science (Doyle & Carter, 1987).

The familiar challenges created by these routines allow skilled teachers to rely on their prior understandings to move through the day. As discussed in the previous sections, experts act within familiar environments by organizing information from many sources into a changing representation of that particular moment in time (Kintsch, 1998).

Routines create regularities; they allow people act fluidly within the familiar situations they author (Borko & Livingston, 1989; Leinhardt & Greeno, 1978). In these structured environments some activities make sense; others appear meaningless. In an accomplished teacher's classroom, for instance, students learn to make one set of choices during writing period, another set during science lessons, and a different set when they are out on the playground. Decisions in these environments are thus triggered by routine activities, rather than deliberate problem solving. Knowledge thus becomes distributed in the situations people create as well as in their heads (Cohen & Ball, 1999; Yinger & Hendricks-Lee, 1993). Habit organizes choice.

The activity structures that organize familiar environments do not prevent reflective-practice; instead they are key resources for planning. Educators can prepare for the school day with the expectation that if they have taught their students how to walk into their classroom at nine o'clock and be ready to learn, their students will walk into their classroom at nine o'clock and be ready to learn. These regularities allow skilled-teachers to take many activities for granted and focus their attention on critical dimensions of their work (Lampert, 1985). Teachers can imagine students at the chalkboard working out a particular problem without having to focus on the procedures required to get them to stand at the board. They can try out sets of instructional moves in their minds-eye and revise their plans based on what they have learned from these scenarios with the expectation that what takes place in their thought-experiments will correlate to what takes place in their classroom (Lampert & Ball, 1998). Expert educators are not required to spend every moment of every school day thinking on their feet. Knowledge and practice give them the ability to solve many of the problems they face in advance (Shavelson, 1983).

Routines shape what teachers and students think, as well as what they do (Brophy, 1996; Kounin, 1970). They focus the class's attention towards some activities and away from others. In classrooms where students engage in the many activities required to participate in Writer's Workshop, students learn to focus on the stories they write, rather than on their conflicts with other members of their learning group. In classrooms where students engage in challenging mathematics activities, children learn to spend their time trying to understand abstract concepts rather than gazing out the window wishing they

were home watching TV.

Routine work should not be viewed as thoughtless. The flows of activity that routine forms of schoolwork create should be viewed as the choreography in a dance routine. These limits do not stifle creativity, instead they are keys to its expression. The days spent following the rules that structure a peaceful working classroom may be some of the happiest of child's life (Foster, 1997; Ladson-Billings, 1994). The benefits human beings enjoy from working together are the subject of much sociological theory (Collins, 1998; Durkheim, 1984; Sandelands, 1998). Mari Koerners (1992)'s ethnographic study of the Chicago Public Schools shows that a good day teaching resounds with strong, joyous energy. One activity flows into the next and the whole system comes together as a single entity. In the words of one of the teachers she interviewed:

...because all of a sudden there is a flow. You and the children are moving together toward the common vision. I don't even like to say goal, it's like a vision. We're just all on the same mind set and the whole day is going along on the kind of mind set, all following together. There's just a sense of collaboration. And that's the neatest feeling every time. I love that sense of flow, that just everything pulls together. (p.38)

An outside observer who walks into these productive spaces in January, might think that the teacher has little to do with producing them. Students may have learn how to enact the many activities that produce these places of work so deeply, classrooms sometimes seem to run themselves (Cameron, Connor, & Morrison, 2005; Leinhardt & Greeno, 1978). One activity flows to the next; projects are started and finished; children are engaged in academic work that interests them; everything seems normal. Similar to other forms of expertise, skilled-teachers thus can make what Simon (1996) would describe as highly *artificial* activities seem natural, even ordinary.

The routines teachers use to organize their classrooms and instruct their students vary in the effects that they have on their classroom community (Brophy, 1988; Kounin, 1970; Leinhardt et al., 1987; Taylor et al., 2000). Some classroom activity structures produce positive environments for learning that support children's development as scholars and citizens. Other activity structures create conflict and poor learning outcomes. Because all students are not the same, however, students may vary in their responses to different instructional strategies (Connor, Morrison, & Katch, 2004; Hamre

& Pianta, 2005; R. J. Sternberg, 1996). Expertise in schoolwork requires both effective plans and skilled, interactive decision-making. Teachers must have the knowledge to design academically challenging educational environments; they must also possess the understanding necessary to accomplish their plans and evaluate their efforts as the school year unfolds (Ball, Lubienski, & Mewborn, 2001; Schön, 1983; Shepard, 2000).

In modal classrooms, beginning teachers lack the knowledge to make consistently beneficial design and interactive teaching choices (Lampert & Ball, 1998; Wildman, Niles, Magliaro, & McLaughlin, 1989). Their plans are less knowledgeable. Their capacity to carry out these activities less accomplished. The reflections they make on their efforts are less astute. Beginning educators, for instance, may use designs for learning that are quite common, but lack proven effectiveness (Roehrig, Pressley, & Talotta, 2002). They may use dittoed worksheets to teach writing, if they teach the subject at all, rather than engage in the many activities required to conduct Writer's Workshop. They may use classroom assessments to diagnose and treat students' academic strengths and weaknesses, but lack the knowledge to understand and use the data produced by these instruments (Kauffman, Moore Johnson, Kardos, Liu, & Peske, 2002).

Because they know less and accomplish fewer goals, beginners' classrooms tend to be unpredictable (Kounin, 1970; Leinhardt, 1988; Leinhardt et al., 1987). Instead of responding fluidly to familiar challenges, they struggle to make sense of unexpected events. Planning time is spent managing unforeseen crises. Bad things happen routinely. Mistakes build on mistakes. The effort required to manage the problems caused by these environments may become so severe that, in Kauffman and colleagues (2002)'s words, many first year teachers find themselves "lost at sea without a map." By the middle of the school year, beginners may find themselves traveling through a sea of problems. They don't know where they are, how they got there, or what to do to travel somewhere else. Instead of leading instruction and guiding the choices their students make, beginners struggle from one crisis to the next.

Current Conceptions of Routines

Classrooms are not the only organizations that are organized by stable activity structures. March and Simon (1958) argued almost 50 years ago that most behavior in organizations is governed by routines or, in their terminology, performance programs. In these researchers' early account, routines are viewed as fixed responses to defined stimuli. They are the organizational equivalent of the behaviorists' stimulus-response chains. In this perspective, organization members enact performance programs when they respond to specific inputs, similar to the way that drivers slow down when they see stop signs. To use an example from March and Simon (1958)'s classic work: When the bell rings, the members of the fire company carry out a performance program. They leap up out of their beds, put on their gear and take their place on their fire engines. Little cognitive effort is required for team members to get on the truck.

Contemporary organizational theorists create more mindful accounts of these collective performances (Becker, 2004; 2005; Dutton, Worline, Frost, & Lilius, 2006; Feldman & Pentland, 2003; Hatch, 1999; Pentland & Reuter, 1994; Weick & Roberts, 1993). Performance programs are not viewed as automatic responses to familiar signals; instead they require much practical consciousness to enact. To use Pentland and Reuter's (1994) term, routines are *effortful accomplishments*. When the bell rings, the fire crew will perform many activities automatically—they will put on their boots with little conscious thought—but they also engage in much cognitive work. Skilled performance requires intensive planning and self-monitoring (Ericsson & Kintsch, 1995; Ericsson & Lehmann, 1996) As crewmembers collect their gear and put on their coats, individuals might be appraising the capacity of the different members of their unit. If the fire-company is sufficiently skilled, these assessments will be factored into the strategies team members engage in during that particular engagement and the moment-to-moment choices they make (Weick, Sutcliffe, & Obstfeld, 1999). The company will act differently if they know that one of their members is coming off an injury or if another is going through a difficult personal problem. As crewmembers drive to the site, they may talk among themselves about future events or listen to the description of the fire on the radio. These interactions allow them to become aware of the kinds of problems they face and prepare for future contingencies. Routine work thus can be highly skilled and cognitively

demanding. Participants may be required to design a response to the challenges they face from a common grammar of routines that may require much effort to learn and skill to apply to the matter at hand (Klein & Calderwood, 1991).

Contemporary organizational theorists view the entire sequence generated by a particular repetitive pattern of actions as an example of a single performance program (Becker, 2004, 2005). Routines thus can extend in time and space and organize many work processes. The many activities involved in academic hiring are viewed as a single routine, as are the many activities required to fight a fire. In Feldman and Pentland (2003)'s core definition, an organizational routine is "a repetitive, recognizable pattern of interdependent actions, involving multiple actors." What matters is not that team members act in the same way each time they engage in a particular performance, but that participants organize their work according to a common grammar and knowledge base. Almost all recurring organizational functions can be viewed as sets of nested routines. The fire-fighting routine described above has many different components that team members carry out with varying levels of skill. Some fire companies may be better at putting out fires than other crews. Some companies may be more skilled at organizing rescues (Lewandowsky & Kirssner, 2000). The team's ability to perform the routine as a whole may be improved by practicing each of its different components and reflecting on members' ability to use them in practice.

Routines allow organizations to gain skill. They create resources that allow participants to organize their activities into a common grammar of tactics and strategies (Leavitt & March, 1988; Pentland & Reuter, 1994). During a search and rescue operation, for instance, fire-crewmembers may break down a door using movements that they have practiced many times, and then quickly search through an apartment according to a highly trained procedure. The choices that members make when engaging in these routine actions are not automatic. They are dependent on crewmembers' understanding of the nature of the event. A fire unit may conduct one type of search if members believe that the fire is localized to one area of the building and the unit is not facing high levels of risk. They may conduct a different type of search if the plot changes and a member of their company reports flames in an unexpected place. These new sets of actions may be as rehearsed and practiced as the activities members performed before the company's

collective understanding changed. The plot has turned, but the stream of actions produced by that particular incident may still be familiar, if significantly more pressured (Hatch, 1999; Pentland, 1999).

Similarly, an academic department may manage the events connected to a particular set of job talks differently, depending on what members learn about the individual candidates' strengths and weakness. Faculty may ask one candidate one set of questions and ask the next applicant to discuss a different set of issues depending on the progress of the search as a whole. These sequences of events may be familiar, but the activities that produce a successful hiring may vary from one job-talk to another.

Feldman and Pentland (2003) argue that organizational routines have two primary dimensions. The first is the knowledge necessary to make sense of the specific type of performance such as the firefighting routine or the academic hiring routine. The "*ostensive*" dimension of a routine is the routine in principle. It is the shared models of action that people use to understand how a task gets done, even if they don't know all that much about that particular subject (DiMaggio & Powell, 1983). The ostensive knowledge of a particular routine is rarely shared equally; instead, it tends to be nested in the minds of different organization members. The classroom teaching routine, for instance, exists as a general model in most adults' minds (Rowan & Miskel, 1999). Teachers, principals and other educational professionals have much more detailed understandings of the different components of this particular performance program. In classrooms and schools that are organized for high performance, professionals' understanding of teaching is organized into extensive grammars of reading practice, writing practice and all the other routines required to allow faculty to perform at a high level (Harris & Graham, 1996; Stringfield, 1995; Taylor et al., 2000). Many of these routines may not be familiar to the general public because they were invented in educational laboratories and demonstration schools. Students thus may know more about the routines that structure classrooms in these academically challenging environments, than do their parents.

Building on Feldman and Pentman's (2003) work, I agree that the ostensive aspect of routines draws on two types of knowledge. The first is the knowledge that exists in a particular individual's head. This might be thought of as the image of the routine. It is what people think about, in general, when they think about that particular activity. This

head-knowledge can be learned by academic study, by coaching, and by trial and effort. The second form of ostensive knowledge is the information distributed (Hutchins, 1995) in the tools, technologies and artifacts people use to enact a particular performance program. A portion of the information a teacher uses to teach Writers' Workshop, for instance, might be distributed in the materials she uses to organize her lessons and the standards that she uses to evaluate the strengths and weakness of her class's assignments (Barnes, Forthcoming). Similarly, part of the knowledge required to engage in the neonatal intensive care routine might come from the equipment that continually monitors the infant's pulmonary and circulatory systems. Ostensive, distributed knowledge must still be viewed as knowledge in principle. It exists in the environment where participants engage in a particular performance, but it does not have to be noticed or put to use (Daft & Weick, 1984). A school leadership team, for instance, may engage in an extensive standardized testing program and fail to use that knowledge to lead instruction. The assessments they use may create detailed summaries of students' academic strengths, but that information will not shape the administrators' decisions unless the team has the skills necessary to analyze this data and to use it for students' benefit (Vanover, Barnes, & Kim, 2006). Ostensive, distributed knowledge might be seen as the routine's *standard engineering*.

The "*performative*" dimension of a routine is the knowledge necessary to enact a particular performance (Feldman & Pentland, 2003). This knowledge may produce responses that range from automatic actions to complex activities that require a great deal of learning. A search and rescue unit may perform many simple activities—such as opening children's bedroom closets—as the unit moves from room to room. Members may then engage in highly complex performances when they discover a fire victim. Both sets of routine activities are necessary to a successful mission. Similar to ostensive knowledge, performative knowledge can be nested. There may be many elements of a routine the participants understand in a general way, but lack the understanding necessary to carry out. When an academic department performs the hiring routine, for instance, a new secretary might not know how to book a candidate's expenses and a new professor might not know how to promote the merits of a particular job seeker. Both these people might ask other team members for advice on how to perform their role (Feldman &

Rafaeli, 2002). These less skilled participants might engage in reflective practice to improve their efforts and use this knowledge to act more effectively in the future.

Similar to the ostensive dimension of a routine, I argue the performative aspect of a routine draws on two forms of knowledge. Performative knowledge exists in an individual's mind and body as the history generated by performing a structured activity (Benner et al., 1996; Ericsson & Lehmann, 1996; Kintsch, 1998). This remembered history has visual, auditory, and emotional dimensions. Routines are not abstractions; they are real life. The events created by engaging in a particular iteration of a performance program can matter a great deal to the people who participate in them. Winning a game or saving a life might be some of the most important experiences in a person's existence (Flanagan, 1954; Klein, 1998). While ostensive knowledge might be seen as the blue print, person-level performative knowledge might be seen as history and skills created when an individual engages in repeated, practiced activities to carry out a particular commitment.

Performative knowledge can also be distributed between people and exist in the situations created by their work. It consists of the tools and activities that structure a particular moment in time (Greeno, 1998; Hutchins, 1995). Distributed performative knowledge thus exists in the moment. It is the resources that support one set of activities and constrain another at a specific time and place (Cohen, Raudenbush, & Ball, 2003; Snow, 2001; Yinger & Hendricks-Lee, 1993). The technology that creates these collective understandings may be complex or simple. In the long narrative taken from Benner and her colleagues (1998)'s work excerpted in the second section of this chapter, the nurse used information gleaned from many kinds of high tech equipment to make sense of her patient's condition. When she worked with the dying patient's family, however, some of her most important tools were chairs, a pitcher of water and a box of Kleenex. The relationships the nurse created with her patient and his family also shaped this particular activity system and help shape the flow of action in that particular encounter.

Collective and individual agency (Benner et al., 1996; Emirbayer & Mische, 1998; Goffman, 1967) plays a key role in the determining the distributed knowledge available in a particular environment. Just because a routine exists, does not mean it is

performed skillfully. Just because people receive training for a particular activity, does not mean they will use this knowledge. Groups of individuals may play the same game according to the same rules, but the resources they have at hand during a particular encounter may fluctuate. Sometimes a particular player may be performing well and her efforts will improve the performance of her teammates; sometimes that player may perform poorly. Skilled teams can adjust to both contingencies (Weick et al., 1999).

This variation is a quality of much professional work. Nurses may work in environments where all healthcare workers pull together for the benefit of the patients in their care (Benner et al., 1999; Benner et al., 1996). Team-members may spend time together learning new skills that make a difference in their patients' outcomes. They also find the time to reflect on the unit's performance and use the knowledge produced in those discussions to strive to do a better job. Nurses may also practice in workspaces filled with conflict, where team members lack the resources to manage the daily demands of their profession. Errors may not be detected. Surfaces may not be kept sterile. Basic routines, such as stocking supply cabinets, may be left undone. In a health care unit filled with problems and conflict, new forms of treatment may not be enacted successfully because the members do not have time to learn how to carry them out. The unit does not gain skill because team members spend their time doing other things besides engaging in reflective practice. The history of a particular patient's treatment thus may be structured by performative knowledge that was learned—or not learned—weeks or even months before.

Routines organize time (Pentland, 1999). They have definite beginnings and endings. Participants' decisions at key points of a routine can strongly influence the flow of events a performance program generates in the same way that a particular character's decision determines the plot of a soap opera. As I discussed in the first chapter, the primary way people understand the history of their work efforts is through narrative. As Barsalo (1993) emphasizes, people don't remember the events they have lived through, but the stories they organize out of those happenings. While individuals may store their experience using many different forms of thought, the primary way they communicate these meanings is by telling stories about what they see, feel, and imagine (Kintsch, 1998). Stories allow people to create causal accounts of how different situations develop

(Pennington & Hastie, 1992). Narrative allows human beings to understand how to act within a changing set of activity structures that provide resources for a particular set of possibilities (Benner et al., 1996; Stuhlman & Pianta, 2001). Stories allow people to communicate the embodied scenarios (Tranel et al., 1999) that guide individual decision-making. Thus while distributed, performative knowledge exists within environments, its effects tend to be communicated to team members through stories.

Routines thus are the raw material for stories and stories shape people's enactment of routines. Teaching, nursing and many other forms of professional work might be seen as storied (Benner, 1984b; Connelly & Clandinin, 1999; Czarniawska, 2004; Elbaz, 1991; Van Manen, 1990).

Relationships

While stories can describe recurring events, these activities are not their primary focus. Classrooms and other types of organizations are not structured exclusively from routines. Teachers and students; managers and workers; nurses and patients do not intermingle solely out habit. Relationships matter (Dutton & Heaphy, 2003; Granovetter, 1973; Hochschild, 1983; Homans, 1974; Pianta & Stuhlman, 2004). They influence how people interact and the way work gets done. From classrooms, to academic conferences, to corporate boardrooms: the ability to create and maintain thriving relationships strongly influences professionals' ability to achieve their goals.

The Expertise in Urban Teaching Project takes a relational perspective on psychological development (Baumeister & Leary, 1995; Bowlby, 1982; Jordan, Kaplan, Miller, Stiver, & Surrey, 1991). Acting in relationships with others is held to be one of the primary activities of human life. Parents relate to children, teachers relate to parents, friends relate to each other because that is what people do. They care for each other. They argue with each other. They reconcile or become distant (Kanov, 2005). These histories of interactions shape the choices people make and the way they lead their lives. People may accomplish a variety of goals by being in a relationship, but goals are not always the force that pulls them to cooperate (Durkheim, 1984; Sandelands, 1998). People are social beings and relationships are as necessary to their growth and development as food and water.

The ability to create and sustain relationships within the complex institutional structures that order the modern world is assumed to be, like other performances that take place within this artificial setting, a form of expertise. As Benner (1996) emphasizes, for professionals, crafting caring relationships is a skill that requires a great deal of effort to learn and experience to master. Expert nurses do not treat diseases and traumas; they treat human beings who have feelings, preferences, and relationships with loved ones that impact the trajectory of their care.

Both technical and relational knowledge are necessary to provide proper treatment. A nurse who lacks the skill to perform the many procedures his or her patients require cannot adequately care for those persons even if the nurse makes extensive displays of compassion and concern. Similarly, nurses and other health care workers who do not value their patients as people and care for them as human beings also fail to benefit the persons in their trust. A caring nurse can motivate a patient to take the first steps towards a long recovery and help carry family members through the shock and grief caused by disease and trauma. Strong bonds with patients and their loved ones have the power to open channels of communication that may elicit critical information about patients' conditions. Relationships give nurses the means to help family members' organize appropriate care for their loved ones, and the authority to advocate for patients when care breaks down.

Nurses who lack the expertise necessary to create relationships with patients move through their practice almost as sleepwalkers (Rubin, 1996). Rubin argues that disengaged practitioners act out of habit, rather than concern. They lack the support and relationships necessary to talk through the events they have experienced, honestly evaluate their efforts, and commit to improving their performance when faced with similar challenges. These professionals lack the means to understand the patients they care for and organize their work experience into a meaningful landscape. The knowledge they use to guide their patients to recovery is thin.

Over the past decade researchers primarily located in educational psychology have created an extensive body of research on the consequences of relationships for children and adolescents (e. g. Birch & Ladd, 1997; Burchinal, Peisner-Feinberg, Pianta, & Howes, 2002; Crosnoe, Johnson, & Elder, 2004; Gregory & Weinstein, 2004; Hughes

& Kwok, 2006; NICHD ECCRN, 2002; Resnick et al., 1997; Taylor & Roberts, 1995; Verschueren, Marcoen, & Schoefs, 1996). These reviews show that strong and secure relationships with parents and other adult caregivers, such as teachers, may function as protective factors for children and adolescents who have been placed at risk and may allow youngsters to succeed in a variety of life domains. Strong connections at home may support students' academic growth. Strong connections in school may protect children from family troubles. Relationships matter for children's academic growth and development.

Hamre and Pianta (2001) show that students with negative relationships with teachers in kindergarten tend to have lower achievement and more problematic behavioral outcomes into 8th grade after controlling for a wide range of student characteristics including initial cognitive ability and pre-school behavior. In a later study, the same researchers show that children assessed at-risk for school failure in kindergarten who learn in first grade classrooms where teachers have the skill to organize high levels of instructional and emotional support, learn at similar levels as students who are not classified at-risk (Hamre & Pianta, 2005). At-risk students who learn in first grade classrooms without these supports show significantly poorer outcomes. The researchers find that students identified at-risk benefited most from classrooms with high levels of measured, emotional support. Many of the instruments the researchers use to create this measure assess similar characteristics to those found in the routinized classrooms produced by the expert teachers discussed in the previous sections of this review (e. g. Bohn, Roehrig, & Pressley, 2004; Cameron et al., 2005; Leinhardt & Greeno, 1978; Leinhardt et al., 1987). When children identified as at-risk attended classrooms with clear, but flexible, rules and routines that were organized by teachers who showed enthusiasm and warmth, they learned at about the same level as students who showed few or no risk factors. Hamre and Pianta (2005) found that no other classroom resources provided the same benefit. Without a routinized classroom environment that provided emotional support, student placed at-risk failed to benefit even from teachers who skillfully organized their classrooms for instruction. In Hamre & Pianta (2005)'s words:

Academic performance for students at high functional risk was not significantly moderated by the level of instructional support in the classroom. This finding is consistent with other work indicating that

among children who have displayed difficulties adjusting to the classroom environment, having teachers who attend to their social and emotional needs may be as or more important to academic development than specific instructional practices (Burchinal et al., 2005; Hamre & Pianta, 2001; Noam & Herman, 2002; Pianta, 1999; Wentzel, 2002). (p. 962)

The history of a student's instructional and emotional relationship to a teacher is driven by the routines that organize the experience of the class as a whole. For students who face many challenges, the chance to spend time in a warm and caring place where their needs are met, the work is fun, and they are never far away from an adult who cares for them may have life-changing benefits (e. g. Graziano, Reavis, Keane, & Calkins, 2007; Pianta, Steinberg, & Rollins, 1995; Silver, Measelle, Armstrong, & Essex, 2005).

Brody et. al. (2002) find similar effects for skilled classroom management and positive relationships in a sample of 277 single-parent, African American families living in a Southern U.S. region with a long history of racism. The researchers find that the young persons in their study benefit from classrooms environments where teachers create clear rules and routines, where daily activities are organized and predictable, and students are involved in classroom planning and decision-making processes. Relationships between the primary caregivers and children that are organized around vigilant and supportive parenting practices (Young, 1970, 1974) also benefit these young people. Brody et al. (2002) find that positive school or home contexts act as protective factors that uniquely improve children's self-regulation and decrease young persons' likelihood of displaying aggression, delinquency and depression. Positive relationships at home can compensate for a chaotic classroom context; positive school environments can compensate for a troubled family life. Student placed at-risk can thus "do better than expected" and show resilience in the face many difficulties as the result of the efforts of their mothers and the school professionals who serve their families. Decker, Dona & Christenson (2007) find similar benefits for positive relationships between teachers and a smaller sample of African American children placed at-risk. Burchinal and colleagues (2002) find that teacher-reported closeness with students is positively related to growth in children of color's receptive vocabulary and reading abilities from preschool to second grade.

Furrer and Skinner (2003) argue that one of the primary benefits of positive

teacher student relationships is they improve children's sense of academic engagement. Children who are embedded in affirmative relationships feel good, and this positive feeling acts a resource for meeting daily challenges of life in school.

Feeling special and important to key social partners is hypothesized to trigger energized behavior, such as effort, persistence, and participation; to promote positive emotions, such as interest and enthusiasm; and to dampen negative emotions, such as anxiety and boredom. In contrast, children who feel unconnected to key social partners should find it harder to become constructively involved in academic activities; should more easily become bored, worried, and frustrated; and should be more likely to become disaffected. The quality of children's day-to-day involvement in academic activities is, in turn, the route to their long-term learning, socialization, and development in school. (p. 149)

When students believe they live and learn in classrooms managed by teachers who care for them, they tend to be more willing to focus on their schoolwork and put in the effort required to master academic tasks. Further, Furrer and Skinner find that positive relationships between a student and particular sets of social partners—parents, teachers, or peers—can compensate for low relatedness to other groups. A strong relationship with teachers and peers can, for instance, compensate for low relatedness to parents. In general, as the sets of social partners that a student had positive relations decreases, the student's likelihood for engagement difficulties increases. As might be expected, in school settings strong teacher-student relationships operate as a protective factor: poor relationships between teachers and students place children at greater likelihood for academic disengagement than weaknesses in any other social relationship. Furrer and Skinner (2003) offer the following explanation:

We subscribe to the view that one reason that high relatedness is connected with improvements in engagement over the school year, and possibly with positive trajectories of engagement over longer periods of time, is that it marks children who are involved in a positive motivational dynamic. Children who are high on relatedness are more likely to show enthusiastic participation in school activities and fewer negative emotions, leading to greater opportunities for actual learning and school success; the combination of constructive engagement and higher performance elicits more support from teachers, parents, and peers, which confirms or promotes children's feelings of belonging and connectedness. In contrast, children who feel unimportant or rejected by key partners are more likely to become frustrated, bored, and alienated from learning activities, which in turn interferes with their academic progress; poor performance coupled

with disaffection erodes social support, leading children to feel further estranged. (p. 158)

Students who have positive relationships with key social partners tend to enjoy school more than students who do not. Positive feeling motivates children with positive school relationships to focus on their studies and this effort, in turn, supports student's academic achievement and draws cognitive support from teachers, peers and parents. Poor social relationships create cycles of bad feeling that pull children away from school resources and tend to provide little support for their academic development.

One of the basic findings of the research on teacher student relationships is that some students are more likely to enjoy caring and close relationships with their teachers than others. Students that are at-risk for poor teacher student relationships include boys (Birch & Ladd, 1997; Furrer & Skinner, 2003; Hamre & Pianta, 2001; Kesner, 2000), students who are poorly adjusted to school (Blankenmeyer, Flannery, & Vazsonyi, 2002) and racial and ethnic minorities (Kesner, 2000; Saft & Pianta, 2001). Given the importance of positive relationships to students' development, it might be argued that at-risk students who might benefit the most from these relationships are least likely to receive them in modal classrooms. Given that most elementary educators are white and female, the adults who care for these students might not understand their needs (e. g. Gay, 2000; Kleinfeld, 1992; Ladson-Billings, 2001; National Partnership for Teaching in At-Risk Schools, 2005; Tharp, 1989). Thus a key outcome of teacher expertise might be the creation of the relational supports where all students, but particularly those placed at-risk, flourish.

Conclusion

I began this review outlining an account of expert knowledge and performance organized around cognitive theory and a number of, mostly, laboratory studies. I argued that expertise was a particular case of the human mind's general ability to adapt to familiar environments and respond intuitively to typical problems (e. g. Anderson & Schooler, 1991; Ericsson & Lehmann, 1996; Ericsson & Smith, 1991). Expertise differs from other forms of experience because these adaptations are generated by conscious and deliberate improvement processes. When people confront stable environments, such

those produced by sports, surgeries, or texts it is possible for them to learn skills and understandings that improve their performance. The two primary causal forces that shape expert practice are the opportunity to learn and the motivation to reflect on one's performance, evaluate the strengths of one's efforts, and change how one acts within similar situations in the future (e. g. Bransford, Brown, & Cocking, 1999b; Charness et al., 1996; Ericsson et al., 1993).

This conscious and deliberate improvement effort may result in different types of performance-adaptations depending on the shape of the task-environment. Expert writers tend to solve problems slower than writers of lesser skill because they see more deeply into the possibilities and constraints set up by a particular assignment, however this extended problem solving effort tends to produce more interesting and engaging work (Scardamalia & Berieiter, 1991). Expert chess players, on the other hand, might be able to read the problems posed by a chess game with the same speed and familiarity skilled readers use to comprehend familiar text (Charness, 1992; Ericsson & Kintsch, 1995). They might see and respond to familiar game patterns quite quickly and experience much of a game's movement as a form of pressured conversation. Similarly, the bodies of expert athletes, musicians, and dancers change in ways that support successful performance in their fields, but these adaptations differ between practices (Ericsson & Lehmann, 1996; Williams & Ericsson, 2005). Performing violin concertos does create the same physical and mental changes as playing basketball.

In the next section of the review, the focus shifted to a set of ethnographic studies on expertise in critical care nursing (Benner et al., 1999; Benner et al., 1996). These works describe how knowledge and experience influence professional performance in the technical environments produced by modern medicine. They bring to life the idea that expertise is not only a type of adaptation, but a form of agency. Expert nurses do not merely adapt to the demands of their work environments, they change how their workplaces are structured to benefit the patients under their care. Expert nurses thus alter the everyday history generated by their colleague's labor. They work in more caring and supportive hospital environments because they have the knowledge and skill to help make them that way.

Throughout this section of the review, I argued expertise in critical care nursing

has both technical and relation dimensions. The best nurses have learned how to perform complex treatments for patients with serious illnesses and injuries. They understand how to engage in this aspect of their work so effectively they can look beyond their patients' immediate situations and influence other aspects of their care. Expert nurses have learned to relate to patients and family members with the skills necessary to treat them as individual persons with unique problems and strengths. Strong relationships become a healing force that may motivate patients to undergo long programs of treatment or help rally family members to support their loved one's recovery.

The review then constructed a cognitive framework for this ethnographically based perspective on expertise. Kintsch's (1998) construction-integration theory was used to model the fluid, situational awareness of expert performers. In this theory, experts combine information from the environment with information from their experience to create highly meaningful representations of the demands of a particular moment in time. Grandmaster chess players have learned spot patterns on the chessboard that lesser skilled players cannot see and they can use this knowledge to respond more effectively to the demands of the match. Expert airline mechanics learn how to look into jet engines and notice problems that escape the gaze of nonexperts (Rosch et al., 1976; Tanaka & Taylor, 1991).

Emotion was argued to be an integral part of this experientially based reasoning process (Bechara et al., 1997; Damasio, 1994). People tend to feel their way through familiar environments rather than calculate each move. Experts learn to feel good when their practice is moving successfully, and they learn to feel puzzled and concerned when things begin to go awry. Performance becomes a conversation: experts respond to the demands of the instant with a response that both feels good and allows them to reinforce the direction of a particular encounter or shift the action towards another line of attack.

Expertise requires a stable environment in order for these intuitive decision making processes to work effectively (Robert J. Sternberg, 1996). Experts' practiced response to the situations where they have gained skill does not benefit them if conditions change and the choices they have learned to make are no longer appropriate. This is a critical issue in sports and chess competitions where skilled performers actively attempt to change the flow of the game in ways that support their skills and work against the

intuitive responses of their opponents (Amidzic et al., 2001; Gobet & Simon, 1996; Starkes et al., 1996). The agency that allows experts to alter their task-environments is thus a necessary dimension of skilled performance in many fields.

In education, the primary way that classroom teachers organize productive workplaces out of the big booming confusion of rooms filled with children is by using routines to structure the class's activities from one moment to the next (Leinhardt & Greeno, 1986; Rimm-Kaufman, La Paro, Downer, & Pianta, 2005; Taylor et al., 2000). In experts' classrooms, routines set up on the first day of school might be readily identified by observers for months across the school year. These highly developed choreographies allow children to move quickly and effectively from reading to writing to social studies to mathematics to science. In schools, adults and children may draw on extensive grammars of action that allow them to reply to the demands of the moment similar to the way that critical care workers respond to medical emergencies or basketball teams counter the strategies of their opponents.

Contemporary organization theory views routines as flexible performances that may require extensive learning to understand and skill to carry out well (Becker, 2004; Dutton et al., 2006; Feldman & Pentland, 2003; Pentland & Reuter, 1994). The ability to shape time and space to meet standardized challenges ranging from a clean surgical incision to a fast break is one of the primary ways professionals change the way things are.

Routinization should not be viewed, however, as the only force that shapes professional performance. Relationships matter (Benner et al., 1996; Birch & Ladd, 1997; Crosnoe et al., 2004; Dutton & Heaphy, 2003; Hughes, Lou, Kwok, & Loyd, 2008; Pianta & Stuhlman, 2004). Positive relationships are viewed as protective factors that help children grow despite adversity. Positive relationships at school may help a child through a difficult family crisis. A supportive family life can help a young person negotiate the challenges posed by chaotic classroom. Relationships play a critical role in the learning trajectories of students placed at risk: these children have difficulty learning at school without a sense of connection between themselves and the teachers and classmates (Hamre & Pianta, 2005). From this perspective, in education as in critical care nursing, the technical knowledge that supports expert practice is complemented the

relational and emotional knowledge that allow skilled performers to join with the individuals under their care.

In the next chapter I describe how I attempted to investigate these two dimensions of classroom life and examine how different levels of knowledge and experience influence the landscape of lessons and relationships that guides classroom teachers' professional labor. I discuss the methods I used both to collect my data and piece together the many studies that I draw on in this review.

References

- Amidzic, O., Riehle, H. J., Fehr, T., Wienbruch, C., & Elbert, T. (2001). Pattern of focal theta-bursts in chess players. *Nature*, *412*(603).
- Anderson, J. R. (1983). *The architecture of cognition*. Cambridge, Massachusetts: Harvard University Press.
- Anderson, J. R. (1993). Problem solving and learning. *American Psychologist*, *48*(1), 35-44.
- Anderson, J. R. (1996). ACT: A simple theory of complex cognition: Award for Distinguished Scientific Contributions Address. *American Psychologist*, *51*(4), 355-365.
- Anderson, J. R. (2000). *Learning and Memory* (2nd ed.). New York: John Wiley & Sons.
- Anderson, J. R., Reder, L. M., & Lebiere, C. (1996). Working memory: Activation limitations on retrieval. *Cognitive Psychology*, *30*(221-256).
- Anderson, J. R., & Schooler, L. J. (1991). Reflections of the environment in memory. *Psychological Science*, *2*, 396-408.
- Anzai, Y. (1991). Learning and use of representations for physics expertise. In K. A. Ericsson & J. Smith (Eds.), *Toward a general theory of expertise: prospects and limits*. Cambridge, England: Cambridge University Press.
- Aristotle. (2000). *Nicomachean ethics*. Cambridge, U.K. ; New York: Cambridge University Press.
- Arocha, J. F., & Patel, V. L. (1995). Construction integration theory and clinical reasoning. In C. R. Fletcher (Ed.), *Essays in honor of Walter Kintsch*. Hillsdale, New Jersey: Lawrence Erlbaum.
- Ball, D. L., Lubienski, S. T., & Mewborn, D. S. (2001). Research on teaching mathematics: The unsolved problem of teachers' mathematical knowledge. In V. Richardsen (Ed.), *Handbook of Research on Teaching* (4th ed.). Washington, D. C.: American Educational Research Association.
- Barnes, C. (Forthcoming). *The case studies of the Study of Instructional Improvement*: Teachers College Press.
- Barsalou, L. W. (1993). Flexibility, structure, and linguistic vagary in concepts: Manifestations of a compositional system of perceptual symbols. In A. C. Collins & S. E. Gathercole & M. A. Conway (Eds.), *Theories of memories*. London: Erlbaum.
- Baumeister, R., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497-529.
- Bechara, A., Damasio, H., Tranel, D., & Damasio, A. R. (1997). Deciding advantageously before knowing the advantageous strategy. *Science*, *275*(February), 1293-1295.
- Becker, M. C. (2004). Organizational routines: A review of the literature. *Industrial and Corporate Change*, *13*, 643-678.
- Becker, M. C. (2005). Organizational routines: Some clarifications. *Cambridge Journal of Economics*, *29*, 249-262.

- Benner, P. (1984a). *From novice to expert: Excellence and power in clinical nursing practice*. Menlo Park, Calif.: Addison-Wesley Pub. Co. Nursing Division.
- Benner, P. (1984b). *Stress and satisfaction on the job: Work meanings and copings of mid-career men*. New York: Praeger.
- Benner, P. E., Hooper-Kyriakidis, P. L., & Stannard, D. (1999). *Clinical wisdom and interventions in critical care: A thinking-in-action approach*. Philadelphia: Saunders.
- Benner, P. E., Tanner, C. A., & Chelsea, C. (1996). *Expertise in nursing practice: Caring, clinical judgment, and ethics*. New York: Springer Publishing Company.
- Berliner, D. C. (1986). In search of the expert pedagog. *Educational Researcher*, 13, 5-10.
- Birch, S. H., & Ladd, G. W. (1997). The teacher-child relationship and students' early school adjustment. *Journal of School Psychology*, 35(61-79).
- Blankenmeyer, M., Flannery, D. J., & Vazsonyi, A. T. (2002). The role of aggression and social competence in children's perceptions of the child-teacher relationship. *Psychology in the Schools*, 39(3), 293-304.
- Bohn, C. M., Roehrig, A. D., & Pressley, M. (2004). The first days of school in the classrooms of two more effective and four less effective primary-grades teachers. *The Elementary School Journal*, 104(4), 269-287.
- Borko, H., & Livingston, L. (1989). Cognition and improvisation: Differences in mathematics instruction by expert and novice teachers. *American Educational Research Journal*, 26(4), 473-498.
- Boshuizen, H. P. A., Schmidt, H. G., Custers, E. J. F. M., & Van de Weil, M. W. (1995). Knowledge development and restructuring in the domain of medicine: the roles of theory and practice. *Learning and instruction*, 5, 269-289.
- Bourdieu, P. (1990). *The logic of practice*. Stanford, Calif.: Stanford University Press.
- Bowlby, J. (1982). *Attachment and loss: Vol. 1. Attachment* (Rev. ed.). New York: Basic.
- Bransford, J., Brown, A. L., & Cocking, R. R. (1999a). How experts differ from novices, *How people learn : brain, mind, experience, and school* (pp. xxiii, 319). Washington, D.C.: National Academy Press.
- Bransford, J., Brown, A. L., & Cocking, R. R. (Eds.). (1999b). *How people learn: Brain, mind, experience, and school*. Washington, D.C.: National Academy Press.
- Brody, G., Dorsey, S., Forehand, R., & Armisted, L. (2002). Unique and protective contributions of parenting and classroom processes to the adjustment of African American children living in single-parent families. *Child Development*, 73(1), 274-286.
- Brophy, J. (1988). Research linking teacher behavior to student achievement: Potential implications for the instruction of Chapter 1 students. *Educational Psychologist*, 23(3), 235-286.
- Brophy, J. (1996). *Teaching problem students*. New York: Guilford.
- Burchinal, M. R., Peisner-Feinberg, E., Pianta, R. C., & Howes, C. (2002). Development of academic skills from preschool through second grade: Family and classroom predictors of developmental trajectories.
- Cameron, C., Connor, C. M., & Morrison, F. (2005). Effects of variation in teacher organization on classroom functioning. *Journal of School Psychology*, 43(2005), 61-85.

- Carter, K., Cushing, K., Sabers, D., Stein, P., & Berliner, D. (1987). Expert-novice differences in perceiving and processing visual information. *Educational Researcher*, 3, 147-157.
- Carter, K., & Doyle, W. (1986). Teachers' knowledge structures and comprehension processes. In J. Calderhead (Ed.), *Exploring teachers' thinking* (pp. 147-160). London: Cassell.
- Carter, K., Sabers, D., Cushing, K., Pinnegar, S., & Berliner, D. (1987). Processing and using information about students: A study of expert, novice and postulant teachers. *Teaching and Teacher Education*, 3, 147-157.
- Ceci, J., & Liker, J. (1986). A day at the races: A study of IQ, expertise and cognitive complexity. *Journal of Experimental Psychology: General*, 115, 255-266.
- Chambliss, D. F. (1989). The mundanity of excellence: An ethnographic report on stratification and Olympic swimmers. *Sociological Theory*, 7, 70-86.
- Charness, N. (1992). The impact of chess research on cognitive science. *Psychological Research*, 54(5-9).
- Charness, N., Krampe, R., & Mayr, U. (1996). The role of practice and coaching in entrepreneurial skill domains: An international comparison of life-span chess skill acquisition. In A. K. Ericsson (Ed.), *The road to excellence: The acquisition of expert performance in the arts and sciences, sports and games*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Chase, W. G., & Simon, H. A. (1979). The mind's eye in chess. In H. A. Simon (Ed.), *Models of thought* (pp. 404-427). New Haven: Yale University Press.
- Chi, M., Feltovich, P., & Glaser, R. (1981). Categorization and representation of physics problems by experts and novices. *Cognitive Science*, 5, 121-152.
- Clark, C., & Yinger, R. J. (1987). Teacher planning. In J. Calderhead (Ed.), *Research on teacher thinking*. London: Cassell.
- Cohen, D. K., & Ball, D. L. (1999). *Instruction, capacity and improvement* (CPRE Research Report Series RR-43). Philadelphia, PA: Consortium for Policy Research in Education: University of Pennsylvania.
- Cohen, D. K., Raudenbush, S. W., & Ball, D. L. (2003). Resources, instruction and research. *Educational Evaluation and Policy Analysis*, 2, 119-142.
- Collins, R. (1998). *The sociology of philosophies: A global theory of intellectual change*. Cambridge, Mass.: Belknap Press of Harvard University Press.
- Connelly, F. M., & Clandinin, D. J. (Eds.). (1999). *Shaping a professional identity: Stories of educational practice*. New York: Teacher's College Press.
- Connor, C. M., Morrison, F. J., & Katch, L. E. (2004). Beyond the reading wars: Exploring the effect of child-instruction interactions on growth in early reading. *Scientific Studies of Reading*, 8(4), 305-336.
- Coulson, R. L., Feltovich, P. J., & Spiro, R. J. (1997). Cognitive flexibility in medicine: An application of the recognition and understanding of hypertension. *Advances in Health Sciences Education*, 2, 141-161.
- Crosnoe, R., Johnson, M., & Elder, G. (2004). Intergenerational bonding in school: The behavioral and contextual correlates of student-teacher relationships. *Sociology of Education*, 77(1), 60.
- Czarniawska, B. (2004). *Narratives in social science research*. London: Sage.
- Daft, R. L., & Weick, K. E. (1984). Toward a model of organizations as interpretation

- systems. *Academy of Management Review*, 9(2), 284-293.
- Damasio, A. R. (1994). *Descartes' error: Emotion, reason and the human brain*. New York: Gosset /Putnam.
- de Bruin, A. B. H., Van De Weil, M. W. J., Rikers, R. J. P., & Schmidt, H. G. (2005). Examining the stability of experts' clinical case processing: An experimental manipulation. *Instructional Science*, 33, 251-270.
- De Groot, A. D. (1948/1965). *Thought and choice in chess* (G. W. Baylor, Trans.). The Hague: Mouton & Company.
- Decker, D. M., Dona, D. P., & Chirstenson, S. L. (2007). Behaviorally at-risk African American students: The importance of student–teacher relationships for student outcomes. *Journal of School Psychology*, 45(2007), 83-109.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147-160.
- Doane, S. M., McNamara, D. S., Kintsch, W., Polson, P. G., & Clawson, D. (1992). Prompt comprehension in Unix command production. *Memory & Cognition*, 20, 327-343.
- Doyle, W. (1986). Classroom organization and management. In M. C. Wittrock (Ed.), *Handbook of Research on Teaching* (3rd ed., pp. 392-431). New York: Macmillan.
- Doyle, W., & Carter, K. (1987). Choosing the means of instruction. In V. Richardson-Koehler (Ed.), *Educators' handbook: A research prospective*. New York: Longman.
- Dreyfus, H. L. (1991). *Being-in-the-world : A commentary on Heidegger's 'Being and Time': Division I*. Cambridge, Mass.: MIT Press.
- Dreyfus, H. L. (1992). *What computers still can't do: A critique of artificial reason*. Cambridge, Mass.: MIT Press.
- Durkheim, E. (1984). *The division of labor in society* (W. D. Halls, Trans.). New York: Free press.
- Dutton, J., & Heaphy, E. (2003). Coming to life: The power of high quality connections at work. In K. Cameron & J. Dutton & R. Quinn (Eds.), *Positive organizational scholarship*. Williston, VT: Berrett-Koehler.
- Dutton, J., Worline, M., Frost, P., & Lilius, J. (2006). Explaining compassion organizing. *Administrative Science Quarterly*, 51(2006), 59-96.
- Elbaz, F. (1991). Research on teacher's knowledge: The evolution of a discourse. *Journal of Curriculum Studies*, 23(1), 1-19.
- Elo, A. E. (1986). *The ranking of chess players: Past and present* (2nd Edition ed.). New York: Arco.
- Emirbayer, M., & Mische, A. (1998). What is agency? *American Journal of Sociology*, 103(4), 962-1023.
- Ericsson, K. A. (1998). Basic capacities can be modified or circumvented by deliberate practice: A rejection of talent accounts of expert performance. *Behavior and Brain Sciences*, 21(3), 413-414.
- Ericsson, K. A. (2004). Deliberate practice and the acquisition and maintenance of expert performance in medicine and related domains: 2003 invited address. *Academic Medicine*, 79(10/October Supplement), S70-S81.

- Ericsson, K. A., & Charness, N. (1994). Expert performance: Its structure and acquisition. *American Psychologist*(August), 725-745.
- Ericsson, K. A., & Kintsch, W. (1995). Long term working memory. *Psychological Review*, 102(2), 211-245.
- Ericsson, K. A., Krampe, R. T., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363-406.
- Ericsson, K. A., & Lehmann, A. C. (1996). Expert and exceptional performance: Evidence of maximal adaptation to task constraints. *Annual Review of Psychology*, 47, 273-305.
- Ericsson, K. A., Patel, V., & Kintsch, W. (2000). How experts' adaptations to representative task demands account for the expertise effect in memory recall: Comment on Vicente and Wang. *Psychological Review*, 2000(4), 578-592.
- Ericsson, K. A., & Smith, J. (1991). Prospects and limits in the empirical study of expertise: An introduction. In K. A. Ericsson & J. Smith (Eds.), *Toward a general theory of expertise: prospects and limits*. Cambridge, England: Cambridge University Press.
- Feldman, M. S., & Pentland, B. T. (2003). Reconceptualizing organizational routines as a source of flexibility and change. *Administrative Science Quarterly*, 48(1), 94-118.
- Feldman, M. S., & Rafaeli, A. (2002). Organizational routines as sources of connections and understandings. *Journal of Management Studies*, 39, 309-331.
- Feltovitch, P. J., Spiro, R. J., & Coulson, R. L. (1989). The nature of conceptual understanding in biomedicine: The deep structure of complex ideas and the development of misconceptions. In V. L. Patel (Ed.), *Cognitive Science in Medicine*. Cambridge MA: The MIT Press.
- Fitts, P. M., & Posner, M. I. (1967). *Human performance*. Belmont, California: Brooks/Cole Publishing.
- Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, 51(4), 327-358.
- Foster, M. (1997). *Black teachers on teaching*. New York: The New Press.
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 2003(1), 148-162.
- Gay, G. (2000). *Culturally responsive teaching: Theory, research and practice*. New York: Teachers College Press.
- Gobet, F., & Simon, H. A. (1996). The roles of recognition processes and look ahead search in time constrained expert problem-solving: Evidence from grandmaster level chess. *Psychological Science*, 7(1), 52-55.
- Goffman, E. (1967). *Interaction ritual: Essays on face-to-face behavior*. Garden City, N.Y.: Anchor Books.
- Granovetter, M. S. (1973). Strength of weak ties. *The American Journal of Sociology*, 78(6), 1360-1380.
- Graziano, P. A., Reavis, R. D., Keane, S. P., & Calkins, S. D. (2007). The role of emotion regulation in children's early academic success. *Journal of School Psychology*, 45, 3-19.
- Greeno, J. G. (1994). Gibson's affordances. *Psychological Review*, 101, 336-342.

- Greeno, J. G. (1998). The situativity of knowing, learning and research. *American Psychologist*, 53(1), 5-26.
- Gregory, A., & Weinstein, R. S. (2004). Connection and regulation at home and in school: Predicting growth in achievement for adolescents. *Journal of Adolescent Research*, 19(405-427).
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625-638.
- Hamre, B. K., & Pianta, R. C. (2005). Can instructional and emotional support in the first grade classroom make a difference for children at risk of school failure? *Child Development*, 76(5), 949-967.
- Harris, K. R., & Graham, S. (1996). *Making the writing process work: Strategies for composition and self-regulation*. Cambridge, MA: Brookline Books.
- Hatch, M. J. (1999). Exploring the empty spaces of organizing: How improvisational jazz helps redescribe organizational structure. *Organizational Studies*, 20(1), 75-100.
- Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. Berkeley, CA: University of California Press.
- Homans, G. C. (1974). *Social behavior: Its elementary forms* (2nd ed.). New York: Harcourt Brace Jananovich.
- Hughes, J., & Kwok, O. (2006). Classroom engagement mediates the effect of teacher-student support on elementary students' peer acceptance: A prospective analysis. *Journal of School Psychology*, 43(2006), 466-480.
- Hughes, J. N., Lou, W., Kwok, O., & Loyd, L. K. (2008). Teacher-student support, effortful engagement, and achievement: A 3-year longitudinal study. *Journal of Educational Psychology*, 2008(1), 1-14.
- Hunt, E. (1989). Cognitive science: definition, status, and questions. *Annual Review of Psychology*, 40, 603-629.
- Hutchins, E. (1995). *Cognition in the wild*. Cambridge, MA: The MIT Press.
- Johnson, K. E., & Mervis, C. B. (1997). Effects of varying levels of expertise on the basic level of categorization. *Journal of Experimental Psychology: General*, 126(3), 248-277.
- Jordan, J. V., Kaplan, A. G., Miller, J. B., Stiver, L. P., & Surrey, J. L. (1991). *Women's growth in connection: Writings from the Stone Center*. New York: Guilford.
- Kanov, J. M. (2005). *Re-envisioning feeling and relating at work: An inductive study of interpersonal disconnection in organizational life*. Unpublished Ph.D., University of Michigan, Ann Arbor.
- Kauffman, D., Moore Johnson, S., Kardos, S. M., Liu, E., & Peske, H. (2002). "Lost at Sea": New teachers' experiences with curriculum and assessment. *Teachers College Record*, 104(2), 273-300.
- Kesner, J. E. (2000). Teacher characteristics and the quality of child-teacher relationships. *Journal of School Psychology*, 28(2), 133-149.
- Kintsch, W. (1988). The use of knowledge in discourse comprehension: A construction integration model. *Psychological Review*, 95(2), 163-182.
- Kintsch, W. (1998). *Comprehension: A paradigm for cognition*. Cambridge, UK: Cambridge University Press.
- Kintsch, W., & Greeno, J. G. (1985). Understanding and solving word arithmetic

- problems. *Psychological Review*, 92(1), 109-129.
- Kintsch, W., & Kintsch, E. (2005). Comprehension. In S. G. Paris & S. A. Stahl (Eds.), *Children's reading comprehension and assessment*. Mahwah: Laurence Erlbaum.
- Kintsch, W., & Rawson, K. (2005). Comprehension. In M. J. Snowling & C. Hulme (Eds.), *The science of reading: A handbook*. Malden, MA: Blackwell.
- Klein, G. A. (1998). *Sources of power: How people make decisions*. Cambridge, MA: MIT Press.
- Klein, G. A., & Calderwood, R. (1991). Decision models: Some lessons from the field. *IEEE Systems, Man and Cybernetics*, 21(5), 1018-1026.
- Kleinfeld, J. (1992). Learning to think like a teacher: The study of cases. In J. H. Shulman (Ed.), *Case methods in teacher education*. New York: Teachers College Press.
- Koerner, M. E. (1992). Teacher's images. In W. H. Schubert & W. Ayers (Eds.), *Teacher Lore*. White Plains, NY: Longman.
- Kounin, J. (1970). *Discipline and group management in classrooms*. New York: Holt, Rinehart & Winston.
- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American children*. San Francisco: Jossey-Bass.
- Ladson-Billings, G. (2001). *Crossing over to Canaan: The journey of new teachers in diverse classrooms*. San Francisco: Jossey-Bass.
- Lampert, M. (1985). How do teachers manage to teach? Perspectives on problems in practice. *Harvard Educational Review*, 55, 178-184.
- Lampert, M., & Ball, D. (1998). *Teaching, multimedia and mathematics: Investigations of real practice*. New York: Teachers College Press.
- Larkin, J. H., McDermott, J., Simon, D. P., & Simon, H. A. (1990). Expert and novice performance in solving physics problems. *Science*, 208, 1335-1342.
- Leavitt, B., & March, J. G. (1988). Organizational learning. *Annual Review of Sociology*, 14, 319-340.
- Leinhardt, G. (1988). Expertise in instructional lessons: An example from fractions. In G. Cooney (Ed.), *Effective mathematics teaching* (pp. 47-66). Reston, VA: NCTM.
- Leinhardt, G., & Greeno, J. G. (1978). The cognitive skill of teaching. *Journal of Educational Psychology*, 78, 75-95.
- Leinhardt, G., & Greeno, J. G. (1986). The cognitive skill of teaching. *Journal of Educational Psychology*, 78(2), 75-95.
- Leinhardt, G., Weidman, C., & Hammond, K. M. (1987). Introduction and integration of classroom routines by expert teachers. *Curriculum Inquiry*, 17(2), 135-176.
- Lewandowsky, S., & Kirssner, K. (2000). Knowledge partitioning: Context dependent use of expertise. *Memory and Cognition*, 28(2), 295-305.
- Mannes, S. M., & Kintsch, W. (1987). Planning routine computing tasks: Understanding what to do. *Cognitive Science*, 15, 305-342.
- March, J. G., & Simon, H. A. (1958). *Organizations*. New York: Wiley.
- National Partnership for Teaching in At-Risk Schools. (2005). *Qualified teachers for at-risk schools: A national imperative*. Washington, DC: National Partnership for Teaching in At-Risk Schools.
- NICHD ECCRN. (2002). The relation of first grade classroom environment to structural classroom features, teacher, and student behaviors: Finding from the National

- Institute of Child Health and Human Development Early Child Care Research Network. *Elementary School Journal*, 102(367-387).
- Norman, G. R., & Brooks, L. R. (1997). The non-analytical basis of clinical reasoning. *Advances in Health Sciences*, 2, 173-184.
- Norman, G. R., Brooks, L. R., Allen, S., & Muzzin, L. (1989). The development of expertise in dermatology. *Archives of Dermatology*, 125, 1063-1068.
- O'Connor, P. J. (1992). Psychological aspects of endurance performance. In R. J. Shephard (Ed.), *Endurance in Sport* (pp. 139-145). Boston: Blackwell.
- Paige, J. M., & Simon, H. M. (1966). Cognition processes in solving algebra word problems. In B. Klienmuntz (Ed.), *Problem solving*. New York: Wiley.
- Patel, V. L., Arocha, J. F., & Kaufman, D. R. (1994). Diagnostic reasoning and medical expertise. *The Psychology of Learning and Motivation*, 31, 187-251.
- Patel, V. L., Arocha, J. F., & Kaufman, D. R. (1999). Medical cognition. In M. T. H. Chi (Ed.), *Handbook of Applied Cognition* (pp. 663-693). West Sussex, England: John Wiley & Sons Ltd.
- Patel, V. L., Evans, D. A., & Groen, G. J. (1989). Reconciling basic science and clinical reasoning. *Teaching and learning in medicine*, 1(3), 116-121.
- Patel, V. L., Groen, G. J., & Arocha, J. F. (1990). Medical expertise as a function of task difficulty. *Memory & Cognition*, 18(4), 394-406.
- Pennington, N., & Hastie, R. (1992). Explaining the evidence: Tests of the story model on juror decision making. *Journal of personality and social psychology*, 62, 189-206.
- Pentland, B. T. (1999). Building process theory with narrative: From description to explanation. *The Academy of Management Review*, 24(4).
- Pentland, B. T., & Reuter, H. (1994). Organizational routines as grammars of action. *Administrative Science Quarterly*, 39(3), 484-510.
- Pianta, R. C., Steinberg, M., & Rollins, K. (1995). The first two years of school: Teacher-child relationships and deflections in children's classroom adjustment. *Development and Psychopathology*, 7(295-312).
- Pianta, R. C., & Stuhlman, M. W. (2004). Teacher-child relationships and children's success in the first years of school. *School Psychology Review*, 33(3), 444-458.
- Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., & al., e. (1997). Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health. *Journal of the American Medical Association*, 278(823-832).
- Rikers, R. J. P., Schmidt, H. G., & Moolaert, V. (2005). Biomedical knowledge: Encapsulated or two worlds apart? *Applied Cognitive Psychology*, 19(2), 223-231.
- Rimm-Kaufman, S. E., La Paro, K. M., Downer, J. T., & Pianta, R. C. (2005). The contribution of classroom setting and quality of instruction to children's behavior in kindergarten classrooms. *The Elementary School Journal*, 105(4), 377-395.
- Roehrig, A. D., Pressley, M., & Talotta, D. A. (2002). *Stories of beginning teachers: First-year challenges and beyond*. Notre Dame, Ind.: University of Notre Dame Press.
- Rosch, E., Mervis, C. B., Grey, W. D., Johnson, D. M., & Boyes-Braem, P. (1976). Basic objects in natural categories. *Cognitive Psychology*, 8, 382-439.
- Rowan, B., & Miskel, C. G. (1999). Institutional theory and the study of educational

- organizations. In J. Murphy & K. S. Louis & American Educational Research Association. (Eds.), *Handbook of research on educational administration : a project of the American Educational Research Association* (2nd ed.). San Francisco: Jossey-Bass Publishers.
- Rubin, J. (1996). Impediments to the development of clinical knowledge and ethical judgment in critical care nursing. In P. E. Benner & C. A. Tanner & C. A. Chesla (Eds.), *Expertise in nursing practice : caring, clinical judgment, and ethics* (pp. 170-192). New York: Springer Pub. Co.
- Saft, E. W., & Pianta, R. C. (2001). Teachers' perceptions of their relationships with students: Effects of child age, gender, and ethnicity of teachers and children. *School Psychology Quarterly*, 16(2), 125-141.
- Sandelands, L. (1998). *Feeling and form in social life*. Lanham, Maryland: Fowman & Littlefield.
- Scardamalia, M., & Berieiter, C. (1991). Literate expertise. In K. A. Ericsson (Ed.), *Toward a general theory of expertise: prospects and limits*. New York: Cambridge University Press.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Scott, D. (2005). *Alternative futures for organizational theory: ICOS Seminar: September 9th, 2005* [ICOS Seminars in RealMedia]. The Interdisciplinary Committee on Organizational Studies. Retrieved October 15, 2007, 2007, from the World Wide Web:
- Shavelson, R. J. (1983). Review of research on teachers' pedagogical judgments, plans and decisions. *Elementary School Journal*, 83(4), 392-413.
- Shepard, L. A. (2000). The role of classroom assessment in teaching and learning. In V. Richardsen (Ed.), *Handbook of Educational Research*.
- Silver, R., Measelle, J., Armstrong, J., & Essex, M. (2005). Trajectories of classroom externalizing behavior: Contributions of child characteristics, family characteristics, and the teacher-child relationship during the school transition. *Journal of School Psychology*, 43, 39-60.
- Simon, H. A. (1996). *The sciences of the artificial* (3rd ed.). Cambridge, Massachusetts: The MIT Press.
- Singer, M., & Kintsch, W. (2001). Text retrieval: a theoretical exploration. *Discourse Processes*, 31(1), 27-59.
- Snow, C. E. (2001). Knowing what we know: Children, teachers, researchers. *Educational Researcher*, 30(7), 3-9.
- Snow, C. E., Griffin, P., & Burns, M. S. (Eds.). (2005). *Knowledge to support the teaching of reading: Preparing teachers for a changing world*. San Francisco: Jossey-Bass.
- Starkes, J. L., Deakin, J. M., Allard, F., Hodges, N. J., & Hayes, A. (1996). Deliberate practice in sports: What is it anyway. In A. K. Ericsson (Ed.), *The road to excellence: The acquisition of expert performance in the arts and sciences, sports and games*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Sternberg, R. J. (1996). Costs of expertise. In A. K. Ericsson (Ed.), *The road to excellence: The acquisition of expert performance in the arts and sciences, sports and games*. Mahwah, New Jersey: Lawrence Erlbaum Associates.

- Sternberg, R. J. (1996). Matching abilities, instruction, and assessment: Reawakening the sleeping giant of ATI. In I. Dennis (Ed.), *Human abilities: Their nature and measurement* (pp. 167-181). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Sternberg, R. J. (1998). Abilities are a form of developing expertise. *Educational Researcher*, 27(3), 11-20.
- Stringfield, S. (1995). Attempting to enhance students' learning through innovative programs: The case for schools evolving into high-reliability organizations. *School Effectiveness and School Improvement*, 6(1), 67-96.
- Stuhlman, M. W., & Pianta, R. C. (2001). Teachers' narratives about their relationships with children: Associations with behavior in classrooms. *School Psychology Review*, 31(2), 148-163.
- Tanaka, J. W., & Taylor, M. (1991). Object categories and expertise: Is the basic level in the eye of the beholder? *Cognitive Psychology*, 23, 457-482.
- Taylor, B. M., Person, D. P., Clark, K., & Walpole, S. (2000). Effective schools and accomplished teachers: Lessons about primary-grade reading instruction in low income schools. *The Elementary School Journal*, 101(2), 121-165.
- Taylor, R. D., & Roberts, D. (1995). Kinship support and maternal and adolescent well-being in economically disadvantaged African American families. *Child Development*, 66, 1585-1597.
- Tharp, R. G. (1989). Psychosocial variables and constants: Effects on teaching and learning in schools. *American Psychologist*, 44(2), 349-359.
- Tranel, D., Bechara, A., & Damasio, A. R. (1999). Decision making and the somatic marker hypothesis. In M. Gazzaniga (Ed.), *The new cognitive neurosciences* (pp. 1115-1131). Cambridge, MA: MIT Press.
- Trzeniewski, K. H., Moffitt, T. E., Caspi, A., Taylor, A., & Maughan, B. (2006). Revisiting the association between reading achievement and antisocial behavior: New evidence of an environmental explanation from a twin study. *Child Development*, 77(1), 72-88.
- Van de Weil, M. W. J., Boshuizen, H. P. A., & Schmidt, H. G. (2000). Knowledge restructuring in expertise development: Evidence from pathophysiological representations of clinical cases by students and physicians. *European Journal of Cognitive Psychology*, 12(3), 323-355.
- van Dijk, T. A., & Kintsch, W. (1983). *Strategies of discourse comprehension*. New York: Academic Press.
- Van Manen, M. (1990). *Researching lived experience: Human science for an action-sensitive pedagogy*. [Albany, N.Y.]: State University of New York Press.
- Van Manen, M. (1994). Pedagogy, virtue and narrative identity in teaching. *Curriculum Inquiry*, 4(2), 135-175.
- Vanover, C. (2003). *Models of expert practice*. Unpublished Candidacy Paper, University of Michigan, Ann Arbor.
- Vanover, C., Barnes, C., & Kim, J.-S. (2006). *Distributed knowledge for evidence-based leadership: How some school leaders learn to use comprehensive school reforms to create sustained, school-wide systems of instructional leadership*. Paper presented at the Paper presented at the Conference of the American Educational Researchers' Association, San Francisco, CA.
- Verschuere, K., Marcoen, A., & Schoefs, V. (1996). The internal working model of the

- self, attachment, and competence in five-year-olds. *Child Development*, 5(2493-2511).
- Weber, M. (1978). *Economy and society: An outline of interpretive sociology* (G. Roth & C. Wittich, Trans.). Berkeley: University of California Press.
- Weick, K. E., & Roberts, K. (1993). Collective mind in organizations--heedful interrelating on flight decks. *Administrative Science Quarterly*, 38(3), 357-381.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (1999). Organizing for high reliability: Processes of collective mindfulness. *Research in Organizational Behavior*, 21, 81-123.
- Wharton-McDonald, R., Pressley, M., & Hampston, J. M. (1998). Literacy instruction in nine first grade classrooms: Teacher characteristics and student achievement. *Elementary School Journal*, 99(2), 101-128.
- Wildman, T., Niles, J., Magliaro, S., & McLaughlin, R. (1989). Teaching and learning to teach: The two roles of beginning teachers. *Elementary School Journal*, 89(4), 479-492.
- Williams, A. M., & Ericsson, K. A. (2005). Perceptual-cognitive expertise in sport: Some considerations when applying the expert performance approach. *Human Movement Science*, 24, 283-307.
- Wineburg, S. (1991). Historical problem solving: A study of the cognitive processes used in the evaluation of documentary and pictorial evidence. *Journal of Educational Psychology*, 83(1), 73-87.
- Wineburg, S. (1998). Reading Abraham Lincoln: An expert/expert study in the interpretation of historical texts. *Cognitive Science*, 22(3), 319-346.
- Yinger, R. J. (1980). A study of teacher planning. *The Elementary School Journal*, 80(3), 197-127.
- Yinger, R. J., & Hendricks-Lee, M. (1993). Working knowledge in teaching. In C. Day & P. Calderhead & P. Denlco (Eds.), *Research on teacher thinking: Understanding professional development*. London: Falmer.
- Young, V. H. (1970). Family and childhood in a Southern Negro community. *American Anthropologist*, 72, 269-288.
- Young, V. H. (1974). A Black American socialization pattern. *American Ethnologist*, 1, 415-431.

Chapter III

Methods

In the sections of this chapter that follow, I will discuss the many choices I made when I worked in the field and analyzed the data I collected. I will use these writings to evaluate the strengths and weaknesses of my research work and to offer suggestions for improvement. It is important to emphasize that I learned a great deal from my time in the field, from my efforts to analyze my data, and from the process of writing up my findings. While the mistakes I made do not, in my opinion, go beyond the bounds of what Dewey described as “competent inquiry” (1938), it is also true that when I conduct another narrative study and analyze its findings I will do a better job. Imperfections in methods, however, do not necessarily invalidate the theories or the meanings drawn from an investigation. Weak methods may be sufficient to pick up a strong signal, and it is my opinion that while my sample size was low, my narrative methods were far from insensitive.

Further, it might be argued that, for some research purposes, the methods I use for this stage of the Expertise in Urban Teaching Project provide superior data than other modes of investigation. Narrative interviews surface the map of routines, persons and events people use to pilot through their jobs (Connelly & Clandinin, 1999; Kintsch, 1998; Klein, 1998; Klein & Calderwood, 1991). They provide samples of what practitioners believe are important, and, particularly in the case of the expert teachers, that is a worthwhile source of information. As Benner and colleagues (Benner, Hooper-Kyriakidis, & Stannard, 1999; Benner, Tanner, & Chelsea, 1996) emphasize, narrative provides a guide to living a good life. Story allows professionals to imagine what it might mean to engage in the many years of practice required to achieve excellence and to use

that knowledge in one's daily work.

Narrative interviews also provide very high levels of confidentiality. Nobody in the schools of the teachers I interviewed knew the educators participated in my research project. I was not required to ask permission from any administrator connected with the Chicago Public Schools to recruit my sample. As a result, my study is able to hear stories of practice from classrooms that it be might quite difficult, if not impossible, to receive permission to enter. Halsted Hoyne, one of the new teachers in my study, for instance, said she broke up more than 15 fistfights between her 3rd grade students during her first week in school. Taylor Touhy, another beginner, was, as I will discuss, treated with what can only be described as contemptible cruelty by her school's administrators. Expert teachers California Calumet and Addison Ashland also had strong conflicts with their principals during the 2003-2004 school year. It is uncertain whether if it would be possible to create intensive research relationships and conduct regular observations with any of these professionals given these circumstances. It is also unclear whether the presence of observers in these classrooms might create resources that change the course of these educators' lonely journey through the 2003-2004 school year.

By taking the teachers at their word (Biklen, 1995), and using their stories to see their classrooms, I anticipated that I would bring to light much that was troubling. As I will discuss when I share my findings in subsequent chapters, what surprised me most were the great benefits the expert teachers received from their many years of practice and study. The highly skilled teachers I interviewed told stories about better worlds than the beginning educators. The classrooms where they practiced were described as life-affirming spaces where minority students blossomed. The beginners shared more troubling narratives. These findings are supported by great deal of research using a wide range of methods (Berliner, 1986; Codell, 1999; Gold, 1996; Hanushek, Kain, O'Brian, & Rivkin, 2005; Leinhardt & Greeno, 1978; McCutchen & Berninger, 1999; Veenman, 1984). I had also predicted I would discover these differences before I went out into the field, but I was unprepared for the weight and intensity of the two groups' interviews and the stories I transcribed.

a. The progress of the investigation

I began my studies at the University of Michigan as a graduate research assistant. I had taught in the Chicago Public Schools (CPS) for eight years before I won a fellowship to the university. The opening section of my original prospectus, excerpted in Appendix B, shows that the work I now describe now as the Expertise in Urban Teaching Project began as an oral history study that was first conceptualized during my second year in the program. I was intrigued by the lives of the system's skilled, veteran educators and began the original project with the idea of comparing highly skilled, urban teachers' work with the efforts of other experienced CPS teachers, such as myself, whose practice benefited their students but did not reach the heights of the Chicago system's stars. I decided to use Benner and her colleagues' studies of expertise in critical care nursing practice (1999; 1996) as a model because I believed it offered a way out of some of then-current debates in education. Expert critical-care nurses are enormously skilled technicians. They work in a sector of the economy where applied research is well-funded and held in high esteem (National Research Council, 2002). The stories Benner and her colleagues collect put a human face on nurses' technical expertise and communicate the emotion and drama of their practice. They make nurses' work visible and important. I wished my own study might inspire researchers, teachers, educational leaders and the public in a similar way and become a work of collective memory that would allow the voice of working teachers to be heard and celebrated.

Table 3.1 (below) describes the development of my dissertation project from the original prospectus until the present day. It highlights the iterative cycles of literature review, fieldwork and analysis that have produced the present work. The table shows that once I completed my prospectus, I began work on a set of pilot interviews with Chicago Public School elementary and high school teachers. I transcribed these beginning sessions myself. I found the process of listening to the tapes and transforming the teachers' speech into words valuable. It gave me raw data to reflect on as I continued my coursework and inspired me to improve my research methods.

In my opinion, there are few better ways to learn how interview. Every time I broke the flow of a teacher's stories during an interview in Chicago, I had to sit in my apartment in Ann Arbor and type out the results. Every time I missed an important follow

up question, I had to write up narratives whose meaning was unclear. Transcribing helped me to learn how to stay in the background of the interview sessions I conducted and unobtrusively help teachers narrate. It gave me a way to judge the strength and weakness of my choices as an interviewer.

As I conducted these interviews and wrote up these transcripts, I studied two streams of methods' research. I read a variety of text on interviewing methods and, especially oral history techniques (e. g. Clandinin & Connelly, 2000; Grele & Terkel, 1985; Riesman, 1993; Thompson, 1988; Van Maanen, 1988; 1990; Weiss, 1995). I also studied works on interpretation and critical theory to deepen my understanding of the texts my methods generated (e. g. Bakhtin, 1981; Bourdieu, 1977; Dreyfus, 1991; Durkheim, 1995; Gadamer, 1975; Goffman, 1974; Taylor, 1971; Weber, 1978). Finally I read, and re-read, completed studies that I admired and I wished my work to emulate (e. g. Algren, 1961; Benner et al., 1999; 1996; Bourdieu et al., 1999; Duras, 1992; Goffman, 1959, 1967; Hutchins, 1995b; Jackall, 1988; Rakove, 1975, 1979; Rodriguez, 1991; Steedman, 1992; Travis, 1987; Waller, 1932).

The most difficult problem my research materials posed was unexpected. It was difficult for me to write my interviews up and transform them into coherent documents that meaningfully communicated Chicago teachers' work. Both Goffman (1959; 1967) and Benner (1984; 1996) are able to frame the interview excerpts and other texts they use in their studies around narration that pulls the reader across the page. These writers have strong voices that organize the knowledge gained from years of inquiry into vivid accounts of the lives and social systems they study. My early attempts to discuss the stories I collected in Chicago went flat. The words of the veteran public school teachers I interviewed were far more interesting than the words I used to analyze their work. However, the teachers' stories did not stand on their own, at least not in the forms I used to display them. People might read them dutifully, but I and my readers were not inspired. It seemed somewhat pointless to collect and study teachers' stories if I could not use those works to create products of value.

Table 3.1 shows that I found two divergent solutions to this problem. The first was to erase myself. Initially under Johnny Saldaña's direction, and then through my own efforts, I learned how to take people's narratives and transform them into ethnodramas

that could be skillfully preformed for audiences that ranged from pre-service students to academic researchers (Vanover, 2006; Vanover & Saldaña, 2005). Unlike the writings I had created up to this point, these performances communicated the passion and dignity of teachers' work. Every performance was met with positive support.

Ethnodrama allows me to organize the meanings generated by a particular life history into communal events that afford extended opportunity for thought and reflection (Saldaña, 2002; Schieffelin, 1985; Styan, 1992; Turner & Turner, 1982). I am able to frame the teachers experience not by telling people what to see, but by creating an event that allows them to feel. The discussions I have after these performances are valuable learning experiences. Audience members' comments help me to understand my work in new ways and force me to defend my theories. As Feldman (2005) emphasizes, the entire process is a beneficial way of creating meaning from fieldwork.

My second solution to the question of how to write up and create valuable research products from teacher interviews was to create a scientific foundation for my investigation. I decided that what Connelly and Clandidin (1999) described as teachers' professional knowledge landscapes were physical phenomena that existed in people's brains and bodies that could be modeled. I then began to learn the cognitive and experimental psychology necessary to explain that phenomena. I read hundreds of experimental studies as I engaged in this project and strongly benefited from this investigation as I developed as a researcher: Most of the literature in my own field, educational administration, is not of the same quality. The literature reviews in Chapters 1 & 2 are the latest iteration of this effort.

These reviews were conducted in the following manner. At the start of the process I took courses in cognitive psychology at the University of Michigan to allow me to understand the foundations of that literature. These studies allowed me to get a sense of the major players in the field and to understand its basic concepts. I then used the Web of Science database to trace the citation patterns of major research studies. The database's citation counts and reference list acted as a curriculum that allowed me to learn the cognitive literature that seemed most applicable to my study and to figure out how the different pieces were related. Rather than attempt to cite every researcher in psychology who every published, Web of Science helped me stay within the expertise literature and

use those studies to make my major arguments. I understand such a strategy might make my citation choices seem a bit eccentric to researchers more firmly enmeshed in psychology, however, given that one of the major purposes of cognitive science is to allow researchers outside the field to ground their researches in the science of the mind, I felt this was a reasonable approach.

I used the same techniques to work through the literatures on expertise in education, relationships, routines, and culturally responsive pedagogy. These parts of my literature review were thus produced by interactions between my experiences as a researcher and the citation patterns revealed by Web of Science. One major problem that I found with this strategy, and one possible benefit of my review, was that many of the research communities I cite do not reference each other. There are expertise researchers in education who cite Ericsson's works. There are education researchers who do not and who also avoid citing the education researchers who do. Similarly, the quantitative researchers on teacher student relationships rarely cite works in culturally responsive pedagogy, and researchers in culturally responsive pedagogy rarely cite works constructed by any experimental psychologists. An additional problem of this strategy is that it leaves out a great deal of the monographic studies and edited volumes that, especially in teacher education and culturally responsive pedagogy, make up a much of the field's knowledge base. Again, as a result, some of the choices and discussions in my review will seem a bit eccentric to readers with a deep knowledge of the field, but I do not believe this is an incorrect way to explore these issues.

I found the study of cognitive science to be a very useful tool in my efforts to make sense of teacher thinking. In psychology, cognitive science functions as somewhat of a check on the theories generated by laboratory-based experimenters (Newell, 1973, 1991). Programming psychological models into a computer requires researchers to specify their assumptions and carefully consider the implications of their theories. Cognitive models combine the results of many research studies to reduce the degrees of freedom available to explain a particular set of experimental findings. Thus while there may be many explanations for a given set of results, this number can be reduced by checking possible models against a larger body of evidence (Anderson, 1996, 2007). Rather than investigate the enormous and growing literature on human thought from my

not particularly central position as a graduate researcher in educational administration, I decided that cognitive researchers could do that work for me with significantly more rigorous methods of evaluation and review.

Cognitive science, as Simon (1945; 1996) emphasizes, provides an empirical foundation for the study of people's lives in society. It places the mind of the individual performer at center stage, and provides models that can be used to make sense of people's choices and actions. There is a history of cognitively oriented work in my home field of educational administration (e. g. Elmore, 2000; Goddard, Hoy, & Patton, 2000; Rowan, 1995). I hoped that by studying this literature I might create a worthwhile framework to help others understand the stories I collected, despite some clear limitations. I focused my researches mostly on the individual level studies to bring out teachers' roles as planners and performers, and bracketed out more social and technical aspects of cognition (e. g. Bandura, 1989; Hutchins, 1995a; Lave & Wenger, 1991; Pea, 1993). The literature on social cognition in my field is fairly well developed; both Goddard and Spillane focus on these issues extensively (e. g. Goddard & Goddard, 2001; Goddard, Goddard, & Tschannen-Moran, 2007; Spillane, Halverson, & Diamond, 1999, 2004; Spillane, Reiser, & Reimer, 2002). I thought I could make more of a contribution by focusing primarily on individual knowledge and skill. Ericsson and colleague's (1993) findings on deliberate practice and Kintsch's models of cognition (1998; 2005) are fairly recent contributions, and I decided it would be worthwhile to put those ideas in the service of teacher thinking. I also believed mastering this content would benefit me across my career. In my opinion, there are few better ways to begin a career devoted to researching school leadership than studying the psychology of learning and performance.

It is important to emphasize, however, that cognitive models are just that: models. John Anderson (1983) began his ACT-R model with the explicit goal of falsifying its predictions to create ever more powerful models of thought in a public process of continuous improvement. In his 2007 monograph, Anderson discusses the last thirty years of his work. He lists the many changes he made to his theory and describes the issues he believes he got right and those he believes he got wrong. Because of the enormous complexity of the human brain, it is highly unlikely there will be a final model within my lifetime. By using Anderson and other cognitive researchers' work as the

foundation for my own, I do not claim that the models I use in my investigations are correct; I cannot be certain of any of my claims. What my study does give me is the knowledge that if these models are later falsified, my errors will put me in good company.

The need for creating an experimental structure for my work became more important to me as I continued in my career as a graduate research assistant in the Study of Instructional Improvement (SII). The interviews, ethnographic study and analysis I conducted for SII Case Studies shaped the development of Expertise in Urban Teaching Project in a manner similar to the way the observations collected by Benner and her research team, shaped their investigation. The data I collected for the larger research project made me aware of, in Benner her colleagues' (1996) words, "the incredible press of the situation" in high poverty, high minority schools. I was able to see with my own eyes the difficulties teachers face as a field researcher doing on-the-ground research in high poverty schools. I was also able to investigate how education science programs might benefit the students who attended the schools I visited by engaging in careful analysis conducted across a large mixed-method research team (Barnes, Massell, & Vanover, 2007; Rowan & Correnti, 2007; Rowan & Miller, 2007). The research-based reform models SII evaluates are far from perfect, but if used skillfully, the designs give the professionals who enacted them the power to create better schools that benefit their students (Rowan, Camburn, & Barnes, 2004; Rowan, Camburn, Correnti, & Miller, in press). My efforts on SII brought me in contact with a community of researchers whom I deeply admired. I hoped that my study of cognitive theories of learning and expertise might give me the intellectual capital necessary to make a contribution to this community.

That does not mean that I disavowal the interpretive and philosophical studies I engaged in at the beginning of the Expertise in Urban Teaching Project and that have guided my efforts throughout my work (e. g. Benner, 1994; Bourdieu & Wacquant, 1992; Collins, 1998; Moss, Girard, & Haniford, 2006; Weber, 1978). If one wishes to skillfully interpret texts, and as a qualitative researcher that is my business, there are few better courses of study. Hermeneutic and interpretive works are critical resources for understanding how to engage in a qualitative investigation and for producing meaning

from the data collected. They are also important guides to understanding the community I worked at in the University of Michigan. Whatever else social science is, it is also a bureaucracy (Brint, 1994; National Research Council, 2002). Science is an institution organized by uniquely beneficial structures—such as blind, peer review—but it is still a physical set of organizations located in the real world. The interpretive and critical philosophy I studied helped me understand the social forces that organize the world in which I worked. They also gave me some of the intellectual resources I needed to make sense of the structures of power that ordered the lives of the teachers I study.

i. Evolution across time

I began the line of research that became the Expertise in Urban Teaching Project because I wished to help change how people see. My goal was to draw attention to the nature of teachers' knowledge, and alert others to its impact on the lives of schoolchildren. I hoped that by studying the work of highly skilled professionals I might create research products that inspire more educators to engage in the difficult work required to become excellent teachers. I also wished to inspire more stakeholders in the field of education and the public at large to support and value that commitment.

These goals eventually led me to make many of the conceptual and design changes that differentiate my current work from the original study outlined in my prospectus and excerpted in Appendix B. I changed the project's sample from high school teachers to elementary school teachers because, from my work in SII, I have a much better understanding of the nature of expertise in elementary education. I changed the selection criteria to National Board Certification from teacher nomination because I wished to use a more precise definition of expertise to select teachers for my study. My writings went through a number of different versions as I searched to discover how best to frame the data I collected. The current version, in a sense, represents a return to the narrative tradition that I operated out of when I began my work. While I have not neglected the theory that I learned across the years, I have endeavored to place the teachers at center stage allow them to speak directly to the reader. Their successes and their failures, their struggles and their joys are placed at the center of my analysis. My commentary exists to help the reader mediate on the study's research questions, rather

than to answer them.

How does knowledge change performance?

1) What is the shape of teachers' classroom knowledge?

2) How does this knowledge vary between teachers of different skill levels?

Table 3.1 Stages of the Analysis

Date	Milestone
2/2000	Prospectus for Oral History Dissertation— <i>'The Voice of Experience'</i> —turned into Brian Rowan, Duane Alwin, & Virginia Richardson. Original design: <ul style="list-style-type: none"> ▪ Compares expert vs “good” CPS high school teachers chosen through teacher chosen through teacher and administrator ratings ▪ Draws from sociology and life course research, no cognitive framework
Summer 2000	Pilot Interviews Begin <ul style="list-style-type: none"> ▪ 20 interviews conducted with 9 teachers ▪ All transcribed by researcher
Summer 2001	<i>Lux Aeterna: Growing up As a Teacher in the Chicago Public Schools</i> <ul style="list-style-type: none"> ▪ Auto-ethnography and ethnographic positioning statement ▪ Presented as part of the juried interactive symposium: “Writing that Matters: How a Community of Writers Addresses Validity”; Division D, Conference of the American Educational Research Association, 4/5/2002
Winter 2002	<i>Cubist Practice Portrait</i> <ul style="list-style-type: none"> ▪ Social Theory Analysis of Teacher Expertise ▪ Unpublished Manuscript produced under the direction of Martha Feldman
Winter 2003	<i>Chalkboard Concerto: Growing Up as a Teacher in the Chicago Public Schools</i> . Co-Author, Johnny Saldaña <ul style="list-style-type: none"> ▪ Ethnodrama ▪ Multiple performances include AERA 2003, Arizona State University, University of Michigan Qualitative Conference, Massachusetts College of Liberal Arts Leadership Conference, OISE/UT, 2006 New Educator Conference, PENN Ethnography 2007
Fall 2003	<i>Beatrice and Her Principal</i> <ul style="list-style-type: none"> ▪ Oral History Portrait from the pilot interviews. ▪ Describes school leader who changed beginning teachers life ▪ Presented as part of the juried symposium, “Leadership as Distributed Knowledge” at the University Council For Educational Administration Annual Conference, Pittsburg,

	PA 11/2/2003
Winter 2003	<p><i>Models of Expert Practice</i>—Literature Review</p> <ul style="list-style-type: none"> ▪ Three models of expert practice compared, ▪ Benner’s ethnographic model ▪ John Anderson and Kintch’s Cognitive models
Fall 2004	<p>Research design finalized</p> <ul style="list-style-type: none"> ▪ Interview instrument completed ▪ Expert selection criteria changed from teacher nomination to NBPTS certification ▪ Began to make contacts with Chicago Teacher’s Union Quest Center Nurturing Teacher Leadership project for nominations of NBPTS teachers for study ▪ Began IRB approval process ▪ Focus group of current and retired teachers created
Winter 2004	<p><i>Teaching the Power of the Word</i></p> <ul style="list-style-type: none"> ▪ Ethnodrama from the pilot interviews ▪ Multiple performances include AERA 2004, QUIG 2005, University of Michigan Narrative Institute 2005
Spring 2004	<p>Sample Selected for Current Round of Interviews</p> <ul style="list-style-type: none"> ▪ Continued relationship with Chicago Teacher’s Union Quest Center ▪ Received permission from University of Chicago Alumni Center to hold interviews ▪ Recruited 7 NBPTS Teachers ▪ Recruited 5 Beginning Teachers
Summer 2004	<p>Field Work Completed</p> <ul style="list-style-type: none"> ▪ Interviews began on June 21, 2004 and were completed by September 3, 2004
Fall 2004	Transcription begins
Winter 2005	<p>First draft of Proposal</p> <ul style="list-style-type: none"> ▪ Revisions continue until Fall 2006 ▪ Original lit review completely reorganized ▪ New sections written on routines and medical expertise ▪ Randomized continuation study becomes one of the central topics of the work
Fall 2006	<p>Analysis</p> <ul style="list-style-type: none"> ▪ See Table 3.6
Summer 2007	<p>Revised Literature Review</p> <ul style="list-style-type: none"> ▪ Section on relationships added
Fall 2007	<p>Methods Chapter Revised</p> <ul style="list-style-type: none"> ▪ New sections on theory of investigation and analysis ▪ Minor Revisions to Literature Review ▪ Sections on Randomized Field trials clarified ▪ Wording on hypotheses changed to relate directly to current

	analytic methods
Winter 2008	Final Revisions to Coding system <ul style="list-style-type: none"> ▪ Dissertation draft turned into Committee
Summer 2008	Major revisions to Chapter 1 <ul style="list-style-type: none"> ▪ Removed most discussion of continuation study ▪ Reorganized theory to merge cognitive research on expertise with Pianta and colleagues' work on classroom quality
Fall 2008	New findings sections <ul style="list-style-type: none"> ▪ Teachers' narratives privileged ▪ Chapters organized to help readers see and feel a year of schoolwork Minor revisions to literature and methods sections <ul style="list-style-type: none"> ▪ Discussions of continuation study cut. ▪ Writing shaped into a narrative research frame.

Fieldwork

a. Overview and participant selection

The goal of my fieldwork was to create a trusting relationship with the teachers I interviewed. I was concerned that without trust and mutual respect, the participants in my study would not provide faithful accounts of their teaching. If the beginning and veteran educators I interviewed did not feel secure enough to narrate without extensive self-monitoring, I was apprehensive they would tell me cover-stories (Clandinin & Connelly, 1996) that glossed over the challenges and puzzles of their work with children. They would spend our interview time telling me what they thought I wanted to hear, rather than speaking about what mattered to them. As I wrote to the teachers in the interview instrument I sent educators before the interviews began:

I would like to know about the successes that made you proud and the mistakes you learned from. I hope you will share some of the joy of life in the classroom while not forgetting the hard work and difficult moments that are also part of life in school. You are welcome to bring notes, samples of student work and other materials that might help you narrate... Feel free to move forward and backwards in time and to come back to incidents that you've brought up before. I hope you will feel comfortable enough to tell your story to me in the same way you would tell it to a teacher you trust.

I spent many hours during fall of 2004 and the winter of 2005 working to create

institutional and professional relationships in Chicago that would allow me to earn the teachers' trust. I created a focus group of current and retired Chicago Public School Teachers and Board Certified Educators and asked them to comment on my interview questions and study description. Their remarks caused me to change some of my questions and clarify the description of the study I sent to participants. I met with the head of one of Chicago's most respected National Board of Professional Teaching Standards preparation programs—The Chicago Teachers' Union Quest Center's Nurturing Teacher Leadership (NTL) program (See description in Nighswander, Cherkasky-Davis, & Bearden, 2001)—and asked her to select the Board Certified teachers I interviewed. All but one of the teachers whose names she gave me agreed to take part in the study. The acceptance rate for the Board Certified Teachers in my sample was thus close to ninety percent.

I worked with the Chicago Board of Education, the University of Chicago's New Teacher's Network and a number of the city's Masters in Teacher Education programs to recruit first-year educators. I put notices on group email lists. I asked teacher educators I knew from the University of Michigan to send me the names of their former students. Despite these connections, it was difficult to find beginning teachers who were willing to speak about their practice. Many of the first-year teachers I spoke to told me that they had jobs over the summer and no time to participate, or they said they weren't comfortable participating in a research study. My acceptance rate for beginning educators was under fifty percent.

It is my opinion that the first-year teachers in this phase of the Expertise in Urban Teaching Project are probably more efficacious and, certainly, more comfortable talking about their work in the Chicago Public Schools than the population of first-year teachers at large. I base this assertion on the following lines of reasoning. First, beginning teachers who had extremely difficult work experiences most likely will refuse to participate in study that asks them to tell stories about their jobs to a stranger in order to generate data to compare their work experience to that of accomplished, National Board Certified Teachers. Second, as Table 3.2 shows, the beginning teachers in the Expertise in Urban Teaching began their careers in the Chicago Public Schools with high levels of knowledge and/or professional training. One beginning educator was part of Teach for

America. Two were working on their Master’s degrees as part of yearlong alternative certification programs. As a result of these factors, I believe that the comparisons I make between the two groups of participants might underestimate the performance advantage of the Board Certified Teachers versus the population of first-year teachers at large.¹

Table 3.2 Project Sample

Teachers ²	Grade Level	Yrs teaching	Race of teacher	Race of students	Special Circumstances
NBPTS NTL Teachers					
1	5 th	11	W	H	Taught her schools’ non-ESL 5 th grade class
2	4 th	7	B	B	First-year in magnet school. Many special needs students in classroom.
3	5 th	17	W	H	Taught her schools non-ESL; 5 th grade class
4	7/8	9	W	H	Became a staff developer two days after last interview
5	4 th	7	B	B	First-year in magnet school. Many special needs students in classroom.

¹ The Expertise in Urban Teaching Project does not use a randomized sample. I was able to find expert and beginning teachers who taught students of color in the same school urban school system during the same year, but I was not able to randomly-assign CPS students to each group’s classrooms. Table 3.2 shows that the NBPTS teachers tended to teach Hispanic students while the beginners tended to teach African American children. None of the classes in my sample were ESL or Bilingual, so I do not believe these differences are critical, but they are a concern. One other interesting selection issue highlighted in Table 3.2 is that two of the NBPTS teachers had left the high poverty, CPS neighborhood schools where they had been Board certified and began the 2004 school year in magnet schools that taught students whose families tended to be from higher SES backgrounds. Both teachers said that this change influenced their teaching. In teacher #2’s account this change made it more difficult for her to challenge the textbook-based curriculum of her new school. She also had difficulty skillfully managing the educational experiences of the many special needs students in her classroom who were continually pulled out to receive services. Teacher #4 received more support to work with special needs students. She reported that her major challenge was adjusting to demands of middle class African American students and parents who, in her account, were much more academically competitive than the lower SES African American students and families she worked with in her previous school. “This year,” as she said through out her interview, “I didn’t have any Indians; they all wanted to be chiefs.”

² The pseudonyms of each teacher are not listed in this chart to protect respondent confidentiality.

Teachers ²	Grade Level	Yrs teachin g	Race of teacher	Race of students	Special Circumstances
6	5 th	7	W	H	
7	5 th	7	W	H	All interviews took place in August.
Beginning Teachers					
8	5 th	1	W	B	Yearlong alternative certification Masters student in CPS training institution
9	4 th	1	W	B	Became a sub in late October 2004 due to low enrollment, became a reading resource teacher in January 2005. Left CPS, but found a teaching job in a suburban district. Now NBPTS Certified.
10	3 rd	1	W	B	Yearlong alternative certification Masters student
11	5 th	1	B	H	Former nursing student. Team-taught class of 36 students with another 5th grade teacher.
12	8 th	1	W	B	Teach For America teacher. Left initial placement and began current class in October. Received high, ongoing support from administrators in 2 nd school.

b. Conduct of interviews

The interviews for the Expertise in Urban Teaching Project were organized in a manner designed to gain the teachers' respect and trust. All of the participants were sent the interview questions in advance. All were also mailed a detailed description of the study's goals and methods of data collection.³ I asked the teachers to read this information over and to ask me any questions about the study before they formally agreed to take part and I scheduled their interviews. These pre-interview calls lasted at least twenty minutes as I described the different elements of the project to prospective study participants. Similar to Benner's studies of expertise in critical care nursing (Benner et al., 1999; Benner et al., 1996), all the teachers were given short homework assignments to complete before each interview session. These assignments were designed to help teachers direct their narratives towards issues of concern to researchers in education without putting them on the spot. At the beginning of each interview session, the teachers were paid for their time and asked to sign an IRB form that described the many steps the

³ A copy of this letter can be found with the original interview instrument in Appendix C.

study took to making their stories confidential. Participants were told that all names of teachers, students, colleagues, schools and neighborhoods would be changed in all transcripts used for data analysis and never be used in private or public study documents.

Throughout the course of my summer data collection I engaged in a number of other activities to show respect and build trust. I told the teachers that the interviews would be conducted at any place or time, at their convenience. Most sessions were held either at the Chicago Teacher’s Union’s offices in the Merchandise Mart in downtown Chicago, or at the University of Chicago Alumni Center in the city’s South Side. I interviewed early risers at 8:30 in the morning and others at 7:30 at night. I was always dressed in a professional manner with a tie, a button-down shirt, and slacks. Similar to the teachers in Bicklin (1995)’s feminist ethnography, I spent most of our interview sessions listening. I had two tape recorders working at all times and this allowed me to focus on teachers’ stories, rather than taking notes.

Table 3.3 Interview Experience

Teachers ⁴	Date	Place	Called in Advance	Read Questions in Advance	Preparation Level
NBPTS NTL Teachers					
Addison Ashland	6/24	Q	Yes	Yes	High
Belmont Barry	6/28	UC	Yes	Yes	Yes
California Calumet	7/1	Q	Yes	No	None
Dorchester Damen	7/7	UC	Yes	Yes	Yes
Ohio Ontario	6/28	UC	Yes	No	None
Prairie Paulina	8/23	C	Yes	Yes	Yes
Sedgwick Sheffield	6/25	C	Yes	Yes	Yes
Beginning Teachers					
Halsted Hoyne	6/23	Q	Yes	Yes	High
Indiana Ingleside	6/21	Q	Yes	Yes	Yes
Keeler Kirkpatrick	6/18	Q	Yes	Yes	Yes
Milwaukee Madison	6/24	Q	Yes	No	None

⁴ The order of teachers in these tables has been changed from Table 3.1

Teachers ⁴	Date	Place	Called in Advance	Read Questions in Advance	Preparation Level
Taylor Touhy	6/24	Q	Yes	Yes	None

C=Coffee Shop Q=Chicago Quest Center UC=University of Chicago Alumni Center

It should be noted that these fieldwork procedures are ethnographic in nature; they violate many of the assumptions underlying psychological laboratory research. Laboratory-based experimenters strive to control and standardize the research experience of subjects in their investigations in order to minimize possible sources of error. Participants may receive the same experimental manipulation in the same room, the same chair, the same time of day, under the direction of the same assistant wearing the same set of clothes. Verbal data may require higher levels of control. Eriksson and Simon (1993) recommend that researchers collecting verbal accounts minimize sources of variation that may influence subjects' responses, such as the interviewer's tone of voice, pacing and body language. Reliable experimental designs that capture verbal samples of participants' experience might use procedures such as recording the entire interview script in advance and asking subjects to stare at a blank wall when they respond to questions.

In educational research, however, the laboratory is not viewed as the gold standard (U. S. Department of Education: Institute for Education Sciences, 2003). Educational laboratories are viewed as places where researchers might try-out initial instructional designs or create early hypotheses, but they do not play the same central role in the field's knowledge production as laboratories do in psychology. Instead, the goal of research on teaching is to change practice in the classrooms where teachers and students work and learn (Raudenbush, 2005). If there is a privileged site of research, it would be classrooms in schools and neighborhoods with high concentrations of the poor and minority students whom the U. S. education system has historically failed. As a consequence, researchers in the field of education confront research dilemmas that would never occur in the lab. Any research work done under field conditions requires trade offs, and the Expertise in Urban Teaching Project is no exception.

When I created the research design for the Expertise in Urban Teaching Project, the goal of creating a highly standardized and replicable research experience for the 12

participants in my study was relaxed in order to collect what were hoped to be honest and trustworthy (Lincoln & Guba, 1985) accounts of urban teachers' schoolwork. My goal was to learn from the teachers I interviewed and I believed that by making them comfortable and giving them control over their interviews I would help them share more straightforward accounts of their work. Teachers were interviewed at their convenience, instead of according to the demands of a master schedule. They spoke to interviewer who, as the transcripts show, actively listened to their narratives; participants did not talk to a blank wall.

I believe this method is appropriate because the experience I requested teachers to verbalize was extremely vivid (Connelly & Clandinin, 1999; McCutcheon, 1980; Yinger, 1980). Unlike experimental psychologists, I did not invite subjects to recall a pallid research intervention: My research design did not require participants to verbalize their efforts to solve a mathematics problem, think-aloud while they read a collection of texts, or categorize nonsense words. I asked the teachers to recount their efforts performing a mentally and emotionally demanding, nine-month-long job (Biklen, 1995; Codell, 1999; Hankins, 1998; Ladson-Billings, 1994; Steedman, 1992). My study also has a different purpose than is common in experimental psychology. My goal is to help the reader see the courage, dignity, and, sometimes, the pain of professionals engaged in difficult and worthwhile labor.

i. Variation in procedures

One issue that Table 3.3 does raise is that there was some variation in the procedures used for the interviews. The teachers did not all read the questions in advance, and only two of those that did wrote extended homework assignments. As the many analysis charts I will share in Chapter 4 will show, this variation did have a minor impact on the data I collected, but did not substantially influence my findings. Teachers who spent more time preparing for the interviews tended to speak more about their practice, but the work they described in those extended interviews does not differ substantially from the work of the other teachers.⁵ As a result of this variation, however, I will

⁵ The two teachers who did prepare extensively for the interviews, Addison and Halsted, might have been

standardize the coded units when presenting my data. I will make the assumption that each interview provided teachers the same opportunity to discuss their work.

The lack of effects from this variation is not surprising. Given the human mind is a rational system organized to allow people to surmount everyday challenges to achieve critical life goals (Anderson & Schooler, 1991, 2000; Bechara, Damasio, Tranel, & Damasio, 1997; Fredrickson, 1998), minor variations in procedures shouldn't do much to change accounts of the inner landscape people use to pilot themselves through thousands of hours of professional practice. In a respectful and trusting interview relationship, what matters is not the different ways the research partners shape the flow of recollections, but the quality of the experience that underlies the verbal data (Weiss, 1995).

The variation in interview procedures described in Table 3.3 also might be argued to support my choice in research methods. When I conducted the interviews for the teachers who had not received the questions in advance, I felt that the sessions were more pressured. While I did not believe that this strain changed substantially what the educators shared in their interviews, I did feel the added stress justified my decision to send participants the questions in advance. It did not seem reasonable to ask the teachers to produce 90 minutes of stories about their work-experience off the top of their heads. The unplanned variation in procedures thus created an informal control group that allows me to argue that letting teachers prepare for the interviews did not in itself strongly alter their accounts.

While the variation created by these issues is not great enough, in my opinion, to suggest that my decision to delay my first face-to-face interview with teachers until our first session was wrong, it does suggest that I might have better managed the interval between the participants' acceptance and the first interview. The end of the school year is a very busy time for teachers. I decided that I did not want to hold pre-interview meetings

able to surface more details of their practice than the other teachers—as Table A6.2 suggests—but these extra details did not seem to appreciably alter the portrait of their practice they shared in their interviews. Neither teacher's recounted practice varied extensively from their peers with the possible exception of Addison's and Halsted's frequent mention of conflict—See Tables A6.2 and A8.2. In fact it might be argued that this constant conflict might have been the reason both teacher's prepared for the interviews extensively; they felt a strong desire to take some time to pull details together before being interviewed.

or ask the educators to come to the sessions early and complete the homework assignments because I thought it was important to minimize the study's demands on their schedules. In retrospect, however, I believe I might have more clearly specified how I wished the respondents to do the first homework assignment and then paid them in advance to complete this work.

c. Interviewing and transcription techniques

The goal of my research design was to encourage teachers to share memories of the 2004-2005 school year. I wanted the teachers to speak naturally, in the spirit of the event (Bourdieu, 1990), rather than expound on pedagogical theories that might not relate to their classroom practice. I thought the best way to get the teachers to speak in their own voice and describe their experience in their own way was to follow Benner and colleagues' (Benner et al., 1999; Benner et al., 1996) lead and ask the educators to begin our research relationship by discussing their work with one of the young people under their care. My first interview question was:

Please tell a story about a student, or a group of students, for whom your teaching made a difference during the 03-04 school year.

I asked this question both because I wished to learn about that particular student, and because that answer would help the two of us move the interview to discussions of other children and other well-remembered classroom events (Carter, 1994; Connelly & Clandinin, 1999; Flanagan, 1954; Kintsch, 1998). All teachers spoke on this topic for at least twenty minutes, some talked for more than forty. My goal as an interviewer was to help the educators move from one story to the next and slowly unwind the landscape of memories generated by a year in the classroom. I continued to ask follow-up questions until, as Weiss (1995) recommends, the conversation seemed to come to an end. I then asked the teacher if they wished to move onto the next topic.

I had worked as a teacher in the Chicago Public Schools for eight years before I came to the University of Michigan. My years in the classroom allowed me to listen to the teachers' stories with the understanding (Bourdieu et al., 1999) of a former insider. I had made enough of my own mistakes in my time as a public school teacher that there was little the teachers said that could shock me. I had also experienced the joys produced

by working in the city's classrooms and could respond knowledgeably to the teachers' descriptions of their success. My years of academic study enabled me to improvise follow up questions that helped channel the teacher's recollections towards issues of concern to educational researchers.

I spent most of the interview listening. Table 3.5 (below, p. 27) shows that from time I asked the first question to the time the interview ended, the teachers shared a median of 96% of the words recorded in the interview, with no clear differences between the veterans and beginners. The transcriptions contain many pages of interview material where I did little more than affirm the teachers' accounts by grunting "uh huh" or muttering "yeah." When I did speak, I used Weiss (1995)'s technique and asked the teachers to expand on the events they had brought up in their stories. Particularly for the beginners, I also asked participants to focus on positive events rather than dwell on the difficulties associated with their practice. I did not bring up topics of my own.

I made this procedure explicit in the interview guide for the first interview. This is what I wrote:

Throughout the session, I will ask you to expand on your stories by asking you to "Tell me more about that." or to "Walk me through what happened at that moment." or to "Describe a specific incident that illustrates that idea." In order to focus the time we have on your teaching I may also ask you questions such as "Could you tell me specifically how that event or person affected your teaching?" All of these questions are designed to help you tell your story in your own way, and in your own words.

This style of interviewing also helped to build trust between the teachers and myself. There were no surprise questions, and I did not use aggressive probes that put the participants on guard. The teachers spoke. I listened. My follow-up questions helped them tell their stories. I did not interrupt the flow of their recollections. Throughout each session, I was extremely interested in what the teachers had to say.

i. Transcription

I transcribed and cleaned the first round of interviews. In order to improve the transcripts' readability I used a different font each time teachers revoiced their experience and spoke as a student, an adult, or themselves teaching. Every time a teacher told a story

where she spoke in a student’s voice, I formatted that text using MicrosoftWord’s Comic Sans text style. I used Haettenschweiler each time the teacher spoke as another adult. I employed another style when she spoke as herself. (See Interview Excerpts 3.1 and 3.3, below, for examples.) I never asked the educators to speak in this way. Instead they decided to make use of this style of discourse naturally, as they described the many events that shaped their work experience. In Table 3.4, I counted up each line of dialogue where teachers use this style of discourse. All of the transcripts, except for one from a beginning teacher, contain at least 100 revoiced pieces of conversation. Two of the expert teachers shared more than 500 separate segments. My efforts to format the transcripts for readability thus support my claim that my interview techniques generate verbal samples of the landscape of practice (Connelly & Clandinin, 1999; Yinger, 1980) teachers use to plan their lessons and manage their schoolwork.

Table 3.4 Types of Revoiced Dialogue Shared in Interview 1

Teachers	Student voice-speaking as a student	Adult voice-speaking as another adult	Classroom voice – speaking as herself, teaching
NBPTS-NTL			
Addison Ashland	129	108	385
Belmont Barry	132	36	266
California Calumet	30	20	74
Dorchester Damen	58	10	110
Ohio Ontario	126	78	312
Prairie Paulina	19	5	105
Sedgwick Sheffield	31	52	193
Beginners			
Halsted Hoyne	64	79	288
Indiana Ingleside	18	1	48
Keeler Kirkpatrick	48	26	145
Milwaukee Madison	55	16	79
Taylor Touhy	26	10	96

Table 3.4 does show some variation between groups and teachers. Expert teachers tended to revoice more dialogue than the beginners. First year teacher Indiana Ingleside, especially, seems to have a low count. I will discuss what I believe are the reasons for these differences below, after my discussion of Table 3.5 (below).

ii. An example of these research methods

The following narrative shared by NBPTS-NTL teacher Belmont Barry illustrates both how the interviews were conducted and how they were initially transformed for analysis. Belmont began her interview with a long description of her efforts to organize her classroom before the year began. The expert teacher told me she believed that the major way her teaching impacted her students was not in individual student successes, but in a transformed classroom ‘atmosphere’ that benefited all students equally. The first seven pages of her transcript flash by with a long string of narratives where no students are discussed by name, despite the fact that I asked her to describe a student or group of students for whom she made a difference. Belmont thus did not answer the first interview question; instead she spoke about something she believed was more important. Essentially, Belmont decided to provide information I intended to surface later in the interview.

This is a specific case that illustrates one of the basic methodological principals of my fieldwork. During the interview, I had to decide, at that moment, on the spot, how to react to fact that Belmont had gone off the script and was not following the interview guide. Whenever dilemmas of this nature occurred, they were always resolved according to the same principle: Teachers controlled the interview experience. If the research participants wanted to say something, I let them say it. If they wanted to stop and take a breath, I let them pause. The urban educators were free to stop the interview and ask me to erase the tape, but this only happened once, after a teacher told a series of stories about a former administrator who had no current influence on her 2003-2004 classroom practice. I assumed that the benefits of creating a trusting interview relationship outweighed whatever variation was caused by this lack of standardization.

As a result, when Belmont talked about her whole class teaching at the beginning

of her interview, I respected her choice and asked her a number of follow up questions about that aspect of her work. The transcript shows that once Belmont had answered these questions, I explained the type of information the interviews were designed to surface and then asked Belmont to describe her individual students. Antonia was the first student Belmont described by name.

The transcript that follows was taken directly from the cleaned copy of Belmont's first interview without any further processing on my part. It is identical to the data I coded. Readers might note how the transcription techniques I discussed in the previous section make the dialogue and pauses in the teacher's narration present. These methods highlight the individual pieces of the teachers' narratives and highlight the parts they were constructed.

Interview Excerpt 3.1: Belmont and Antonia

<p style="text-align: center;">Interviewer</p> <p>So could you tell me about them specifically what they were like, like, an, maybe an individual student in that group.</p> <p style="text-align: center;">Belmont</p> <p>NNN-HHMM, um, one of the students and can I use her name? **⁶</p> <p>Antonia⁷, she I don't have anything to write about.⁸ You know and the first day of school, we um, we write down some topics in our writing notebooks **</p>

⁶ I created a new paragraph and typed two asterisks each time I affirmed the teachers' narration by uttering a speech crutch such as saying "yeah" or grunting "uh-um". (See Table 3.4, below.) This step further dramatized the interviews by continually breaking up the text into smaller, easy to understand, units.

⁷ I created pseudonym for each student mentioned in the teachers' interviews by picking names in alphabetical order. The name of the first student mentioned in an interview begins with an 'A', the second with a 'B', etc.

⁸ Every time Belmont spoke as a student, I formatted her words in **Comic Sans MS**

What is anything you've ever been interested in?⁹

And you know her list has 3 things. Uh like

School. Friends. Books.

**

These huge topics

**

I don't have anything to write about. I don't have anything to write about.

So, sitting down with her and I said

Okay, these are your topics,

**

School.

**

So what aspects of school?

**

NNMMM, I don't know. Just school.

**

You know, its really trying to pull it out of her.

**

Um, but then, you know she would find little things. Like, little friends at school.

Oh, well that's a huge topic that you could writing about. Do you want to write about specific friends? Or do you want to write about your best friend, do you have a best friend?

You know, really trying to pull it out and then you can see the little spark

Yeah, I have a best friend.

Oh, what's her name?

**

What ever her name is.

Well, is there a way you can write about her?

Well, yeah...

Okay, why don't you start? And you it doesn't have to be perfect. It doesn't have to be, you know, don't worry about that. Just get your ideas down.

So really just trying to guide her through one piece,

**

that shows that she can that she can do it. Building up her confidence that something so small, can come out of her, can. It can come out of her,

⁹ Every time Belmont spoke as herself, working, I formatted her words in Bookman Antiqua.

**

and just building up that confidence with her, and just after that she would keep going with it and going with it and then she got into this topic of animals. I think she felt, she's much more comfortable with nonfiction. She didn't want to write stories, they were too difficult to understand, and try to a story is very difficult to write so she just found that writing about things she knew, her friends then she started getting into this researching you know

Oh, I am going to do something I don't know if its on caterpillars or rabbits or

It was on, it was on rabbits

**

Well, I want to write about rabbits.

**

Okay, well what would like to say about rabbits?

Well, there she write this little brain storm

It's so cute. They have ears.

You know its really basic. I said

Okay, what about going a step further and doing some research on rabbits?

**

Well NNMM

She did not know how. Lead her to the library.

Go look,

we have this book.

Oh, look there is a whole book about animals let's go into the index.

Oh look, rabbits, there is a whole chapter on rabbits.

Really trying to immerse her into the... different research I guess.

**

um books anything she can get her hands on that could help her and then she just, took off!

**

You know, so by the end you know she was so independent writing all these different pieces and so proud of what she wrote. She kept it very basic. Because that's just her style, she's just a very basic writer.

[Belmont Barry Round (R)1 Question (Q)1]

Interview Excerpt 3.1 began with a follow-up question where the interviewer attempted to draw Belmont out and encouraged her to speak about a specific student. Belmont talked without interruption the rest of the excerpt and continued on for another half a page beyond the passage published in Excerpt 3.1. Belmont improvised the entire

story on the spot. As the literature on narrative I reviewed in the proceeding chapter indicates (Baumeister & Newman, 1994; Connelly & Clandinin, 1999; Doyle & Carter, 2003; Kintsch, 1998), the expert teacher was able to almost effortlessly transform visual, auditory, kinesthetic and other forms of experience into a verbal account. Narrative allowed Belmont to pull together her memories of many classroom incidents into a meaningful discussion that can be understood by someone who never walked through her classroom door. The veteran educator did not have to sift through her memory to hunt for details about her work experience. The many incidents were so vivid; they ‘tripped off her tongue’.

iii. Variation in narration

Table 3.5 quantifies variation in the individual interviews. In the first column I total the number of affirmations I uttered. In the second, I list the number of words I spoke from the opening question to the conclusion of the interview. This column shows that there was clear variation in the number of words shared. Beginning teacher Halsted Hoyne spoke more than 26,000 words while another beginner, Indiana Ingleside, shared less than 11,500. The ‘Percent Teacher Words’ column shows that, mostly, I did what I said I would do during the interview sessions. I spent my time listening to the participants in the study and shared an average of about 4% of the words in the interviews. In the last column, I total up the number of times the respondent paused noticeably, which I defined as breaking the flow of narration for three seconds or more. Taken together, Table 3.4 and 3.5 show both there was variation between individual teachers in their interview experience, but no large-scale, systematic variation between the two groups. Given that the ability to reflect on one’s practice is a skill that teachers learn from experience (Calderhead, 1989; Hogan, Rabinowitz, & Cravan, 2003; Leinhardt, 1988), the higher number of words for the NBPTS-NTL teachers do not, in my opinion, lie outside the realm of natural variation. It was probably easier for them to speak about their work.

Table 3.5 Transcribed Interviewer and Respondent Variation

Teachers	# of Interviewer Affirmations per Interview	Ratio of Interviewer Words to Respondent words ¹⁰	Percent Teacher Words	# of Respondent Generated Pauses per Interview
NBPTS-NTL				
Addison Ashland	395	371/23,732	98%	19
Belmont Barry	621	779/19,767	96%	12
California Calumet	445	1219/16,589	93%	20
Dorchester Damen	504	497/15,206	97%	8
Ohio Ontario	442	757/15,583	95%	10
Prairie Paulina	606	1066/15,422	93%	9
Sedgwick Sheffield	446	849/19,555	96%	31
Beginners				
Halsted Hoyne	384	755/26,715	97%	4
Indiana Ingleside	100	644/11,315	94%	50
Keeler Kirkpatrick	422	781/16,276	95%	4
Milwaukee Madison	428	494/12,297	96%	2
Taylor Touhy	247	500/13,128	96%	27

Tables 3.4 and 3.5 do show some clear differences in the interview experience of individual teachers. Addison Ashland and Halsted Hoyne, the two teachers who prepared extensively for the interviews, spoke more words than the other educators and tended to re-voice more dialogue. Given that the purpose behind the homework assignments was to support the teachers' efforts to verbalize their experience, these differences are not unexpected. It will be important to take this variation into account in the findings I share in Chapter 4, but as I will discuss, these differences don't appreciably change my conclusions.

Beginning teacher Indiana Ingleside, on the other hand, responded quite differently to the study's interview procedures. Table 3.5 shows Indiana spoke the fewest

¹⁰ Affirmations are not counted as interviewer words and, as a result, are excluded from these totals.

words, had the most frequent pauses, and received the fewest number of interviewer affirmations. The content of her interview offers some reasons for this variation. Indiana told me at the start of the session she read the questions in advance, but hadn't prepared extensively. During the interview she had difficulty moving from one incident to another, and many times seemed troubled by the events she narrated. Similar to many beginners (Veenman, 1984) the gap between her understanding of what good teaching should be and her memories of her actual classroom performance was quite large. As Indiana told me:

I was always reading about you know educational policy and what was going on in trends and just always very excited about it. So the decision to become a teacher came pretty naturally. But so, even though I, I, I, I had read about all this stuff, to actually be in it and doing it is like so

[LAUGHS]

it's just so, you know, in your face and real so

[8 SECOND PAUSE]

I mean I learned a lot of the issues with the system that are,

[4 SECOND PAUSE]

you know, really troubling.

[Indiana Ingleside R1 Q3]

Indiana, like many other teachers I interviewed for the Expertise in Urban teaching project, taught young people whose lives were impacted by violence. During the 2003-2004 school year, there were two different days Indiana's students found the bodies of murder victims who had been dumped near her school and, as was the case in every discussion of violence in the study, neither she nor her students received any professional counseling. Indiana did not find out about the first murder until a Chicago Police Detective walked into to her classroom to interview the student who had found the body. Indiana told me that she felt more disturbed by the incident than her student.

Tables 3.4 and 3.5 show, beginning teacher Taylor Touhy also paused frequently during her interview and had a low number of interviewer-generated affirmations. She also seemed to have difficulty putting her practice into words. Taylor Touhy suffered from similar difficulties as Indiana Ingleside. Taylor was trained as urban educator by a leading Midwest research university and chose to teach in CPS because she was

committed to working with poor and minority students. She was overjoyed when she got a job in the system, and while Taylor said that she intellectually understood the difficulties that awaited her, she told me she was not fully prepared for the reality of her work. Taylor's first principal in CPS did not allow her into school building until the week before school started and, consequently, Taylor did not discover her classroom was filled with construction debris until the Monday she walked inside it. The school had mandatory staff development sessions scheduled for the week before classes began, and Taylor was not permitted to skip those sessions to clean her classroom. No one at the school offered to help. She was not allowed into the building before or after school. Taylor called her mother in tears and asked her to clean her classroom.

During her interview, Taylor said she spent her first weeks in that building working and, many times, failing to maintain order. Discipline problems made here work difficult. This changed one morning in October when Taylor's principal told her that the school's enrollment had dropped and her services were no longer needed. Taylor was asked to pack up her classroom and leave the building before school started. She was not allowed to say goodbye to her students. Here is Taylor's description of how she left her first job out of college:

So we had one hallway and there's one class per grade

**

and I was the fourth grade teacher and I was the newest person. I don't know how they get rid of a fourth grade teacher but they did, when it's the only fourth grade teacher, but they did.

**

So, yeah I showed up on Tuesday, they said,

You're out before the kids come.

It was a bad, bad, bad.

[Taylor Touhy R1 Q4]

Consequently, most of experiences Taylor relayed during her interview focused on her work in another building where she served as a pullout teacher providing reading and mathematics lessons to some of her school's neediest students.

Given this interview content, I decided that if Indiana or Taylor wanted to pause and think about what they were going to say, I let them pause and think about what they

wished to say. I affirmed their stories by being quiet rather than by saying “yeah”. In my opinion, the interviews with the other beginning teachers flowed more smoothly not because their content was radically different from Indiana and Taylor’s, but because these educators spent much of the 2004-2005 school year speaking about their teaching with other people. Keeler Kirkpatrick told me that as a Teach for America teacher she talked about her teaching with the other beginning educators she lived with all night and all weekend. Halsted Hoyne drove to work with another teacher from her school each day and, in her account, sometimes spoke to members of her Master’s cohorts for hours. Milwaukee Madison team-taught with another teacher.

d. Relationship of verbal data to experience

Indiana and Taylor’s difficulties making sense of their work experience might be understood to be part of the ‘natural’ difficulties beginning educators face. As Carter et al. (1987; 1987) demonstrate, classrooms are complex and fast moving environments; it is not always easy to make sense of what happens inside of them nor to understand the social forces that organize a given moment in time. Organizing trustworthy reflections is a skill that must be learned (Carter, 1993; Lampert & Ball, 1998; Leinhardt, 1988; Schon, 1987). As I have argued throughout these chapters, the many samples of classroom events my narrative method generates should combine into a landscape that comes close to approximating the educator’s work experience, but I make no claim stories mirror experience. The beginners stories might be seen as somewhat less trustworthy than the highly trained NBPTS-NTL teachers, because it is quite possible that the first-year teachers made mistakes they did not notice or, as might be the case for all the teachers in the study, withheld critical incidents they were not comfortable relaying. Taylor Touhy, for instance, described how she left her first job in the Chicago Public Schools during her first interview. Taylor did not tell me she asked her mother to come to her school and sweep the debris out of her classroom until her fourth interview.

The interviews were designed, as Benner (1996) recommends, to encourage participants to speak about positive aspects of their work with children. While I honored the teachers’ decision to share difficult aspects of practice and did not interrupt them when they spoke, I would also, especially with beginners, ask them to focus on moments

when they felt good. I had no interest in collecting verbal data about every negative event that occurred to every participant during the 2003-2004 school year.

The question of whether my research methods create verbal data that can be analyzed in ways that allow me to discuss ‘real-world’ variations in the teachers’ practice is, of course, an empirical one.

- Does the human mind organize the experience generated by an extended skilled work experience into a landscape of well-remembered events that can be sampled in narrative interviews?
- Was my decision to focus on building a trusting interview relationship with my respondents at the expense of a loss of standardization appropriate?
- Can the findings I create with this ethnographic methodology generate findings that contribute to theory building on research on teaching and can be investigated by other research methods?

I don’t know the answer to these questions. It is my sense that the teachers’ stories are honest accounts of their work and that the differences they described in their workplaces could be easily verified by an outside observer, but my study design made it impossible for me to triangulate interview content with classroom observations. The goal of my research methods was to allow others to hear the voice of Chicago’s classrooms and to imagine the benefits that expert teachers received from many years of study and practice. I also hoped to draw the reader’s attention to the difficulties both groups endured and to bring to light the teachers’ bravery and their suffering.

Analysis

a. Analytic overview

I transcribed the first round of interviews verbatim before I began to code my data. I formatted all respondent dramatizations and researcher affirmations in the manner discussed in the previous section. My work transcribing the data should be understood as a form of analysis. By constantly listening to the tapes, writing down the teachers’ words, and then checking to make sure I accurately rendered their stories, I began to “know my data” and reflect on the patterns that lay within it (Alvesson & Skoldberg, 2000). During

the beginning of the transcription process I took notes and attempted to describe what I learned. As time went on, these notes decreased. Transcription became an opportunity for extended, mental dialogue around the guiding questions of the study. I continually attempted to make sense of the stories I inscribed.

Once the transcriptions were finished, I moved away from the data and wrote what turned into Chapter 1, Chapter 2 and an early version of the fieldwork section of this methods chapter. It took about four major revisions to organize a coherent manuscript out of the many studies I had read and the ideas I had come up with during fieldwork and transcription. These early chapters were written in dialogue between the cognitive and educational literature I studied and the understandings of the teachers' experiences I gained from transcribing. I did not code until I had finished these works. The first writings are an attempt to build theory. The empirical chapters are attempts to use it to make sense of the teachers' innerworlds and to publish educators' successes and their struggles.

As I discussed earlier, the unit of analysis in Benner's research is the story. Her research team divided up their transcripts into collections of extended stories—'paradigm narratives'—and collections of shorter accounts—'exemplars'. The research team then analyzed these materials to create collections of stories that referred to distinct aspects of nursing practice. This process allowed Benner and her colleagues (1999) to identify two major habits of thought in the expert nurses they studied—'clinical grasp and clinical inquiry' and 'clinical forethought'—as well as nine domains of practice such as 'the skilled know-how of managing a crisis' and 'facing death'.

I did not choose to code my interview data this way. The semi-structured interviews I conducted seemed to create less coherent stories than those produced by Benner's focus groups. Because the individual teachers spoke for ninety minutes with minimal interruption, research participants spent much of their interview time reflecting on incidents that they had not prepared to share in advance and many of the stories they told were fragmented and disjointed. The transcripts were filled with collections of incidents rather than developed narratives with discernable conflict, character development, and resolution. Rather than imposing structure on these accounts, I decided that the best way to analyze the teachers' professional knowledge landscapes was to

divide the stories into the incidents they were constructed. Events, not full narratives, are thus the Expertise in Urban Teaching Project's coding unit.

Table 3.6 describes the development of the coding system I created to analyze the first round of interviews for the Expertise in Urban Teaching Project. The table describes my investigation from my early efforts to prepare the data for analysis to my concluding work to quantify my results. This coding system was created out of a hermeneutic approach to qualitative investigation (Gadamer, 1975; Taylor, 1971). I did not use a pre-developed instrument to analyze my data. Instead, I developed the coding system by engaging in an inner dialogue between what I learned from the text and what I learned from readings and my writings.

I began coding on November 15th 2006 with the assumption that the expert teachers' knowledge and skill would give them the power to create thriving classroom communities where teachers and students work together to grow morally and academically. I further assumed the knowledge teachers used to pilot these designed classrooms could be surfaced in teachers' narratives. I developed the analytic categories by examining the transcripts for patterns related to my understanding of the nature of teacher knowledge and expertise in classroom instruction. I then work to improve the usefulness of these categories by re-imagining my definitions in light of the meanings I found in the text. I could not assume that my current understanding was correct, and throughout the analysis and my written descriptions of my findings, my comprehension of the text changed and developed. I learned not only from coding each individual piece of text, but from using NVIVO commands to display the results of my analysis and examining how the two groups' totals for particular, analytic categories 'fell out.' These totals helped me think about the teachers' interviews as a whole and enter into an alternative type of dialogue with the data I collected. I could imagine how knowledge and experience shaped the teachers' experience, in general, and visualize how the daily demands of the educators' classrooms influenced their memories in ways that helped fashion the stories they tended to tell.

My initial writings about my coding system were organized around the hypotheses that I had developed to guide my initial work. These writings were not successful as I wished. My experience interviewing the teachers and transcribing the data

had convinced me the stories the teachers shared corresponded, in a rough way, to their everyday classroom experience. I felt it made sense to me to use the words ‘hypothesis’ and ‘testing’ because the teachers interviews varied in the ways that I ‘predicted’ they would vary when I went out to the field. In a sense, I believed that the narratives I collected might be used as a form of measurement that sampled the landscapes educators used to pilot themselves through their daily work. I thought that the teachers’ stories might allow me to peer into their classrooms without having to pay observers to walk inside them. I even pulled cognitive theory that I believed supported this claim. However, during my revisions, I found that this line of reasoning pulled attention away from the worth of the teachers’ stories as stories. Rather than helping readers enter into the spirit of a difficult professional project and feel performers’ joy and exertion as they struggled to overcome the challenges of their work, my use of terms such as ‘predicted’ created dissonance and disbelief. The stress generated from this language seemed to prevent the narratives from taking flight and made it difficult for readers to join with the teachers’ experience. I felt the stories read more truthfully when they were allowed to speak for themselves.

In my current writings, the charts and coding they are based on are not used to prove a point, but help readers imagine the shape of the teachers’ narratives as a whole. The tables allow the reader to see how I experienced the individual pieces of text. They draw attention towards aspects of the educators’ experience that can be picked up in the many passages I excerpt. The charts allow me to represent themes visually, rather than in words, and replace a great deal of commentary. It might be possible to use my findings as the basis for hypotheses in future studies, but that effort is not the focus of this current work. Instead, my goal is to help the reader see and feel what it might be like to work a classroom as a first year teacher and to imagine what it might be like to do a similar job after spending many years improving one’s knowledge of teaching.

i. Coding text

Table 3.6 describes the development of the coding system I created to analyze the first round of interviews for the Expertise in Urban Teaching Project. It describes my investigation from my early efforts to prepare the data for analysis to my concluding

work to quantify my results. Each coding wave listed in Table 3.6 required me to make at least two complete passes through the data. My analytic work required me to read over each narrative unit at least ten times and, for units connected to language arts, almost twenty. I began each coding wave by reading the first incident discussed by expert teacher Addison Ashland. I then moved through each event shared in each participant's interview until I reached the last piece of story offered by beginning teacher Taylor Touhy. I asked the same two questions every time I read each narrative unit:

1. "Is this text an example of [analytic construct] , yes or no?"
2. "Does this text refer to an aspect of teachers' practice that I do not have listed in my coding instrument, yes or no?"

If I answered 'yes' to the first question, I coded that text. If I answered 'yes' to the second question, and decided that the text I was analyzing referred to an important *type of event* that was not listed in my coding system, I used NVIVO commands to create a new code for that category. As a result, the number of codes I used to analyze the teachers' narratives grew as I worked through my data.

Table 3.6 shows I employed broad, non-inferential, codes such as 'Reading Comprehension,' and 'Conflict' to index hundreds of pieces of text in the early rounds of my analysis. In later rounds, I divided these large collections of incidents into finer sets of categories. The code for conflict, for instance, was divided into separate groupings for 'Disagreements Between Teachers and Children'; 'Disagreements Between Teachers and Parents;' and/or 'Disagreements Between Teachers and Colleagues.' These groupings then, in turn, were sub-divided. I created 6 distinct categories of student misbehavior that ranged from 'Breaking Rules' to 'Arguments' to 'Violence'. I used the Study of Instructional Improvement Log Coding Systems (Rowan, Camburn, & Correnti, 2004; Rowan & Correnti, 2007) to create similar collections of English Language Arts events for the reading and writing incidents shared by teachers. I also developed new categories based on patterns I saw as I worked through the interviews.

Most of the charts I display in the next chapters, however, are based on quite simple analyses. I moved away from a fine-grained approach and did not, for instance, display my findings from the SII Log or similar analytic tools. The charts, instead, show broad patterns in the data. One of the major reasons for this decision was that these first

interviews were not focused on a specific school subject. They were designed to get an overview of the teachers' work, and as a result there is a great deal of variation in the type of things the teachers tended to tell. Some teachers talked about mathematics, some talked about writing, and some focused on their relationships. There were broad patterns within and across these discussions, but it was hard to discern more subtle distinctions. Focusing on simpler, more large-grained efforts—such as the number of incidents of reading and writing across the curriculum the teachers shared—seemed the most effective strategy for discussing differences between groups.

To reduce the impact that the charts have on readers' understanding and to focus attention on the narratives the tables summarize, I have placed the charts in the middle of the three substantive, empirical chapters. They are intended to help the reader see the issues that I raise broadly, without overwhelming the analysis. The charts are designed to help crystallize what the reader has already learned from reading the narratives I selected and my commentary.

ii. Transparency

One great benefit of NVIVO is it makes the results of my analytic work transparent (American Educational Research Association, 2006). All the transcripts I code have been cleaned with pseudonyms. The name of each teacher, student, administrator, school, street and neighborhood discussed in the interviews has been changed. As a result, all the narrative units marked for a particular topic can be pulled up and examined by outside evaluators without loss of confidentiality. It is possible for me to send the text coded by specific analytic constructs to reviewers or other interested parties. If the request falls within IRB guidelines, and does not violate the trust of teachers who participated in the study, I can send interested parties a copy of the entire NVIVO data set.

Table 3.6 Major Coding Waves and Analytic Process

Coding Wave	Description of Analytic Process; Date work began
1. Organization Codes	Code interviews by question including pre and post interview comments. 11/15/2006 Code each mention of a particular student 11/21/2006

Coding Wave	Description of Analytic Process; Date work began
2. Narrative Units	Code individual's single and repeated acts 12/04/2006 Code collectivities' single and repeated acts 12/04/2006 Code self acts 12/20/2006 Divide up individual and collective acts codes 1/03/2007. Work continues throughout Wave 3 Code, recode previous acts 1/12/2007 Code, recode revised self node 4/19/2007 Split/Code non-classroom acts from individual and collective acts 6/12/2007
3. Large-Grained Academic & Management Codes	Code academic subjects including reading, writing, social studies, math, science and research work 1/16/2007 Code classroom management 1/17/2007 Code testing 1/19/2007 Code conflict 1/19/2007 Code coaching 1/19/2007 Code group work 2/26/07 Code individualized work 2/26/2007 Code self-actualization 2/26/2007 Code teacher learning 2/27/07 Code class discussion 3/06/2007 Code modeling 3/26/2007 Code practical problem solving 4/19/2007 All codes cleaned/checked 4/22/2007
4. Fine-Grained Classroom management codes	Code student misbehavior within and outside the classroom 4/24/2007 Code academic management issues and problems 4/24/2007 Split/code outside classroom behavior/management from inside behavior/management 5/1/2007 Code smoothly working classroom 5/14/2007 All management codes cleaned and checked 5/24/2007
5. Fine-Grained Academic codes	Code testing and assessment use 5/18/2007 Code reading comprehension from codes developed in SII log 5/25/2007 Code writing from codes developed in SII log 6/06/2007 Code social studies 6/13/2007 Code research work 6/13/2007 Code math 6/16/2007 Code science 6/16/2007 All academic codes cleaned and checked 6/19/2007

Coding Wave	Description of Analytic Process; Date work began
6. Rough tables completed	First set completed 6/25/2007 <ul style="list-style-type: none"> ○ Shared with U of M peers 6/26; 6/28; 6/29 First revision completed 6/30/2007 <ul style="list-style-type: none"> ○ Shared with focus group 7/1; 7/4; 7/4 ○ Shared with study participants 8/29, 8/31
7. Emotion and Relationship Codes Constructed	Emotion Codes Constructed 7/28/2007 -8/2/2007 <ul style="list-style-type: none"> ○ Codes for positive and negative emotion; compassion and concern; struggles and pleasurable effort added at this time ○ Relationship measurement still under construction
8. Final Cleaning for Quantification	Major cleaning efforts include <ul style="list-style-type: none"> ● Final revised person and class codes 7/28/2007 ● Selection of codes for findings section 10/1/2007 ● Removal of co-linearity and validity checks 10/1/-11/1 ● Emotion Tables Constructed 10/12-11/1; 1/8
9. Minor revisions for publication	Comparisons changed and charts reorganized to clarify their meanings 1/2008-2/2008 & 10/2008

References

- Algren, N. (1961). *Chicago: City on the make* (3rd ed.). Oakland, Calif.: Angel Island Pub. Inc.
- Alvesson, M., & Skoldberg, K. (2000). *Reflexive methodology: New vistas for qualitative research*. London: Sage.
- American Educational Research Association. (2006, June 2006). *Standards for reporting on empirical social science research in AERA publications*. American Educational Research Association. Retrieved June 27, 2007, from the World Wide Web:
- Anderson, J. R. (1983). *The architecture of cognition*. Cambridge, Massachusetts: Harvard University Press.
- Anderson, J. R. (1996). ACT: A simple theory of complex cognition: Award for Distinguished Scientific Contributions Address. *American Psychologist*, *51*(4), 355-365.
- Anderson, J. R. (2007). *How can the human mind occur in the physical universe?* New York: Oxford University Press.
- Anderson, J. R., & Schooler, L. J. (1991). Reflections of the environment in memory. *Psychological Science*, *2*, 396-408.
- Anderson, J. R., & Schooler, L. J. (2000). The adaptive nature of memory. In E. Tulving & F. I. Craik (Eds.), *The Oxford handbook of memory*. (pp. 557-570). New York,: Oxford.
- Bakhtin, M. M. (1981). *The dialogic imagination: four essays by M. M. Bakhtin* (M. H. C. Emerson, Trans.). Austin: University of Texas Press.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, *44*, 1175-1184.
- Barnes, C., Massell, D., & Vanover, C. (2007). Building capacity in strong environments: How local education agencies manage the comprehensive school reform effort to improve instruction. *Unpublished Manuscript*.
- Baumeister, R. F., & Newman, L. S. (1994). How stories make sense of personal experiences: Motives that shape autobiographical narratives. *Personality and Social Psychology Bulletin*, *20*(6), 676-690.
- Bechara, A., Damasio, H., Tranel, D., & Damasio, A. R. (1997). Deciding advantageously before knowing the advantageous strategy. *Science*, *275*(February), 1293-1295.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Menlo Park, Calif.: Addison-Wesley Pub. Co. Nursing Division.
- Benner, P. E. (1994). *Interpretive phenomenology : Embodiment, caring, and ethics in health and illness*. Thousand Oaks, Calif.: Sage Publications.
- Benner, P. E., Hooper-Kyriakidis, P. L., & Stannard, D. (1999). *Clinical wisdom and interventions in critical care: A thinking-in-action approach*. Philadelphia: Saunders.
- Benner, P. E., Tanner, C. A., & Chelsea, C. (1996). *Expertise in nursing practice: Caring, clinical judgment, and ethics*. New York: Springer Publishing Company.
- Berliner, D. C. (1986). In search of the expert pedagog. *Educational Researcher*, *13*, 5-

10.

- Biklen, S. K. (1995). *School Work: Gender and the cultural construction of teaching*. New York: Teacher's College Press.
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge ; New York: Cambridge University Press.
- Bourdieu, P. (1990). *The logic of practice*. Stanford, Calif.: Stanford University Press.
- Bourdieu, P., Accardo, A., Balazs, G., Beaud, S., Bonvin, F., Bourdieu, E., Bourgois, P., Broccolichi, S., Champagne, P., Chrsitin, R., Faguer, J.-P., Garcia, S., Lenoir, R., OEuvrard, F., Pialoux, M., Pinto, L., Podalydes, D., Sayad, A., Soulie, C., & Wacquant, L. J. D. (1999). *The weight of the world: Social suffering in contemporary society* (S. E. Pricilla Parhurst Ferguson, Joe Johnson and Shaggy T. Waryn, Trans.). Stanford, CA: Stanford University Press.
- Bourdieu, P., & Wacquant, L. J. D. (1992). *An invitation to reflexive sociology*. Chicago: University of Chicago.
- Brint, S. G. (1994). *In an age of experts: The changing role of professionals in politics and public life*. Princeton, N.J.: Princeton University Press.
- Calderhead, J. (1989). Reflective teaching and teacher education. *Teacher and Teacher Education*, 5(1), 43-51.
- Carter, K. (1993). The place of story in the study of teaching and teaching education. *Educational Researcher*, 22(1), 5-12.
- Carter, K. (1994). Preservice teacher's well-remembered events and the acquisition of event-structured knowledge. *Journal of Curriculum Studies*, 26, 235-252.
- Carter, K., Cushing, K., Sabers, D., Stein, P., & Berliner, D. (1987). Expert-novice differences in perceiving and processing visual information. *Educational Researcher*, 3, 147-157.
- Carter, K., Sabers, D., Cushing, K., Pinnegar, S., & Berliner, D. (1987). Processing and using information about students: A study of expert, novice and postulant teachers. *Teaching and Teacher Education*, 3, 147-157.
- Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: experience and story in qualitative research*. San Francisco: Jossey-Bass.
- Clandinin, D. J., & Connelly, P. L. (1996). Teachers' professional knowledge landscapes: Teacher stories--stories of teachers--school stories--stories of schools. *Educational Researcher*, 25(3), 24-30.
- Codell, E. R. (1999). *Educating Esmé: Diary of a teacher's first year*. Chapel Hill, N.C: Algonquin Books of Chapel Hill.
- Collins, R. (1998). *The sociology of philosophies: A global theory of intellectual change*. Cambridge, Mass.: Belknap Press of Harvard University Press.
- Connelly, F. M., & Clandinin, D. J. (Eds.). (1999). *Shaping a professional identity: Stories of educational practice*. New York: Teacher's College Press.
- Dewey, J. (1938). Logic: The theory of inquiry. In J. A. Boydston (Ed.), *John Dewey: The later works, 1925-1953, Vol. 12*. Carbondale, IL: Southern Illinois University Press, 1988.
- Doyle, W., & Carter, K. (2003). Narrative and learning to teach: Implications for teacher-education curriculum. *Journal of Curriculum Studies*, 35(2), 129-137.
- Dreyfus, H. L. (1991). *Being-in-the-world : A commentary on Heidegger's 'Being and Time': Division I*. Cambridge, Mass.: MIT Press.

- Duras, M. (1992). *The lover* (B. Bray, Trans.). New York: Harper Perennial.
- Durkheim, E. (1995). *The elementary forms of religious life* (K. E. Fields, Trans.). New York: Free Press.
- Elmore, R. F. (2000). *Building a new structure for school leadership*. Washington, DC: Albert Shanker Institute.
- Ericsson, K. A., Krampe, R. T., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, *100*(3), 363-406.
- Ericsson, K. A., & Simon, H. A. (1993). *Protocol Analysis* (Revised Edition ed.). Cambridge, Massachusetts: The MIT Press.
- Feldman, M. (2005). *Why ethnodrama, and why not?: Keynote address to the University of Michigan Narrative Institute, 2005*. Paper presented at the University of Michigan Narrative Institute, Ann Arbor.
- Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, *51*(4), 327-358.
- Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology*, *2*(3), 300-319.
- Gadamer, H. G. (1975). *Truth and method* (G. B. J. Cumming, Trans.). New York: Seabury.
- Goddard, R., & Goddard, Y. (2001). A multilevel analysis of the relationship between teacher and collective efficacy in urban schools. *Teaching and Teacher Education*, *17*(7), 807-818.
- Goddard, R., Hoy, W., & Patton, W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, *37*(2), 479-507.
- Goddard, Y., Goddard, R., & Tschannen-Moran, M. (2007). A theoretical and empirical investigation of teacher collaboration for school improvement and student achievement in public elementary schools. *Teachers Colledge Record*, *109*(4), 877-896.
- Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, N.Y.: Doubleday.
- Goffman, E. (1967). *Interaction ritual: Essays on face-to-face behavior*. Garden City, N.Y.: Anchor Books.
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Boston: Northeastern University Press.
- Gold, Y. (1996). Beginning teacher support: Attrition, mentoring, and induction. In J. Sikula (Ed.), *Handbook of Research on Teacher Education* (2nd ed., pp. 548-594). New York: Macmillan.
- Grele, R. J., & Terkel, S. (1985). *Envelopes of sound : The art of oral history* (2nd , rev. and enl. ed.). Chicago, Ill.: Precedent Pub. : Distributed by Transaction Books.
- Hankins, K. H. (1998). Cacophony to symphony: Memoirs in teacher research. *Harvard Educational Review*, *68*(1), 80-95.
- Hanushek, E. A., Kain, J. F., O'Brian, D. M., & Rivkin, S. G. (2005). *The market for teacher quality* (NBER WORKING PAPERS Working Paper 11154). Cambridge, MA: National Bureau of Economic Research.
- Hogan, T., Rabinowitz, M., & Cravan, J. A. (2003). Representation in teaching:

- Inferences from research of expert and novice teachers. *Educational Psychologist*, 38(4), 235-247.
- Hutchins, E. (1995a). *Cognition in the wild*. Cambridge, MA: The MIT Press.
- Hutchins, E. (1995b). *Cognition in the wild*. Cambridge, MA: MIT Press.
- Jackall, R. (1988). *Moral mazes : The world of corporate managers*. New York: Oxford University Press.
- Kintsch, W. (1998). *Comprehension: A paradigm for cognition*. Cambridge, UK: Cambridge University Press.
- Kintsch, W., & Kintsch, E. (2005). Comprehension. In S. G. Paris & S. A. Stahl (Eds.), *Children's reading comprehension and assessment*. Mahwah: Laurence Earlbaum.
- Klein, G. A. (1998). *Sources of power: How people make decisions*. Cambridge, MA: MIT Press.
- Klein, G. A., & Calderwood, R. (1991). Decision models: Some lessons from the field. *IEEE Systems, Man and Cybernetics*, 21(5), 1018-1026.
- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American children*. San Francisco: Jossey-Bass.
- Lampert, M., & Ball, D. (1998). *Teaching, multimedia and mathematics: Investigations of real practice*. New York: Teachers College Press.
- Lave, J., & Wenger, E. (1991). *Situated learning : Legitimate peripheral participation*. Cambridge [England] ; New York: Cambridge University Press.
- Leinhardt, G. (1988). Expertise in instructional lessons: An example from fractions. In G. Cooney (Ed.), *Effective mathematics teaching* (pp. 47-66). Reston, VA: NCTM.
- Leinhardt, G., & Greeno, J. G. (1978). The cognitive skill of teaching. *Journal of Educational Psychology*, 78, 75-95.
- Lincoln, Y. S., & Guba, G. E. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.
- McCutchen, D., & Berninger, V. W. (1999). Those who know, teach well: Helping teachers master literacy-related subject-matter knowledge. *Learning Disabilities Research & Practice*, 14(4), 215-226.
- McCutcheon, G. (1980). How do elementary school teachers plan? The nature of planning and influences on it. *Elementary School Journal*, 81, 4-23.
- Moss, P., Girard, B. J., & Haniford, L. C. (2006). Validity in educational assessment. *Review of Research in Education*, 30, 109-165.
- National Research Council, Committee on Research in Education, R. Shavelson and L. Towne, Eds., Center for Education, Division of Behavioral and Social Sciences and Education. (2002). *Scientific research in education*. Washington, DC: National Academies Press.
- Newell, A. (1973). You can't play 20 questions with nature and win. In W. G. Chase (Ed.), *Visual information processing*. New York: Academic Press.
- Newell, A. (1991). *Unified theories of cognition*. Cambridge, Massachusetts: Harvard University Press.
- Nighswander, J. K., Cherkasky-Davis, L., & Bearden, A. (2001). *Chicago Teachers' Union Quest Center "Nurturing Teacher Leadership" evaluation study* (Eric Document ED46707). Chicago: Educational Learning Resources.
- Pea, R. (1993). Practices of distributed intelligence and designs for education. In G. Salomon (Ed.), *Distributed cognitions: Psychological and educational considerations*. Cambridge, England: Cambridge University Press.

- Rakove, M. L. (1975). *Don't make no waves--don't back no losers : An insider's analysis of the Daley machine*. Bloomington: Indiana University Press.
- Rakove, M. L. (1979). *We don't want nobody nobody sent : An oral history of the Daley years*. Bloomington: Indiana University Press.
- Raudenbush, S. W. (2005). Learning from attempts to improve schooling: The contribution of methodological diversity. *Educational Researcher*, June/July, 25-31.
- Riesman, C. (1993). *Narrative analysis*. Thousand Oaks, CA: Sage.
- Rodriguez, L. J. (1991). *The concrete river*. East Haven, CT: Curbstone.
- Rowan, B. (1995). Research on learning and teaching in K-12 schools: implications for the field of educational administration. *Educational Administration Quarterly*, 31(1), 115-133.
- Rowan, B., Camburn, E., & Barnes, C. (2004). Benefiting from Comprehensive School Reform: A review of research on CSR implementation. In C. T. Cross (Ed.), *Putting the pieces together: Lessons from comprehensive school reform research* (pp. 1-52). Washington, DC: George Washington University Press.
- Rowan, B., Camburn, E., & Correnti, R. (2004). Using teacher logs to measure the enacted curriculum: A study of literacy teaching in third-grade classrooms. *The Elementary School Journal*, 105(1), 75-101.
- Rowan, B., & Correnti, R. (2007). Opening up the black box: Literacy instruction in schools participating in three comprehensive school reform programs. *American Educational Research Journal*, 44, 298-338.
- Rowan, B., & Miller, R. J. (2007). Organizational strategies for promoting instructional change: Implementation dynamics in schools working with comprehensive school reform providers. *American Educational Research Journal*, 44(2), 252-297.
- Rowan, B. B., Camburn, E. M., Correnti, R., & Miller, R. (in press). How Comprehensive School Reform works: Insights from a Study of Instructional Improvement. In J.-L. Derouet (Ed.), *Knowledge and equality: How consistent are education and training policies? French-American cross-cultural comparison*. Lyon, France: Institut National de Recherche Pédagogique (National Institute of Educational Research).
- Saldaña, J. (2002). Dramatizing data: A primer. *Qualitative Inquiry*, 9(2), 218-236.
- Schieffelin, E. L. (1985). Performance and the social construction of reality. *American Ethnologist*, 12(4), 707-724.
- Schon, D. A. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass.
- Simon, H. A. (1945). *Administrative behavior: a study of the decision making process in decision making organization*. New York: The Free Press.
- Simon, H. A. (1996). *The sciences of the artificial* (3rd ed.). Cambridge, Massachusetts: The MIT Press.
- Spillane, J., Halverson, R., & Diamond, J. (1999). *Distributed leadership: Toward a theory of school leadership practice*: Northwestern University.
- Spillane, J., Halverson, R., & Diamond, J. (2004). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies*, 36(1), 3-34.
- Spillane, J., Reiser, B., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*, 72(3), 387-431.

- Steedman, C. (1992). *Prisonhouses, Past tenses : essays on writing autobiography and history* (pp. 51-61). London: Rivers Oram Press.
- Styan, J. L. (1992). The mystery of the play experience. In R. F. Jones (Ed.), *Performing Texts*. Philadelphia: University of Pennsylvania Press.
- Taylor, C. (1971). Interpretation and the science of man. *The Review of Metaphysics*, 25(1).
- Thompson, P. R. (1988). *The voice of the past: Oral history* (2nd ed.). Oxford ; New York: Oxford University Press.
- Travis, D. (1987). *An autobiography of black politics*. Chicago, Ill.: Urban Research Press.
- Turner, V., & Turner, E. (1982). Performing ethnography. *The Drama Review*, 26(2), 33-50.
- U. S. Department of Education: Institute for Education Sciences. (2003). *Identifying and implementing educational practices supported by rigorous evidence: A user friendly guide*. Washington, DC: U. S. Department of Education: Institute for Education Sciences: National Center for Education Evaluation and Regional Assistance.
- Van Maanen, J. (1988). *Tales from the field: On writing ethnography*. Chicago: University of Chicago Press.
- Van Manen, M. (1990). *Researching lived experience: Human science for an action-sensitive pedagogy*. [Albany, N.Y.]: State University of New York Press.
- Vanover, C. (2006). *Teaching the power of the word: Culturally responsive pedagogy in the Chicago Public Schools*. Paper presented at the Unpublished Manuscript.
- Vanover, C., & Saldaña, J. (2005). Chalkboard concerto: Growing up as a teacher in the Chicago Public Schools. In J. Saldaña (Ed.), *Ethnodrama: An anthology of reality theatre*. New York: Rowman & Littlefield.
- Veenman, S. (1984). Percieved problems of beginning teachers. *Review of Educational Research*, 54(2), 143-178.
- Waller, W. (1932). *The sociology of teaching*. New York,: J. Wiley & sons inc.,.
- Weber, M. (1978). *Economy and society: An outline of interpretive sociology* (G. R. C. Wittich, Trans.). Berkeley: University of California Press.
- Weiss, R. S. (1995). *Learning from strangers: The art and method of qualitative interview studies* (1st Free Press pbk. ed.). New York: Free Press.
- Yinger, R. J. (1980). A study of teacher planning. *The Elementary School Journal*, 80(3), 197-127.

Chapter IV

Technical Methods: Constructing the Coding Unit

Teachers' narratives of specific events and recurring activities are the Expertise in Urban Teaching Projects' primary unit of coding. All of the subsequent coding waves listed in Table 3.6 are based on these textual units. When I coded for discipline problems or academic work, I did not mark the raw transcripts. I coded activity units that had been cut and organized using the methods discussed in this section. (An example of these units is shown in Interview Excerpt 4.2, in the appendix below.) At the conclusion of this chapter I will discuss two alternate methods of creating these "base" units, as well as my reasons for using my current method. This section is not necessary to understand the overall flow of the argument. It might be skipped by readers without a strong interest in method.

Verbal representations of recurring classroom activity

When I began preparing the transcripts for analysis during Wave 1, I believed, perhaps naively, that the texts I worked on would resemble the narrative data that Benner and her colleagues (1999; 1996) generated from their focus groups. I thought that my interview methods would produce verbal data filled with long strings of stories about particular students, as well as extended discussions of the teachers' efforts to choreograph the educational experience of the class as a whole. As I began to organize the transcripts for analysis, however, I discovered that the interviews were more complex than I anticipated. The stories were quite fragmented. Further, many of the incidents the teachers shared were not unique, one-time events. Throughout their interviews, the educators described activities that continually repeated themselves. Teachers seemed to

store the memory of the many routines (Feldman & Pentland, 2003; Leinhardt & Greeno, 1978) that structured their workplaces in a vivid landscape of generalized, recurring incidents. To use language from my literature review, the teachers spent a great deal of time talking about the performative routines that shaped the life of their classrooms.

These descriptions were quite colorful. The educators I interviewed did not experience routines as abstract entities, but as facts of life that organized time and space. In some ways, the term narrative gives a false sense of this verbal data. Routines do not always have clear plots. Much of what happens when one group of routines change may have to be inferred. Rather than drama, the experience seems closer to dance (Leinhardt, Weidman, & Hammond, 1987). Change may be viewed as progress from frequent to rare, or from less to more, rather than as a journey from one unique state to another. However, I continue to use the term ‘narrative’ for this type of verbal data to emphasize these recurring events perform one of the central functions of story (Carr, 1986; Kintsch, 1998): They describe the flow of activity across time. Routine also should not be viewed as a unique kind of experience that is categorically different from action that occurs only once. A unique action might be unusual or highly memorable but, in the familiar environment of the classroom, it is usually constructed out of the same grammar of activity that produces recurring patterns.

a) An example of routine work

Belmont Barry describes some of the routines that organize her classroom in Interview Excerpt 4.2 in Appendix 1 (below). I have highlighted each narrative unit in yellow. As I will discuss, all of this text was given the same code from Table 4.1: They are all labeled as Repeated-Classroom Acts.

Belmont’s discussion is organized around sets of routine events that occur more or less frequently. At the beginning of the year, the expert teacher’s students do not understand how to perform a variety of literacy practices. The children in Belmont’s class do not know how to pick a book up and engage in a meaningful dialogue with that text. The repeated observations upon which Belmont bases these claims have been organized into a brief description of a generalized student who knows how to perform recurring

activities her students do not. In Belmont's words:

We just take it for granted that a kid can go to a library and say
Oh! This is a really great book! I'm going to pick it up and I'm going to read it for the next half an hour and I am going to be completely engaged. I'm going to be completely focused and I know exactly what I am doing.

**

They don't know how to do that.

[Belmont Barry R1 Q1]

In the next block of narration, Belmont describes her efforts to teach literacy. She describes a set of linked classroom moves that she can deploy when there is an opportunity to teach these related reading skills.

These are all the things I call like the details in reading. So I teach them how to independently read. What that means to read on your own. How to choose books. How to abandon a book,

Each sentence in this narration is what Weiss (1995) describes as a speech tag. These statements are links to other elements of practical landscape (Connelly & Clandinin, 1999) Belmont uses to organize her work and care for her students. One can infer that if asked, Belmont might provide rich descriptions of the routine experience each sentence indexes. The expert teacher does this naturally when the phrase "how to abandon a book" sparks a set of associated memories:

I think many kids, sometimes don't realize that it is okay not to like a book.

**

Especially in school.

Oh, this is the book I checked out, I have to read it.

**

And you know, they are reading the same page 500 times because they're completely uninterested in it. So I teach them how to abandon books and some reasons that people abandon books. I tell them about books I have abandoned.

I'm just not interested in this book. I can't... There's too many characters to keep track of. I'm just not interested in the setting.

Belmont's many hours of studying literacy, planning her lessons, working with her

students in her classroom and reflecting on her practice gave her the ability to map her efforts to teach students these reading skills into a brief and focused narration. Many different streams of recurring incidents, and much thought about literacy practice, were compressed into what cognitive psychologists might describe as a schema. As current experimental work emphasizes, schemas are not fixed entities that channel people's actions into rigid, pre-determined patterns of thought and action (Hunt, 1989; Patel, Arocha, & Kaufman, 1994). Instead schemas are linked collections of ideas, event memories, and action plans that guide performers' thinking process and give them the knowledge necessary to manage specific set of familiar challenges (Ericsson & Kintsch, 1995). The expert teacher was able to use this type of cognitive structure to connect a variety of different activities around a particular challenge into a brief and coherent discussion. Belmont focused on one element of her literacy skills schema, "abandoning books" in the same way that a shopper might skip over aspects of the supermarket experience, such as the meat-counter, and center her discussion on the challenges of analyzing the fruits and vegetables in the store's produce-section.

After Belmont discussed her students' lack of literacy skills during the beginning of the year, the expert teacher pauses for about three seconds. When she spoke again she traveled to the end of the school year. The expert described how her students' have grown under her care:

And then I realize that they through our discussions and through my teaching of reading with them. I don't want to get into too much detail with that, but I just know from their conversations whether it's a formal conversation with me, or some comments they make during the class discussion, or one-on-one during lunch

**

that they are just so much more aware of, whether they know it or not, they are just so much more aware of the details in the classroom

**

when it comes to reading

Rather than providing a clear plot that outlines the expansion and development of her students' literacy skills, Belmont compared and contrasted two samples of repeated activity. At the start of Excerpt 4.2, she described how her students tended to act at the beginning of the school year. Later in that excerpt, Belmont described how she worked

with her class at the end of their time together. Rather than calculating the possibilities her students would display one set of literacy skills in the beginning of the year and a different set of skills at the end, Belmont organized her evaluation of her students' progress into a brief narrative about recurring incidents that become more or less likely as the school-year moves forward:

you know my students have said,

Ms. Barry, I can't believe. Did you realize that this was written by a female author? And the last two books that we read by her she is talking through the perspective of a boy.

**

Things like that that they never would have thought about at the beginning of the school year,

The expert teacher did not describe a unique incident, but a *type of event* (Anderson, 1991) that happened more than once. The intensely local and structured nature of classroom experience, where 30 children sit in the same room working under the care of the same adult for six hours a day, five days a week, 180 weeks a year, became organized into a landscape of unique and generalized experience. To use the terminology from my literature review, ostensive models of how a classroom should function were transformed into memories of routine performance.

Defining and constructing the coding unit

Table 4.1 shows that I took this dimension of classroom life into account when I constructed the Expertise in Urban Teaching Project's coding unit. All of the text the teachers shared in their interviews is coded by one, and only one, of the units in this table. I made distinctions between routine and unique events for each type of activity listed in that table. When I analyze my data, these codes allow me, for instance, to discuss both how many routine and how many unique reading events teachers' share and graphically display differences between the two groups. Table 3.6 shows that on the same date, December 4th, 2006, I decided to make this analytic distinction I also created a second set of codes. I differentiated events that occurred in relationship to individuals from events that occurred in relationship to the whole class. Unlike the stories shared in Benner's work, many of the teachers' narratives were not person-focused. The educators spoke

about their work to serve their class of 20-30 students as an entity. Many of the incidents they discussed described groups, not individuals. I decided to make this distinction clear by, as shown by the first two rows of Table 4.1, creating codes for unique and routine events that occur in relationship to specific persons. I also created codes for unique and routine events that occur in relationship to large groups such as the class as a whole. In my full coding system, these categories allow me to discuss the number of stories that discuss whole classroom teaching and the number that describe incidents of individualized instruction and relationship-development.

I continued to differentiate types of narrative units and revise the definitions I used throughout the time I devoted to my analysis. Table 3.6 shows that on January 12th, 2007, I decided to differentiate activities that occurred prior to the 2003-2004 school year from the other events discussed in the teachers' interviews. This choice required me to go back through all the units that I had coded previously, and recode any events that occurred in the past. Eventually, I decided to exclude these past incidents and routines—Labels #9 and #10 of Table 4.1—completely from the analysis. I decided that the focus of the Expertise in Urban Teaching Project was the 2003-2004 school year and that it did not make sense to discuss information from other time periods.

The final set of analytic categories is listed in Table 4.1. All of these constructs, collectively, are my coding unit. Every piece of text in the teachers' interviews that describes participants' experience as education professionals is labeled by one of these codes. Thus a story about an individual student would be coded as an example of Label #1. Person-Acts. A story about the recurring activities performed by a group of people would be labeled as an example of Label #4. R-Class Acts.

Table 4.1 Definitions of Labels for Text Units

Column #1	Column #2
Unique actions performed by specific types of people and groups in the teachers' narratives	Recurring actions performed by specific types of people and groups in the teachers' narratives
Label #1. Person-Acts; Actions performed by a classroom person once, i.e. a student or parent	Label #2. R-Person Acts Repeated Actions performed by another classroom person more than

	once, i.e. the habits of students or parents
Label #3. Class-Acts Actions performed by the class as a whole once; teachers' efforts planning/preparing single lessons	Label #4. R-Class Acts Actions performed by groups more than once, i.e. routines; teachers' recurring instructional work and repeated lesson planning activities
Label #5. Self-Acts Actions performed by the teacher that do not interact with others at school, planning and lesson preparation double code with Class-Acts.	Label #6. R-Self Acts Actions performed by the teacher more than once that do not interact with others, repeated planning and lesson preparation double code with R-Class-Acts.
Label #7. Colleague-Acts; Group-Acts Individual actions performed by Colleagues, including administrators, or groups of adults	Label #8. R-Colleague-Acts; R-Group-Acts Repeated actions performed by Colleagues or other groups of adults
Label #9. Past-Acts Any of the above, performed prior to the 2003-2004 school year— These have been excluded from analysis	Label #10. R-Past Acts Any of the above performed prior to the 2003-2004 school year— These have been excluded from analysis

For the most part, categorizing the text with the definitions in Table 4.1 did not pose many difficulties. An activity performed by one person once—Label #1. Person Acts—is not the same as a repeated set of whole class actions—Label #4. R-Class-Acts. It is easy to differentiate stories about colleagues from stories about students. However, I did find some areas of ambiguity. For instance, it was not always simple to differentiate a teachers' description of a single long-term change—i.e. “he became more dedicated to his work”—from their discussion of recurring activities—i.e. “everyday, he just started taking it more seriously”. I solved dilemmas of this type by focusing carefully on the meaning of the text and using the evidence it held to decipher the teachers' intentions. If the text described one single action, regardless of how long it lasted, I coded it as an unique act—one of the labels listed in Column 1. As a result, all of the classifications for unique activities in Table 4.1 encompass actions that happened only once in ‘linear time’, but that may occur over a span of a minute, a day, a month, or a year.

Another area that caused me frequent difficulties was coding teachers'

relationships with other people. When a teacher discusses working with a particular student in her class—as Belmont does in Excerpt 3.1 when she talks about Antonia—I had to specify whether those type of activities should be coded as examples of Person-Acts, because they described Antonia, or Self-Acts, because Belmont discussed her own actions. After trying out a variety of different definitions, I decided to use the four classroom codes—Labels #1-4—broadly. I resolved that whenever a teacher spoke about her efforts to work with a student, a family member, or the class as a whole during the 2003- 2004 school year, I would to classify that activity with one of those four labels. I thus decided to *code the relationship* rather than the teacher. The Self-Act codes—Labels #5 and #6—were used infrequently.

The last major change took place on June 12th of 2007. I had finished coding many of my initial categories and was checking the charts I created from my work to see if they made sense. After reflecting on my efforts, I decided that it was important for me to differentiate teachers’ efforts to teach and manage their classrooms from the other events they discussed in their stories. I reasoned that it made sense to define students’ family-members as classroom persons, and to separate the actions educators perform directly on family-members’ behalf, from the actions they perform with other adults, such as colleagues and administrators. As a result of this change, I examined all of the text that I had coded previously, and placed all mentions of the educators’ work with their administrators, colleagues, or other non-classroom persons into a new set of analytic constructs summarized in Label # 7 and Label # 8 of Table 4.1. This step allows me differentiate reading lessons performed by the teachers in my study, from reading lessons performed by staff developers. It allows me to distinguish conflicts with administrators, from conflicts with parents.

The textual units coded with Labels #1-#4 of Table 4.1 thus describe all classroom-related activity produced by a teacher during the 2003-2004 school year. Throughout my analysis, these four labels will be referred as ‘in-class units’ even though they may refer parts of the teachers’ texts that describe calls to students’ family members that take place after school has ended or to planning sessions that take place in teachers’ cars.

Constructing boundaries between narrative units

The most difficult analytic problems posed by my coding system did not occur when I defined different stretches of discussed activity, but when I attempted to mark the boundaries between individual textual units within a long flow of narration. Table 3.6 shows that in January of 2007, I made a second pass through the data and cut boundaries between individual narrative units. Instead of long blocks of coded text, I created collections of smaller textual units that focused on a single activity, such as a one-time event or a single routine. This step created many puzzles and challenges. I found it fairly easy to use the definitions in Table 4.1 to distinguish the different kinds of incidents discussed in the teachers' narratives. I had a more difficult time figuring out where one textual unit ended and another began.

To do this work I relied on a variety of methods. The most important was to focus on the meaning of the event described in the teacher's interview and to look for points in her narration where that meaning changed. When teachers moved from discussing writing routines to describing student's families, I divided that text into different units. I also found that teachers tended to use verbal signals when they changed the focus of their attention from one remembered event to another. They would utter speech crutches such as "uh-ub" or "Ummm" as they made this transition.

As I discussed, every separate coding wave outlined in analytic history discussed in Table 3.6 required me to make at least two separate passes through these individual narrative units. As I worked through the different waves, I checked the appropriateness of the boundaries of the units I coded. While I do not have exact figures, the records I do possess show the major change I made during these subsequent passes was to pull together units that I initially separated to create a single unit from two or three previously unconnected incidents. Much of this work consisted of combining units separated by a speech crutch, such as 'ummmm', but still had the same meaning. I combined more than 500 of these smaller units into larger units.

Seen from my current vantage point, I think this was an honest decision, but I am not sure it was the wisest. The reason for my doubt is that as I work over these units now, I feel that that the longer units are harder to justify to outside evaluators. There are more

opportunities for disagreement about where to cut the boundary markers, because, instead of following clear rules, I drew on a wide range of information to make these coding decisions. An approach that most likely would have generated higher levels of inter-rater reliability, if not perhaps more meaningful units, would have been to have left the individual pieces of text separate and, instead, divided them into smaller units that are easier to justify. However, at the time, I felt that the more than 3000 narrative units I had initially created from the twelve teachers transcripts was more than enough; it did not make sense to subdivide this number further.

The reader should note that most of these larger units were constructed from the experts' narratives. Their stories tended to pull more ideas and experiences together into larger structures. As a result, this step might make minimize some of the comparisons I make between the experts and beginners.

An example of the coding process

In the last section of this chapter, I will discuss two alternative approaches to creating the study's coding unit, including one method that allows me to retain my current coding system while constructing a more regular set of boundaries. Before discussing the alternatives to my current approach, I would like to discuss the coding decisions I made to construct a set of narrative units from a piece of text to allow the reader to evaluate the process. The text shared in Excerpt 4.1 in Appendix 1, expert teacher Belmont Barry's discussion of 'The Details of Reading', is a worthwhile candidate for this discussion because it provides an example of one of the more difficult coding challenges I faced.

During this excerpt Belmont discusses her literacy instruction by sharing a long string of routine activities whose frequency changes as the school year unfolds. The transcript excerpts and table I share in Appendix 1, below, show how these units were constructed. The prepared transcript after formatting is shown in Excerpt 4.1. Each different unit is highlighted in yellow and I have created lines out of equal signs to highlight each unique piece of text. My final NVIVO output for this text is shown in Excerpt 4.2. This is exactly how the text appeared to me when I made other coding decisions during subsequent waves of my analysis. Excerpt 4.2 is thus an example of the

prepared interview text produced by the methods I chose to transform the teachers' words into research materials.

These excerpts illustrate both the major benefit and the major weakness of my methodology. The major benefit of my choices is that the units I create do a good job of highlighting the meaning of a text that is not easy to decipher. My transcription and coding decisions allow me to transform the sprawling meaning of the transcripts into a set of units that convey the essence of a particular piece of text. The first unit in Excerpt 4.2 (See below) describes a common literacy problem. The second unit describes some of the activities Belmont engages in to teach literacy. The third unit organizes the observations she makes as she assesses her students development over the course of the school year. The NVIVO software highlights these specific events at fine grain. The reader might imagine how much simpler it is code the narrative units in Excerpt 4.2, than a raw transcript.

Belmont's narration also illustrates my method's major weakness. The individual narrative units are made up of smaller chunks of thought, and it is not always clear how to group these different features of the educators' professional knowledge landscapes. The boundaries between the individual units are somewhat fuzzy and, hence, open to dispute. As Kintsch (1998) emphasizes, the mind is messy. The elements of people's inner worlds are not always organized into distinct compartments.

a) Difficult choices

The piece of Belmont's interview that cut into Unit #2 of Excerpt 4.2 is a clear example of these coding challenges. Here is how the complete unit appears in the prepared transcript:

Um these are all the things I call like the details in reading. Um, so I teach them how to independently read, what that means to read on your own, how to choose books, um how to abandon a book,

**

4th graders. I think many kids, sometimes don't realize that it is okay not to like a book.

**

Especially in school.

Oh, this is the book I checked out, I have to read it.

**

And you know, they are reading the same page 500 times because they're completely uninterested in it, so I teach them how to abandon books um and some reasons that people abandon books. I tell them about books I have abandoned.

I'm just not interested in this book. I can't there's too many characters to keep track of. I'm just not interested in the setting.

Um,

(THREE SECOND PAUSE)

It would be possible to argue this excerpt could be divided into at least four or five different units, and that these associated cognitive structures, could further be separated into many different individual ideas. The opening sentence might be seen as a unique concept:

these are all the things I call like the details in reading.

The brief list of reading activities Belmont describes might also be argued to be a separate unit that expands on this initial idea.

Um, so I teach them how to independently read, what that means to read on your own, how to choose books, um how to abandon a book,

The words '4th graders' could be defined as a boundary marker that signals a different thought.

4th graders. I think many kids, sometimes don't realize that it is okay not to like a book.

**

Especially in school.

Oh, this is the book I checked out, I have to read it.

**

And

It would be possible to continue to make these fine distinctions until the end of the excerpt and identify, at least, three more short pieces along with many different ideas.

One of the reasons my coding decisions make sense, however, is that the scenes in teachers' professional knowledge landscapes are not thrown together randomly. The

groupings and the associations that exist within people's memories are produced by thought (Benner et al., 1996; Connelly & Clandinin, 1999; Ericsson, Krampe, & Tesch-Romer, 1993; Kintsch, 1998). People create their innerworlds by thinking about events and ideas that matter to them and organizing this material into cognitive structures, such as narratives, that help them make sense of their experience. I chose to mark the entire segment of text that I just discussed as a single unit—Unit #2 of Excerpt 4.2—because each piece of thought the text is constructed from is related. Every chunk of information in this unit describes Belmont's recurring experiences teaching a specific set of reading skills.

The next portion of her interview text, Unit #3 in Excerpt 4.2, refers to a different type of activity:

Um,

(THREE SECOND PAUSE)

And then I realize that they through our discussions and through my teaching of reading with them. I don't want to get into too much detail with that, but I just know from their conversations whether it's a formal conversation with me or some comments they make during the class discussion or one-on-one during lunch

**

that they are just so much more aware of whether they know it or not, they are just so much more aware of the details. In the classroom

**

when it comes to reading

**

you know

Belmont switches from discussing literacy activities in Unit #2 to discussing her efforts to assess her students' progress in Unit #3.

The goal of my narrative unit coding was to find boundary makers, such as the time interval I labeled "(THREE SECOND PAUSE)", that would allow me to segment a particular text into meaningful units. I went from one unit in the transcript to another trying to figure out the best way to cut them. As I discussed, one of the benefits of the process was that it forced me to engage with the text at a very fine level. I focused on the building blocks teachers used to tell their stories and this helped me experience their narratives in a different way and engage in alternative forms of dialogue with the stories I

collected. I will offer alternatives to this approach at the conclusion of this chapter.

Findings from Wave 2 of the analysis

The number and type of narrative unit shared by each teacher in the Expertise in Urban Teaching Project is given in Table 4.2. The two teachers who spoke the most words during their interviews, Addison and Halsted (See Table 3.4, previous chapter), also shared the highest number of narrative units. Similarly, the two teachers who spoke the fewest words, Indiana and Taylor, had the fewest marked units.

Table 4.2 Narrative Unit Count

Teachers	P-Acts	R-P-Acts	Class Acts	R-Class Acts	<i>Total In-Class Units</i>	Self Acts	Col-leagues Acts	<i>Total Units Coded</i>	Pre-vious	<i>Total types of units Shared</i>
EXPERT Teachers										
Addison Ashland	48	61	21	71	201	12	58	271	33	304
Belmont Barry	17	39	57	87	200	4	15	219	3	222
California Calumet	38	30	36	76	180	0	31	211	12	223
Dorchester Damen	54	78	37	50	219	0	11	230	9	239
Ohio Ontario	32	76	18	65	191	3	3	197	73	270
Prairie Paulina	19	41	44	78	181	3	15	199	13	212
Sedgwick Sheffield	79	43	39	37	198	0	17	215	20	235
Beginning Teachers										
Halsted Hoyne	106	83	51	78	318	4	59	381	18	399
Indiana Ingleside	22	12	34	77	145	0	1	146	9	155
Keeler Kirkpatrick	26	52	28	90	196	2	21	219	4	223
Milwaukee Madison	31	35	36	23	125	5	37	167	11	178
Taylor Touhy	4	7	32	59	102	3	18	123	7	130
Total	476	557	433	791	2254	36	286	2576	212	2788

One interesting piece of information revealed by Table 4.2 is differences in teachers' focus of attention. Teachers clearly varied in the extent that they discussed events that were not directly related to their work. Ohio Ontario and Indiana Ingleside,

for instance, almost never spoke about their colleagues in ways that were not directly related to their classroom practice. I was able to talk with Indiana during the summer of 2007 and show her the many charts I had then constructed from my analysis. During this discussion, Indiana told me the reason she spoke so infrequently about the other faculty members at her school was because they because almost never spoke to her. “No one said a word to me almost my entire first year.”

Expert teacher Ohio Ontario, on the other hand, spent almost a quarter of her interview time describing her past practice, particularly events that occurred in her previous school. When Ohio did talk about her present colleagues, it was almost always in reference to her efforts to collaborate on particular lessons, such as a science unit on the Shed Aquarium, that were coded as in-classroom units. Ohio had moved into a new school at the start of the 2003-2004 year and the students she taught posed different types challenges than the students she had worked with in her previous placement. Large portions of Ohio’s interview were spent comparing the two groups of children, rather than, perhaps, discussing a group of colleagues she had just met.

The low number of units beginning Taylor Touhy shared about individual students and parents also seems to be a reflection of her remembered experience. Taylor had, in her words, such a “really, really frustrating, hard, sad beginning to my year” in CPS that she did not have a chance to create deep relationships with the students in her initial teaching placement or during her work as pull-out teacher in the classroom that was the primary focus of her interview.

Alternative methods of coding

Because of its importance to my analysis, I think it is appropriate to sketch out two workable alternatives to my current method of constructing narrative units. The first comes from Chi (1997)’s extensive primer on quantifying verbal data. While I do not think it makes sense to break all the text the teachers uttered into their individual thought-units, as I discussed in the previous section, it might be worthwhile to take small, randomized samples of the text and analyze those materials. Thus I might study the idea units or propositions (Butcher & Kintsch, 2004; van Dijk & Kintsch, 1983) the teachers shared enacting the following procedures. First, I would determine the number and length

of text units needed to generate statistically reliable differences between the two groups. Then I would count each word uttered by each educator and place that total in a random number generator. The random number generator, similar to a lottery, would pick the required quantity of ‘winners’ necessary to analyze the text. Each number drawn would correlate to a particular word in the interview and would begin one of the assigned text samples. These random units would then be divided into idea-units, and counts would be taken of concepts sampled in the two groups of teachers’ interviews.

I believe that this method might be an interesting way for me to check my findings, but it does not provide one of the major benefits of my current approach if used in place of my current method of analysis. Drawing random samples from the interviews would not require me to get to know the data in a way that my current method demands. It is an approach that I think could best be used in an investigation clearly focused on testing theory, rather than developing it. Learning how to cut the text into propositions, and then performing that work, would also require a large time investment.

I would like to conclude by describing a method I could use along side my current analysis that would eliminate a great deal of fuzziness. As I discussed, the units I created are effective tools for coding the rest of my data. They give me access to the meanings of the text, and allow me to code for other concepts at reduced levels of ambiguity. My major difficulties revolve around marking boundaries between text-units that would withstand public scrutiny. A fairly simple way to resolve this problem would be to divide each interview into a standard number of units—perhaps 100—and then intersect these ‘standard-units’ with my existing collection of ‘narrative units’. Thus I would assume that each interview session had provided each educator with the same opportunity to discuss her work. I would then divide the transcripts into the same number of sections by letting the words in a given teacher’s text units vary depending on the total number of words the educator speaks. Once this coding was finished, it would be a fairly simple matter to use NVIVO commands to create my final totals by intersecting my existing meaning-based narrative units with the new standardized units. This procedure builds off my efforts to examine my text at a fine grain, while creating a standard set of units for quantification.

I have not performed this work, because I do not believe it will contribute much to my attempt to build theory. My current methods required me to cut the data up into more than 2,600 smaller pieces and apply a label to each textual unit. I believe such a method provides sufficient rigor given my research goals. The differences between the teachers' stories that I discuss in Chapter 5 are large. The methods I used to create those differences are not arbitrary. In my opinion, the two groups of teachers' stories are so dissimilar, it would be impossible to design an honest method of investigation that would be unable to find strong differences. It is also the case that I am not using the charts I constructed to prove differences between the teachers. The charts illustrate my experience doing the analysis. They help the reader see what I saw as I worked across the transcripts. Rather than use blind raters to triangulate this analysis, I have published long, verbatim passages from the text in the chapters that follow. These excerpts ground my commentary and analysis in the raw data I studied.

In my opinion, considered disagreements around methods should instead focus on the decisions I made in the field when I conducted the interviews and those that I made earlier when I constructed the perspective on teachers' knowledge (e. g. Connelly & Clandinin, 1999; Kintsch, 1998; Rikers, Schmidt, & Moulaert, 2005; Yinger, 1980) I used to design The Expertise In Urban Teaching Project.

- Do teachers' innerworlds adapt to the activities that occur in their classrooms?
- Did my interview methods surface representative samples of these inner landscapes?

The answers to these questions are uncertain, but it is important to point out that the best way to evaluate my findings is not talk about how they might be improved, but to read them.

Appendix 1

Interview Excerpt 4.2: The Details of Reading

First unit of Excerpt 4.2

For instance, for instance I teach them how to choose books that I write for them.

**

We just take it for granted that a kid can go to a library and say

Oh! This is a really great book! I'm going to pick it up and I'm going to read it for the next half an hour and I am going to be completely engaged. I'm going to be completely focused and I know exactly what I am doing.

**

They don't know how to do that.

**

So we start there.

Second unit of Excerpt 4.2

Um these are all the things I call like the details in reading. Um, so I teach them how to independently read, what that means to read on your own, how to choose books, um how to abandon a book,

**

4th graders. I think many kids, sometimes don't realize that it is okay not to like a book.

**

Especially in school.

Oh, this is the book I checked out, I have to read it.

**

And you know, they are reading the same page 500 times because they're completely uninterested in it, so I teach them how to abandon books um and some reasons that people abandon books. I tell them about books I have abandoned.

I'm just not interested in this book. I can't there's too many characters to keep track of. I'm just not interested in the setting.

=====

Third unit of Excerpt 4.2

Um,

(THREE SECOND PAUSE)

And then I realize that they through our discussions and through my teaching of reading with them. I don't want to get into too much detail with that, but I just know from their conversations whether it's a formal conversation with me or some comments they make during the class discussion or one-on-on during lunch

**

that they are just so much more aware of whether they know it or not, they are just so much more aware of the details. In the classroom

**

when it comes to reading

**

=====

Fourth unit of Excerpt 4.2

you know my students have said,

Ms. Barry, I can't believe. Did you realize that this was written by a female author? And the last two books that we read by her she is talking through the perspective of a boy.

**

Things like that that they never would have thought about at the beginning of the school year,

=====

Fifth unit of Excerpt 4.2

you know it just would have been, you know, pick up the book, read it. Answer questions

**

Okay, there're some words I probably should know.

**

Should I go get a dictionary?

=====

Sixth unit of Excerpt 4.2

**

You know so that they are just so much more aware. Of, I think its more of a love of literature and more of a love of the understanding of why people read and that its not just a skill a lesson a concept taught from 9:00 to 9:30 and then we move on.

**

I just hear them, how they talk to each other, how they talk to me, its just very, very different and I know that I have made a huge impact with that,

(Belmont Barry R1 Q1)

Interview Excerpt 4.3 NVIVO Extract of "The Details of Reading"

Section 1, Paragraphs 134-141, 435 characters.¹

¹ Each individual narrative unit is marked by a bold-faced headline.

For instance, for instance I teach them how to choose books that I write for them.

**

We just take it for granted that a kid can go to a library and say

Oh! This is a really great book! I'm going to pick it up and I'm going to read it for the next half an hour and I am going to be completely engaged. I'm going to be completely focused and I know exactly what I am doing.

**

They don't know how to do that.

**

So we start there.

Section 1, Paragraphs 141-149, 747 characters.

these are all the things I call like the details in reading. Um, so I teach them how to independently read, what that means to read on your own, how to choose books, um how to abandon a book,

**

4th graders. I think many kids, sometimes don't realize that it is okay not to like a book.

**

Especially in school.

Oh, this is the book I checked out, I have to read it.

**

And you know, they are reading the same page 500 times because they're completely uninterested in it, so I teach them how to abandon books um and some reasons that people abandon books. I tell them about books I have abandoned.

I'm just not interested in this book. I can't there's too many characters to keep track of. I'm just not interested in the setting. Um,

Section 1, Paragraphs 151-155, 485 characters.

And then I realize that they through our discussions and through my teaching of reading with them. I don't want to get into too much detail with that, but I just know from their conversations whether it's a formal conversation with me or some comments they make during the class discussion or one-on-one during lunch

**

that they are just so much more aware of whether they know it or not, they are just so much more aware of the details. In the classroom

**

when it comes to reading

Section 1, Paragraphs 157-160, 233 characters.

you know my students have said,

Ms. Barry, I can't believe. Did you realize that this was written by a female author? And the last two books that we read by her she is talking through the perspective of a boy.

**

Things like that

Section 1, Paragraphs 160-164, 249 characters.

they never would have thought about at the beginning of the school year, you know it just would have been, you know, pick up the book, read it. Answer questions

**

Okay, there're some words I probably should know.

**

Should I go get a dictionary?

Section 1, Paragraphs 166-170, 503 characters.

You know so that they are just so much more aware. Of, I think its more of a love of literature and more of a love of the understanding of why people read and that its not just a skill a lesson a concept taught from 9:00 to 9:30 and then we move on.

**

I just hear them, how they talk to each other, how they talk to me, its just very, very different and I know that I have made a huge impact with that,

**

um we're just so much more knowledgeable about all the little ingredients that go into reading

(Belmont Barry R1; Q1)

References

- Anderson, J. R. (1991). The adaptive nature of human categorization. *Psychological review*, 98(409-429).
- Benner, P. E., Hooper-Kyriakidis, P. L., & Stannard, D. (1999). *Clinical wisdom and interventions in critical care: A thinking-in-action approach*. Philadelphia: Saunders.
- Benner, P. E., Tanner, C. A., & Chelsea, C. (1996). *Expertise in nursing practice: Caring, clinical judgment, and ethics*. New York: Springer Publishing Company.
- Butcher, K., & Kintsch, W. (2004). Text comprehension and discourse processing. In A. F. Healy & R. W. Proctor & I. B. Weiner (Eds.), *Handbook of Psychology* (Vol. 4: Experimental Psychology). New York: John Wiley & Sons.
- Carr, D. (1986). *Time, narrative and history*. Bloomington: Indiana University Press.
- Chi, M. T. H. (1997). Quantifying qualitative analyses of verbal data: a practical guide. *Journal of the learning sciences*, 6(3), 271-315.
- Connelly, F. M., & Clandinin, D. J. (Eds.). (1999). *Shaping a professional identity: Stories of educational practice*. New York: Teacher's College Press.
- Ericsson, K. A., & Kintsch, W. (1995). Long term working memory. *Psychological Review*, 102(2), 211-245.
- Ericsson, K. A., Krampe, R. T., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363-406.
- Feldman, M. S., & Pentland, B. T. (2003). Reconceptualizing organizational routines as a source of flexibility and change. *Administrative Science Quarterly*, 48(1), 94-118.
- Hunt, E. (1989). Cognitive science: definition, status, and questions. *Annual Review of Psychology*, 40, 603-629.
- Kintsch, W. (1998). *Comprehension: A paradigm for cognition*. Cambridge, UK: Cambridge University Press.
- Leinhardt, G., & Greeno, J. G. (1978). The cognitive skill of teaching. *Journal of Educational Psychology*, 78, 75-95.
- Leinhardt, G., Weidman, C., & Hammond, K. M. (1987). Introduction and integration of classroom routines by expert teachers. *Curriculum Inquiry*, 17(2), 135-176.
- Patel, V. L., Arocha, J. F., & Kaufman, D. R. (1994). Diagnostic reasoning and medical expertise. *The Psychology of Learning and Motivation*, 31, 187-252.
- Rikers, R. J. P., Schmidt, H. G., & Moulart, V. (2005). Biomedical knowledge: Encapsulated or two worlds apart? *Applied Cognitive Psychology*, 19(2), 223-231.
- van Dijk, T. A., & Kintsch, W. (1983). *Strategies of discourse comprehension*. New York: Academic Press.
- Weiss, R. S. (1995). *Learning from strangers: The art and method of qualitative interview studies* (1st Free Press pbk. ed.). New York: Free Press.
- Yinger, R. J. (1980). A study of teacher planning. *The Elementary School Journal*, 80(3), 197-127.

Chapter V

The Start of the School Year

The next chapters spotlight the remembered successes and challenges of the expert teachers. I draw this emphasis not because the stories of the beginning teachers do not have value, but because the measured excellence of National Board Certified teachers represents something new. The veteran teachers I interviewed learned how to live the lives they imagined. The expert teachers learned how to grab hold of the events they experienced and organize their classrooms into life compositions strong with ambition and heart. Years of study and practice transformed the choices they made, the lessons they taught, and the thoughts that came to their minds.

In contrast, the beginners' stories are as old as their profession. From colonial schoolhouses up to the present day (Elsbree, 1939; Herbst, 1989; Ryan, 1970; Waller, 1932) first year teachers have struggled to keep order and inspire their students to learn. The beginning teachers I interviewed told stories about their mistakes. They shared details about how their lessons blew up. Sometimes, they described moments of suffering that rarely occur in most other forms of professional labor. Students threatened and insulted them. Fights broke out. Children sobbed at their desks. The first year teachers I interviewed told me they refused to lower their expectations, but sometimes weeks would go by when their best efforts did not count for much. Hour followed hour. Day followed day. Lessons produced conflict instead of harmony. Relationships caused pain instead of satisfaction.

Eventually, the work became easier. The beginners learned to connect with their students and weave instruction into their daily struggle to keep order. The circle of harmony produced by their schoolwork pulled more children into its orbit. Days would

sometimes pass in peace until a new round of conflict would break out.

All of the beginners I interviewed were committed to teaching. They did not choose to spend their first year out of college skiing and waiting tables. They did not decide to pay their mortgage by pushing paper in an office. The first year teachers chose to serve some of Chicago's most vulnerable children, and all shared stories about making a difference. The successes they achieved, however, did not make them less surprised at how hard it was to do the work. The first year teachers were confounded by how demanding it was to transcend the Chicago system's many challenges and connect with the children they served. The beginners were dismayed at how exhausting it was to pull everyone together and really teach.

a) Methods of story-crafting

Each chapter that follows interlaces qualitative analysis with verbatim transcriptions from particular interview sessions. These excerpts share every word from the interview sessions with one major exception. I have removed the speech crutches—such as “um” or “yeah”—from the transcriptions. As I worked through early drafts of these chapters, I found that these hesitations and stammers interfered with the teachers' storytelling. They focused the reader's attention on the narrative as a text, rather than as a tool for making meaning. I have also used the formatting techniques described in the methods chapter. These preparations are intended to give voice to the poetry and drama of the teachers' work without changing the flow of their storytelling.

Similar to all transcribed speech, the scenes these texts convey are not always easy to follow. Sometimes the teachers had difficulty putting their experiences into words. Sometimes they repeated themselves. Memories of students and lessons were not always embroidered into a clear-cut storyline. In my opinion, the music of the teachers' voices compensates for these difficulties. The transcriptions allow each educator walk into the spotlight and tell her personal story. The inarticulateness that sometimes results is intrinsic to the intimate settings where the interviews were carried out. I did not ask the teachers to prepare a speech. I asked them to discuss a physically and emotionally demanding nine-month long project at a place where they felt comfortable. The teachers did not speak to a large audience; they shared their stories to someone with a deep

interest in their work.

Occasionally, the events the teachers narrated are organized by associations rather than the demands of a distinct storyline. The teachers' minds sometimes wandered. They might refer to incidents that had meaning for them, but did not bear on the matter at hand. I marked the transcripts with brackets and an ellipsis [...] to indicate where I cut part of a transcript to enhance a story's meaning. My use of this technique was not extensive. In most cases I decided to allow readers to work through the stories on their own.

Narrative research is organized around different sets of aesthetics than other forms of research. The stories that I share in this work are not intended to prove a point: They are the point. Narrative research works as meditation on important events and a call to action (Benner, Tanner, & Chelsea, 1996; Grele & Terkel, 1985; Ladson-Billings, 1994; Tyler, 1986). It amplifies the experience of the individual performer and gives careful readers the opportunity to learn through the events voiced. Narrative moves beyond abstraction to paint pictures that may inspire change and healing. Rather than abstracting from experience, it communicates personal and emotional knowledge. Stories evoke the life that creates theory (e. g. Dutton & Heaphy, 2003; Thompson, 1988). At its best, narrative research pulls readers out of their individual perspective and connects them to achievements of value.

My writings' ability to evoke what matters, however, has limits. My descriptions of teachers' experience and the texts I publish from their interviews represent an attempt to tell a story about the stories the educators told, but my narrative cannot be definitive. The transcripts threaded through my analysis are not the only stories that I might share from the many voiced in the interviews. The story I construct from their experience is not the only narrative one could write. Storytellers always omit and exclude. There are always alternative perspectives (Feldman, Skoldberg, Brown, & Horner, 2004). Further, my research design was not constructed to get the 'whole truth.' The teachers were asked to focus on positive aspects of their work when they were interviewed. They were told it was appropriate to avoid issues that they felt uncomfortable discussing or that brought them a great deal of pain. What was left out of their discussions may matter more than what was said, but the words the teachers did not share remain unspoken. Silence is difficult to analyze.

Language may represent the things people see and help them understand the choices they make (Kintsch, 1998). Narrative may inspire human beings to imagine new possibilities and construct original meanings from the process of change. Stories, however, are not the same as the events they describe. Words are not experience. Theory is not life. Reading a narrative about an urban public school classroom is not the same thing as working in one.

The first days of school

a) Expert Belmont Barry

In August of 2003, Belmont drove to the high poverty elementary school where she had worked for many years, walked inside her classroom, and began to imagine the routines and activities she might use to organize the next nine months of the year:

Belmont

So this school year began with a great deal of organizing my classroom. And I set up different parts of my room and the kids have all access to every area.¹

**

So the year begins a week before the kids come in. Really organizing, reflecting on the year before and seeing, you know, what worked, what didn't work, what areas were accessible, which areas never got used. Different parts of the room. I had a writing center, a student center which involves post it notes and pencils and any types of tools that they needed to use.

**

A computer area where we have three computers and a lap top and then a guided reading table like there are different parts of the room there is a guided reading area where I do all my guided reading.

**

¹ As I discussed in Chapter 3, I transcribed all interviews verbatim. Breaks in the text are indicated in brackets. In order to make the transcripts meaningful, I use the following conventions

1. Narration is written in Times Roman Font
2. The teacher's voice, teaching is written in Book Antigua
3. Students voices are written in **Comic Sans MS Font**
4. The voices of other adults are written in **Haettenschweler Font**
5. The interviewer's affirmations and mumbles are marked by **

And then I had a teacher this year with me during guided reading. So she also pulled a group, so I had to have a whole separate area for her.

**

And then, of course, the classroom library which is a big part of the room. So really starting to just organizing, and organizing the room, and really thinking about

What do I want the kids to walk into?

**

And what do I want

**

to emphasize

**

for the year?

[Belmont Barry R1 Q1]

Belmont began the year by moving furniture and reflecting on last year's schoolwork. She paced through her classroom and grasped memories that lay dormant over the summer. One might imagine her moving students' desks into place and cleaning dust off the windowsills as different incidents come to mind. It is easy to visualize Belmont standing in her classroom library and reflecting on the books her students read. One can hear her asking, "What do I want the kids to walk into? And what do I want to emphasize for the year?"

Belmont worked alone. There was no mention of administrative oversight or group planning. What mattered was the time she spent moving through her classrooms and, "just organizing, and organizing the room, and really thinking." Possibilities sparked from different classroom locations, but Belmont did not mention speaking with another adult.

In two of the pilot interviews I conducted for the Expertise in Urban Teaching Project, teachers told me there were summers when they could not sleep the night before school. These educators lay in bed visualizing plans and procedures while praying the year would turn out right. On the first day, they got up long before dawn and ate their breakfast while waiting for the morning paper. As the hours passed, the teachers did their hair, woke their children, and dropped the kids off at a neighbors or their mother's house

before driving to work. Belmont did not tell this type of story. Immediately after she spoke about her planning process, she began sharing memories of the first day of school.

Belmont

...the first day and I thought this was important talking about how the first days of school begin. Is that something that is important?

Interviewer

Yeah, no, that's fine.

Belmont

We start by building community.

**

The first thing. The first day of school, you know, sometimes its unpacking all this material, all their crayons, and going over the rules and all that kind of stuff, but I don't begin that way because I think that is so typical.

**

And I want them to really understand what is going to be involved in the year.

**

So they are not shocked later on.

**

So we begin. As soon as they walk in, you know, we do a little scavenger hunt so they feel a little more comfortable with each other. But then right away I give them numbers.

**

And they find that they are paired up with somebody else in the classroom. Completely anonymous, no one knows, I don't know. And so they're paired up, and they interview each other.

**

So it begins. Like the first hour after the first hour of school, I'm talking about what a good interview is,

What would we want to know each other? What's important for us to know? What's too personal that you shouldn't ask?

And then they create these interview questions for their partner which a lot of them don't know each other.

**

And they go through this process. And then, after they are done with their questions, we talk about how to take the answers to those questions and turn it into a biography.

**

So, right away, it starts. This whole talk discussion about what a biography is. What a genre is. At first they are very nervous, you know, because they are getting up in front of everybody. But it's really to just get them right in the swing of things understanding that

This is the expectation level. This is where we are going to be. It's not just because it's the first day or it's the last day or

Oh, it's Friday.

There is none of that. It's taken away the first day.

So that also gets them comfortable with presenting in front of the room because they do a lot of that through out the year. It also gets them started with the importance of writing

**

which is a huge part of my our day.

[Belmont Barry R1 Q1]

Belmont took control of her students' choices the moment they walked through the classroom door. Instead of beginning the first day of school by unpacking books and organizing school supplies, the NBPTS-NTL teacher "makes her students really understand what is going to be involved." Belmont pushed her kids out of their normal routine by running a scavenger hunt and asking them to interview a classmate. The reader might imagine not only what it would be like to be a teacher, capable of teaching these lessons, but what it would be like to be a professional confident enough to tell the story of the start of a demanding yearlong project with Belmont's pleasure and energy.

Belmont's plans were successful, and she began the 2003 school year well. Her students did not fight or argue. The management challenges posed by an indoor scavenger hunt performed by 30 fifth graders did not show up her account. The work required to transition kids into the complex set of literacy activities was glossed over. Belmont's students collaborated with their classmates. They made up questions about things that mattered to them and tried to organize the information they received into a coherent story. Kids shared what they discovered in front of the entire class. As I will discuss, these research and cooperative learning activities were a mark of expertise; the

beginning teachers I interviewed rarely mentioned them. The pride Belmont took in her schoolwork can be seen in the reverent tones she used to describe how her classroom came to life:

So we begin...

So it begins...

So, right away, it starts...

Belmont shared more incidents of academic work during her interview than any teacher the Expertise in Urban Teaching Project. Throughout her transcript, Belmont regularly told stories about how her students read, wrote, and talked about books. These activities not only benefited her students, they made her feel good. When Belmont and the other NBPTS-NTL teachers talked about their efforts teaching core academic subjects—such as reading, mathematics, and science—they frequently used words that communicated positive emotion. They “really enjoy” and “are amazed” and “feel great” when they saw their students grow academically.

Belmont was also as a woman who is comfortable using power (Collins, 1991; Ladson-Billings, 1994). She believed she knew what was best for her students, and there were number of issues over which she did not negotiate. Her children had a great deal of choice, but they were not allowed to do things she did not want them to do. As she said in her interview, it was “my our day.”

In the next section of her transcript, Belmont described how she set up her classroom management systems. Both the rules her students made and the processes children used to construct these guidelines helped structure Belmont’s classroom across the school year. These events stand out so clearly, they were recalled with little effort.

Belmont

So the first day we just jump right in and we also build community through creating rules for our classroom. We devise the classroom contract so we talk about what would we not want to see in our classroom.

What would be the worst room that you could possibly ever walk into? What would be happening in that room?

And they get so excited.

Oh, this and this and this and then!

I'd say

Okay, now what kind of classroom do you want to be in?

And I presented

That we are a peaceful working classroom. So what does that mean?

So we had this big list. And we kind of come up with, what are some of the core ingredients to a peaceful working classroom

**

and it becomes this contract. And of course I kind of guide them towards, I mean they all, they have it all but they have a hundred little pieces.

**

So I try to guide them into putting things together on

**

you know,

Isn't this

**

Isn't this a form of? Isn't this about respect? Yes. Okay, so we can erase, you know, not spitting at each other.

[INTERVIEWER LAUGHS]

That would fit under respect. Right, wouldn't that be

[INTERVIEWER CONTINUES TO LAUGH]

So things like that and then they sign the contract and then they all get a a. I xerox enough for everybody. And they go home and they take to their parents and it becomes a contract. It's hung up in the room. So right away it just begins, that this is they are such a big part of what we do everyday.

**

So its not, it's more of me facilitating them

**

and it starts the first day. So, that is an overview and that continues throughout the year and

**

and that sort of philosophy I think

**

giving them a lot of ownership and really being a part of our daily routine.

[Belmont Barry R1 Q1]

Belmont's knowledge of classroom management and good teaching wove through her narrative. She had great ambitions for the school year, and she was able to bring her dreams to life. On the first day of school, thirty 5th graders walked into a classroom that had lain empty for two months, and the year quickened and came to life. In Belmont's account, her students did not fight or argue. They did not complain. They talked seriously about how their community would function, and they imagined what it might be like to spend the next nine months in a peaceful working classroom. Through out this discussion, Belmont regularly recast (Baker & Nelson, 1984) her students suggestions. Despite the fact that her children never opened a book in those first hours, the NBPTS-NTL teacher began building their vocabulary from the moment they walked through her classroom door. From one moment to another, Belmont was able to blend (Kintsch, 1998) her students' interests and concerns with her knowledge of classroom management and vision for how the class would operate across the year. Once the day's work was done, children took copies of the contract they signed to their parents and hung the original on their classroom's wall. Belmont's understanding of good teaching gave her the power to make the time her own.

b) Beginner Halsted Hoyne

In urban classrooms, happy outcomes are not guaranteed. Halsted Hoyne, one of the beginning teachers in the study, told me specifically that she began the year without the knowledge and skill necessary to take control of her students' lives and organize their time in school. As a result, Halsted and her students suffered. Two of the boys placed in her 3rd grade were sworn enemies: The children spent the first week of school wrestling across her classroom floor. Halsted broke up fistfights. She yelled and shouted for order. Hours of classroom time passed in arguments and quarrels. Halsted left school every afternoon of her first week exhausted and humiliated. She cried when she came home to her family. She spent hours talking about her schoolwork with friends from her Master's class. When she met with her principal on the Friday after her first week of school, Halsted broke down in tears.

During her interview session, the first year teacher read an excerpt from her teacher-reflection journal:

Halsted

...this was, this was like my observation from my very first week

**

with my kids

**

[HALSTED READS FROM JOURNAL]

I did not expect this much anger to slap me in my face. I must have broken up 10 to 20 fights this week. I cried every night for two to three hours. I forgot everything I learned at school. Thank goodness one of my cohort members from my Master's cohort walked me through my week. This school is an emotional place. By Friday of this week, I had broken down in front of my class. And this is the first time I had questioned whether I could do this. I feel like I had been dropped into a war zone. I did not know that places this sad existed and now I spend the majority of my time here. It is quite an adjustment.

[HALSTED SPEAKS TO INTERVIEWER]

So just the fact that like, when they walked through the door, the kids, they come in with, you know, this much million pound of issue on their back. So, you just never, you never, and I know that's probably true of anywhere, but you never know where the day's going to take you, honestly.

[Halsted Hoyne R1 Q4]

Halsted's children did not spend the beginning of September learning how to live in the intensified language arts space produced by a peaceful, working classroom.. Instead of starting the year right and bringing her students together, her classroom shattered. Fights broke out. Waves of anger broke across her classroom. The beginning teacher forgot everything she learned as a teacher education student, and, at one point, cried in front of her kids. The beautiful rehabilitated building Halsted walked into before the school year began, was transformed into the saddest place the new teacher had ever known. Halsted began to question the commitment to serving others that brought her into teaching.

As I discussed in my methods section, when I designed the Expertise in Urban Teaching Project I made the strong assumption that all CPS classrooms posed the same level of difficulty. While all children who attend a particular school system do not begin the year at the same academic level, it is not unreasonable to hold that in modal classrooms, their academic growth during the school year, as well as their behavior in class, is primarily the result of their teachers' knowledge and skill. (e. g. Bohn, Roehrig,

& Pressley, 2004; Cameron, Connor, & Morrison, 2005; Evertson & Emmer, 1982; Nye, Konstantopoulos, & Hedges, 2004; Rowan, Correnti, & Miller, 2002). Later, I will discuss how expert teachers responded to similarly aggressive students and will provide the reader with the information necessary to imagine how an accomplished, urban teacher might manage a classroom that had been assigned two sworn enemies. However, during this introductory section, I would like the reader to, perhaps, suspend disbelief and consider my claim that the differences between Belmont's and Halsted's classrooms were not foreordained by their students' life histories, but caused by their teachers' choices.

Halsted made one plan and carried it out to the best of her ability; Belmont crafted an alternative classroom experience. The two teachers spent the rest of the school year living with the consequences. In Halsted's words:

Halsted

...and just, you can never sit down, you can't sit down, I mean I don't believe that anyway. I want to be the kind of teacher that like circulates the room, but you can't even like turn your back

**

for like a second

**

It was like

**

eyes had

**

to be

**

on everyone at all

**

times.

[Halsted R1 Q1]

To return to the metaphor I used in the first chapter, one that has been used before in education research (Kauffman, Moore Johnson, Kardos, Liu, & Peske, 2002), the emotion released by the first day of school might be seen as a strong wind that fill a classroom's sails and carries teacher and students out to sea. Belmont had the skill to tack

into those winds and speed into the year's journey. Halsted did not. The same gusts that energized Belmont's classroom hurled Halsted off course. The beginning teacher's mistakes made every stage of the year's voyage more perilous.

For all but one of the first year teachers in the Expertise in Urban Teaching Project², the opening weeks of school were perceived as a calamity that required strength, heart, and fortitude to survive. Administrating, rather than teaching, became an overriding concern. Three of the beginning teachers told me there were weeks during the school year when it was a struggle to get their students to walk to the bathroom and back. Creating plans and procedures to organize minute portions of the school day became a critical survival concern. One beginner told me one of the most valuable professional development sessions in her new teacher's support group was devoted to creating rules for managing students' pencils.

In contrast, the expert teachers' years of study gave them the means to join with their students to create happy and productive classroom communities. Experts understood how to orchestrate the daily round of events produced by the school day into forms that supported children's growth and development. Throughout their interviews, the NBPTS-NTL teachers told stories about helping poor and minority students learn critical thinking skills, make new friends, and believe in themselves.

² New Teacher Milwaukee Madison did not suffer from the same difficulties because she team-taught with another teacher who was an experienced classroom manager. As a result, as I discussed in the methods sections, I have mostly dropped her from the analysis. Much of her narrative was focused on the specific routines she and her co-teacher used to care for their students and it was confusing to publish these texts along with those of the other teachers. I will return to this issue in the conclusion.

References:

- Baker, N., D., & Nelson, K. E. (1984). Recasting and related conversational techniques for triggering syntactic advances by young children. *First Language, 5*(3-22).
- Benner, P. E., Tanner, C. A., & Chelsea, C. (1996). *Expertise in nursing practice: Caring, clinical judgment, and ethics*. New York: Springer Publishing Company.
- Bohn, C. M., Roehrig, A. D., & Pressley, M. (2004). The first days of school in the classrooms of two more effective and four less effective primary-grades teachers. *The Elementary School Journal, 104*(4), 269-287.
- Cameron, C., Connor, C. M., & Morrison, F. (2005). Effects of variation in teacher organization on classroom functioning. *Journal of School Psychology, 43*(2005), 61-85.
- Collins, M. (1991). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. New York: Routledge.
- Dutton, J., & Heaphy, E. (2003). Coming to life: The power of high quality connections at work. In K. Cameron & J. Dutton & R. Quinn (Eds.), *Positive organizational scholarship*. Williston, VT: Berrett-Koehler.
- Elsbree, W. S. (1939). *The American teacher: Evolution of a profession in a democracy*. New York, Cincinnati[etc.]: American Book Company.
- Evertson, C. M., & Emmer, E. T. (1982). Effective management at the beginning of the school year in junior high classes. *Journal of Educational Psychology, 74*(4), 485-498.
- Feldman, M. S., Skoldberg, K., Brown, R. N., & Horner, D. (2004). Making sense of stories: A rhetorical approach to narrative analysis. *Journal of Public Administration Research and Theory, 14*(2), 147-170.
- Grele, R. J., & Terkel, S. (1985). *Envelopes of sound: The art of oral history* (2nd , rev. and enl. ed.). Chicago, Ill.: Precedent Pub. : Distributed by Transaction Books.
- Herbst, J. (1989). *And sadly teach: Teacher education and professionalization in American culture*. Madison, Wis.: University of Wisconsin Press.
- Kauffman, D., Moore Johnson, S., Kardos, S. M., Liu, E., & Peske, H. (2002). "Lost at Sea": New teachers' experiences with curriculum and assessment. *Teachers College Record, 104*(2), 273-300.
- Kintsch, W. (1998). *Comprehension: A paradigm for cognition*. Cambridge, UK: Cambridge University Press.
- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American children*. San Francisco: Jossey-Bass.
- Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis, 2004*(3), 237-257.
- Rowan, B., Correnti, R., & Miller, R. J. (2002). What large-scale, survey research tells us about teacher effects on student achievement: Insights from the Prospects study of elementary schools. *Teachers College Record, 104*(8), 1525-1567.
- Ryan, K. (1970). *Don't smile until Christmas: Accounts of the first year of teaching*. Chicago: University of Chicago Press.
- Thompson, P. R. (1988). *The voice of the past: Oral history* (2nd ed.). Oxford ; New York: Oxford University Press.

- Tyler, S. A. (1986). Post-modern ethnography: From document of the occult to occult document. In J. Clifford & G. E. Marcus (Eds.), *Writing culture: The poetics and politics of ethnography* (pp. 122-140). Berkeley: University of California Press.
- Waller, W. (1932). *The sociology of teaching*. New York,: J. Wiley & sons inc.;

Chapter VI

Classroom Events and Routines

In the best classrooms, once the school year is fully underway, one activity flows to the next with little conscious decision-making (Bohn, Roehrig, & Pressley, 2004; Leinhardt & Greeno, 1986; Shavelson, 1983; Taylor, Person, Clark, & Walpole, 2000). Planning occurs before and after a lesson. During the day teachers and students focus on the content of their lessons, rather than on procedures members use to get things done. In expert teachers' classrooms, effective systems for taking attendance, collecting homework, and lining up for lunch help maximize instructional time. Successful routines for cooperative learning, holding discussions, and receiving feedback help children grow and develop. In December, expert teachers are not concerned about how students will start the school day, because the morning's procedures have been worked out in advance. In March, experts do not have to worry about how to organize reading groups, because their students have already become skilled at working as a team. Teachers and students focus on the books they read. They solve puzzles and organize experiments. They care for each other and become friends.

In the next passage, expert teacher California Calumet described how she organized her classroom. The activities discussed are not dramatic. Each activity was an ordinary task carried out with little stress. The peaceful atmosphere they produced, however, helped make California's classroom a more pleasant and effective place to learn. The passage shows how classroom quality is produced out of the successful accomplishment of many small tasks.

California

...Another management thing tool I used is I assigned jobs every week to my students

**

and, actually, towards the end they were doing they were doing that themselves. They were deciding who was going to do what. We had, I mean, just, you know, from the person who runs the errands, the line leaders, the people in charge of being in the front of the line, passing out the lunch tickets, wiping off the lunch tables after, after lunch. That was their least favorite job because they had to dip their hand into the dirty water of the sponge.

**

And let's see, what else did I have? Paper. People in charge of collecting homework and passing out papers, watering the plants, you know just all those kind of little jobs. And they loved it.

**

And, you know, I had their names I have a pocket chart and I had all the jobs on index cards and then all their names on an index card. And so they would just take the deck and, you know, we would put people in and try to be fair, you know

How many times have you had to wash the lunch tables this year?

And things like that, so but they were pretty much in charge of that by the end of the year. Oh, computers. I had five internet-connected computers in my room. [...] And so someone was in charge of starting those up in the morning and shutting them off at the end of the day.

**

Things like cleaning even. Because you know the engineers come in and sweep the floor maybe twice a week.

[SHE LAUGHS]

**

And the rest of, you know, washing the boards things like that.

[California Calumet R1 Q2]

California's classroom was a place where homework was collected, plants were watered, chalkboards wiped off, and computers started up and shut down. California orchestrated much of this work. The expert teacher listed jobs on index cards and allowed kids to decide who did what. There were no mentions of conflict in this passage. All students shared in the work required to create the classroom setting that organized their time together. Each was willing to "dip their hand into the dirty water of the sponge."

For new teachers, one of the most difficult discoveries of their induction to their

profession is how complicated it is craft these procedures and to motivate students to engage in this work. The stakes are high (Borko & Livingston, 1989; Evertson, Emmer, Sanford, & Clements, 1983; Ladson-Billings, 2001; Leinhardt, Weidman, & Hammond, 1987; National Partnership for Teaching in At-Risk Schools, 2005). Effective sets of routines structure school life in positive directions and support children's academic and moral development across the length of the school year. Poorly conceived procedures cause chaos. Similar to the way that beginning readers strain to decode the words and draw meaning from unfamiliar paragraphs (Carter & Doyle, 1986; Kintsch, 1998; National Reading Panel, 2000), beginning teachers may struggle to organize their classrooms and to understand the events these activities generate. First year teachers may start the day with plans that are not workable and, hence, do not allow them to manage activities allow them to achieve their goals. They may not understand the meaning of their students' actions and may respond ineffectively to events they do understand. Once the day is done and their students have left their classrooms, beginners may not be able to assess what happened and respond effectively the next morning. The school year moves jaggedly (Kounin, 1970). The work may be experienced as painful and exhausting (Roehrig, Pressley, & Talotta, 2002; Ryan, 1970).

In the next passage, beginning teacher Indiana Ingleside described her difficulties managing her classroom and discussed a lesson that bombed. The reader might compare Indiana's account of her actions with the narratives shared by the expert teachers. In contrast to the stories shared by the veteran educators, Indiana worked in a harsh landscape. Things happened that the beginning teacher did not anticipate, and she was not able to read the moment and successfully manage its contingencies. Students' actions were experienced as cruel and wounding. Indiana's narration was layered with regret.

Indiana

...Unfortunately I was a lot more traditional in my instruction

**

than I thought I would be. And I feel like my, for my first year. I think that, that was because it was my first year.

**

It sounds like an excuses and it probably is and I was just overwhelmed with everything that I had to do. Also, just very focused on managing the class

**

because when a lot your energy is going towards making sure that, you know, Johnny stays in his seat and isn't hitting the kid next to him, that takes a way a lot of the creative the time that you want to put in to being creative. Also, you know, what the collaborative group work, some of the kids that I was working with had never done that before.

**

And so it really takes a long time to get them to the point where they can successfully work together, even in groups of twos, and that really limits, you know, what you can do. And I know for next year, I need to start earlier and more basic with that type of thing so that we can do more activities and just so they know how to be when they are given more freedom

**

in the learning process. For example, in the fall I brought in apples and oranges for a science project we were doing. We're starting out observation and I wanted them—they were observing the differences between apples and oranges and how they were like similar, and we were going to make Venn Diagrams. And so I had them all in groups

[STRONG EMOTION IN HER VOICE]

and I was passing out the fruit. And I hadn't even got passed out yet and one of the kids took one of the oranges, and I didn't even see it happened, I think he punched it, and then squished the juice all over the other kids.

**

Who would have thought that would have happened? I didn't. Like I just assumed that it wouldn't be a problem for 5th graders to look at some apples and oranges and write down the similarities and differences.

[LAUGHS]

So I snapped. And I snatched up all the fruit and I made a huge scene and I was just. Part of me was really angry, but part of me just did that for effect because I, you know, its like,

How can?

At that point I was like

How, how, how? What are we supposed to do, to learn, if we can't even look at some fruit without?

And then the kid who got the juice squeezed on him like started crying and he was just like horrified. And, you know, and it, I think, the reason that

things like that hurt so much is that you spend your own time and money going to get the fruit, first of all. And then you are so excited because it is something different and its going to be fun and you are hoping that they are going to have fun with it.

[LAUGHS]

And then it takes like two seconds and it's ruined!

[Indiana Ingleside R1 Q3]

Indiana's lesson was "ruined" when her students failed to perform a straightforward procedure. They were not able to pass sets of apples and oranges to their classmates. Instead, a boy acted inappropriately and the lesson broke apart. Indiana did not see the child act out. She lacked the ability to anticipate critical classroom events and scan her classroom for signs of trouble. Instead, the new teacher was taken by surprise. She looked up from whatever she was doing and saw orange pulp squished "all over the other kids."

Indiana snapped. In her words, "I snatched up all the fruit and I made a huge scene." Indiana laughed when she shared the story, and there is a sense that the incident was not fully real to her. She seemed to experience events as an observer rather than as a participant and did not seem deeply committed to her role. Similar to the beginning nurses in Benner and colleagues' (1999; 1996) ethnographies, the focus of Indiana's story was primarily on herself and her disappointment. The first year teacher did not discuss how she comforted the student who was attacked, nor did she describe disciplining the boy who disrupted the lesson.

Later in her interview, Indiana said that one of the major things she discovered over the course of the year was the importance of being explicit. She found that what worked best was to guide her students into the activities she wanted them to perform and—to the extent it was possible—organize each part of a lesson out of procedures her students had already learned. Indiana told me that she decided in the fall to begin the 2004-2005 school year by making sure her students understood how to do the most basic tasks:

I think, start off in twos and getting them, allowing them to work together in groups. And teaching them you how to communicate with each other in a respectful way. And how to complete a very basic task. I think I would just start you, you know, just start out very basic. And then eventually get them

in groups of fours, and then this year I went as high as groups of six. And, you know, doing basic things like making sure they all have a their role.

**

If it's, if it's a project that includes a worksheet, making sure they all have the same worksheet and can record the data on the work sheet. But I think mostly is like just getting them used to the language of effective communication with each other. I think is really important and you know sharing supplies and how to handle materials and stuff. I think needs a lot more time than, than what I gave it this year.

[Indiana Ingleside R1 Q3]

This passage illustrates how beginning teachers' difficulties managing their classrooms narrowed the focus of their reflections. None of the expert teachers I interviewed told me that, during the 2003-2004 school year, they had discovered that, if they passed out a worksheet, it was important to make sure every child received the same kind of worksheet. None of the experts said it was important to check and make sure that these worksheets contained a blank space where the class might write up their data. Struggles over little details were not a prominent feature of the veterans' narratives.

As I will discuss in a later chapter, there were times when Indiana was able to overcome her student's resistance and join with children to create engaging and beneficial lessons. Just as struggling readers might have areas of expertise, such as football or music, where words and subject matter are familiar enough to allow them to comprehend difficult pieces of text (Recht & Leslie, 1988; Walker, 1987), Indiana was able to use routines she learned in her teacher education classes to organize the opening hours of the school day. The first year teacher said it took some time for everything to fall in place, but in the morning her students worked on oral language lessons, they read stories, and they wrote in their journals. The class became skilled at performing these activities, and schoolwork flowed in a pleasant groove. Indiana said her difficulties began when morning ended and her children began working on math and science.

Quantifications

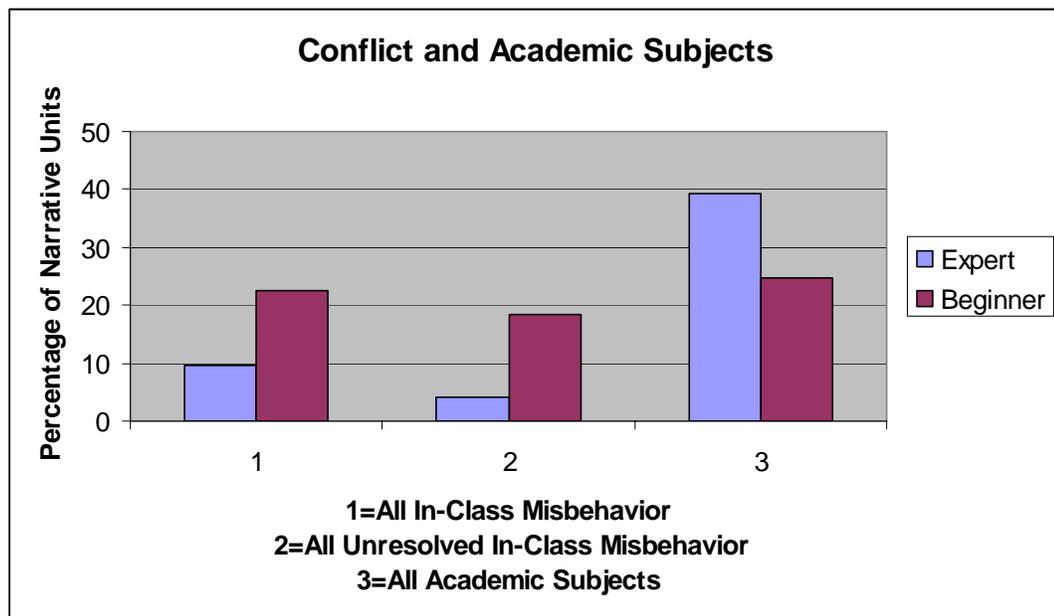
The charts and tables that follow use the cognitive coding techniques I described in the methods section to examine the shape of the teachers' narratives. They describe the type of stories that the different groups of teachers tended to discuss. The figures display

different dimensions of the teachers' verbal representations of their inner classroom landscapes and allow the reader to distinguish variation between teachers and groups. The charts total the number of incidents in the teachers' transcripts that share the themes I describe; the quantifications also surface discrepant information.

The full analysis is attached to an appendix placed at the end of the thesis' empirical chapters. Coding totals for each teacher are listed, as well as the definition of each analytic category. These larger tables are the source of the tables and charts displayed in the main body of the empirical chapters. Readers can refer to the appendix if they wish to know exact definitions or coding breakdowns.

I decided to organize my findings this way in order to make the chapter easier to read and to allow the charts in the appendix to be available for other analyses. When individual educators' stories are discussed in the sections that follow, it is possible to go to the appendix and use the coding breakdowns to investigate what other types of stories that teacher tended to tell. California and Indiana's narratives, for instance, can be compared over a wide range of analytic categories.

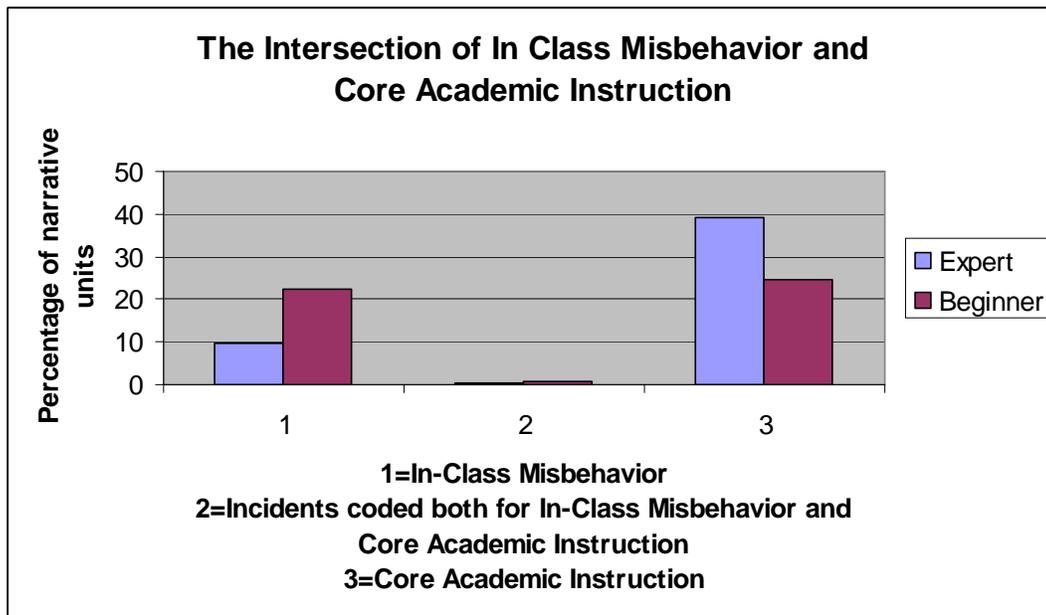
Table 6.1 Conflict and Academic Subjects



Standardized Misbehavior and Academic Incidents Coded from End of the Year Interviews

Comparison	1	2	3
Category	All In-Class Misbehavior	All Unresolved In-Class Misbehavior	All Core Academic Subjects
Experts	9.62%	4.23%	39.33%
Beginners	22.41%	18.52%	24.76%

Table 6.2 The Intersection of In-class Misbehavior and Core Instruction



Standardized Totals of In-Class Misbehavior and Core Instruction Coded from End of the Year Interviews

Comparison	1	2	3
Analytic Codes Displayed	All In-Class Student Misbehavior	Intersection	All In-Class Academic Subjects
Experts	9.62%	0.53%	39.95%
Beginners	22.41%	0.77%	24.03%

These charts compare the amount of misbehavior and academic work discussed in end of the year interviews with teachers who possess different levels of professional knowledge. Table 6.1 shows that about 10% of the incidents in the expert teachers' narratives are coded for student misbehavior, versus about 22% of the stories shared by the beginners.

When the transcripts are examined to differentiate incidents where misbehavior was resolved positively from stories where the difficulties were not resolved, the results are striking. Comparison 3 in Table 6.1 shows that around 4% of the expert teachers' stories describe unresolved, in-class conflict; this compares to 19% of the beginners' narratives.

These differences are critical because as Table 6.2 shows that when both groups of teachers talked about student discipline problems they rarely discussed academic instruction. Breaches of social order seemed so disturbing teachers rarely focused on academic content when they discussed these incidents. Student discipline problems thus changed the shape of the teachers' narratives and altered the fabric of their verbalized memories. Classroom management problems weighed beginners down and pulled attention away from academic instruction. In the words beginning teacher Indiana Ingleside shared in the previous passage:

It sounds like an excuses and it probably is and I was just overwhelmed with everything that I had to do. Also, just very focused on managing the class

**

because when a lot your energy is going towards making sure that, you know, Johnny stays in his seat and isn't hitting the kid next to him that takes a way a lot of the creative the time that you want to put in to being creative.

Discipline problems dominated beginners' professional knowledge landscapes. The charts show that only 25% of the incidents discussed in the beginners' narratives focus on core academic content. First year teachers shared almost as many stories of student misbehavior as they did of reading, writing, social studies, mathematics, and science teaching combined.

The charts show that the expert teachers' classrooms were not from conflict. The incidents totaled in Comparison 1 of Chart 6.1 include stories where the experts described arguing with administrators, quarreling with colleagues, and calling parents at their homes to demand they improve their child's misbehavior and achievement in school. Conflict ran throughout the veteran teachers' narratives, but as the charts show, it did not regularly push inside their classroom door. Unlike the beginning teachers, when the experts were challenged by their students, they were able to resolve the incident peacefully. Only 4% of the veterans stories described incidents of unresolved in-class

behavior as compared to 19% of the beginners' stories.

These findings are in line with other ethnographically based investigations of skilled teachers in high poverty schools (e. g. Foster, 1991; Gay, 2000; Irvine & Fraser, 1998; Kleinfeld, 1992; Ware, 2002). Caring is not always sweet and gentle. Committed teachers can be frightening figures of authority who possess the power to shock the most hardened nine-year-old into compliance with one cool look. In the highly pressured spaces produced by urban school systems skilled teachers have the resources necessary to stand up for peace and learning. Years of work with poor and minority students give these skilled professionals the ability to speak quietly with every muscle in their body when it is time to lay down the law. As the charts show, however, this struggle was not a prominent feature in the experts' narratives. Their classrooms seemed similar to those studied by Brophy, where behavior was managed primarily by giving children interesting and engaging academic work. As I will discuss throughout these chapters, when the NBPTS-NTL teachers spoke about their classrooms, they tended to describe caring and productive workplaces. Successful work with children gave the teachers I interviewed a great deal of happiness.

Experts Prairie Paulina & Addison Ashland

Successful schoolwork did not come easily. There were many things that happened in the experts' classrooms during the start of the year the veteran teachers did not approve. In the experts' accounts, the development of the peaceful, working classrooms was a creative process. The life that shaped each hour of the school day was born from the experts' constant labor. The shape of the activities that bound teachers to students, students to each other, and all to the academic content that flowed through these structures might change over time. The systems of activities that structured experts' lessons were organized around choreographies that might take months for children to learn. Crafting classroom procedures that helped youngsters to work together as a team was not described as effortless.

In the next passage, expert teacher Prairie Paulina shared an extended discussion of the everyday, academic life of her classroom, before describing the difficulties she faced managing group activities and her successful efforts to teach these skills. Her

discussion began with a long series of incidents that take place during a unit she taught on Colonial life using a young adult novel, Sign of the Beaver. These lessons were described quite positively. She portrayed herself as enjoying her schoolwork and spoke extensively about how she connected with her kids. Through out this passage, time moved without much pressure. The narration was closer to a collage than a conventional storyline. Events occurred one after the other without a clear sense of plot. Days passed in a series of activities that helped students learn, but did not lead to a dramatic climax.

These moments of peaceful work were responsible for a large portion of the differences between experts and beginners described in the charts in the previous section. Throughout their interviews, experts tended to dwell on lessons that went well and discussed how they worked together with their students to create situations that made them feel great. It was only after she discussed these incidents, that Prairie described how she taught her students how to manage cooperative learning:

Interviewer

Ok, could you talk about your units?

Prairie

Sure. The unit I think that made the biggest difference in their lives—which is I think how you worded the question?

Interviewer

Yeah, yeah.

Prairie

Well, the unit we did around the novel The Sign of the Beaver. It's a really, really tough novel for 5th graders. It's a lot of vocabulary. But it brings up—it's by Elizabeth George Spear—it brings up a lot of really interesting

**

discussion points. It's about this little boy, Matt, who—

[TEACHER TAPS TABLE]

his father leaves him in charge of their cabin in Maine—it's like 1768, so it's just after the French and Indian War—and he goes to get the rest of the family which is living in Massachusetts,

**

and Matt has to survive out there all summer.

**

And he ends up—his rifle gets stolen by this kind of vagabond man

**

and a bear breaks into his cabin and eats all the food, so then he has no way to get food except for fish. And then he climbs this tree and gets stung by bees and is rescued by some Native Americans that are living in the area,

**

so then he develops this relationship with this Native American boy. And the kids just—for whatever reason—really identified with the book and the relationship between Matt and Etienne, who's the Native American boy. And like the fact that, there were issues about being white versus being Native American and just the things that he had to do for survival

**

they found really interesting.

**

They really were just fascinated by Colonial life.

**

They did some really incredible projects over Christmas vacation

Interviewer

Oh, really.

Prairie

that showed their understanding of the book.

Interviewer

What did they do?

Prairie

One of the—the most impressive project was done by Gregory, and he made a picture book,

**

pictures and captions of The Sign of the Beaver, and so he had drawn—and in art I teach them that artists don't leave white space,

**

that the whole surface is covered—so he drew these beautiful drawings and captioned them.

[SHE SHOWS A PHOTO OF THESE DRAWINGS]

Interviewer

Oh my gosh, that's really great.

Prairie

Yeah, I actually it have at home so I can bring that next time if you want to see it, but it's amazing and

**

he's one of my top students and just used this project to really shine.

**

It was really just amazing. So this is where Etienne is making a bow and arrow for Matt to teach him how to hunt.

[SHOWS PHOTO]

And they really just liked the relationship between the two boys, and like this idea of brotherhood. And they really thought a lot about like the way that Native Americans viewed land as

**

communal and being like

**

air, something that you couldn't own, and the whites thinking about it differently. It really gave them—it helped them sort of take perspective on like all sides of the issue.

**

I learned history from a very like white-centric perspective,

**

and I don't want my kids to learn only one side of the history. So that book really helped them kind of see the other sides of the issue.

Interviewer

What would they say?

Prairie

They would say things like,

"That's not fair that the white people came and pushed everybody out."

**

And then some other people would say,

“Well, that’s not fair because in England you could only have land if you had money, and most people didn’t have money.”

**

And then they’d say,

“But it’s not fair...”

[INTERVIEWER LAUGHS]

They were just pushing around a lot of really big issues.

**

And they really liked the idea of—he goes off to find his manatu, which is like his spirit guide,

**

They thought that was just amazing. So then they had lots of discussions about like what their animal guide would be if they had an animal guide,

**

and like what sort of advice it would give.

**

One of the other things that we did that played into their lives later was we—it happened that in their basal reader they had this section on Colonial games,

**

because there was a section called Voices of the Revolution, so we were just kind of immersed in Colonial history—so

**

what I had them do in small groups was read through the directions

**

and rewrite them in kind of kid-friendly language. And then I had all the materials for the games, so then they put the games together

**

and then played them and taught each other the games. That made just such a difference in the community of the classroom.

**

They really had not been so good at working in small groups. They were really good at working in pairs,

**

and they would handle large group instruction very well, but small group instruction was just kind of a nightmare.

**

And after that experience they were just—it really—

Interviewer

So, what did you do, what changed?

Prairie

I don't really know. I think just like going through that activity just kind of showed them in a really concrete way how you needed to work together.

**

And because they were focused on this end of playing a game, which would be fun,

**

and because they had to teach each other how to do it—

[Prairie Paulina R1 Q2]

At the beginning of this passage, Prairie narrated a series of events that described the smooth flow of life that shaped her classroom. Students were depicted as enjoying their time at school, and the expert teacher felt good about the young people's actions. The book the class studied, Sign of the Beaver, was written with a large vocabulary that was not easy for Prairie's Hispanic 5th graders to understand. However, the methods Prairie used to teach this content did not show up in her account. The expert teacher seemed to be able to manage this aspect of her schoolwork without a great deal of stress. Instead, similar to the expert nurses in Benner and colleague's ethnographic studies (Benner et al., 1999; Benner et al., 1996), Prairie's primary focus was on the students she served.

In the expert teacher's account, the class became fascinated with the novel, and the youngsters used the story to try to understand their place in the world. The students in Prairie's classroom grew up in a city that was dangerous for children of color. Many of their families struggled to make ends meet, and these adults were not always confident they would achieve the dreams that had pulled them away from their home country. Prairie's lessons gave her students tools to make sense of their families' struggles. As she narrated in the previous passage:

They would say things like,

"That's not fair that the white people came and pushed everybody out."

**

And then some other people would say,

"Well, that's not fair because in England you could only have land if you had money, and most people didn't have money."

**

And then they'd say,

"But it's not fair..."

[INTERVIEWER LAUGHS]

They were just pushing around a lot of really big issues.

**

And they really liked the idea of—he goes off to find his manatu, which is like his spirit guide,

**

They thought that was just amazing. So then they had lots of discussions about like what their animal guide would be if they had an animal guide,

**

and what sort of advice it would give.

These discussions were described as occurring regularly without a great deal of stress or strain. Prairie's students trusted her enough to share their feelings. The entire class was focused on the issues the story raised.

The tone of Prairie's discussion changed, however, when she described her efforts to manage a major classroom problem. At the beginning of the year, her 5th grade students were not comfortable working together as a team. They had not learned how to participate in cooperative learning groups in their previous classes, and they carried this poor behavior pattern into her classroom. When Prairie asked her youngsters to work in groups, they would argue, instead of cooperate. She said students could work in two's, or in large groups, but anything in between was, "a nightmare." Throughout the fall, Prairie continued to look for opportunities to teach these skills, but her efforts were not successful. The unit on Sign of the Beaver offered her students a new opportunity. It is at

this point in the transcript that the interviewer asked Prairie a probe intended to surface a description of this lesson. The passage continues:

Interviewer

Could you describe what they did in more depth? And before you do that, hold on.

[INTERVIEWER TURNS TAPE OVER] [...]

Prairie

So what I did was I read through all the Colonial games together

**

and I made sure that I had all the materials available so they could put the games together.

**

And I structured the groups very carefully

**

so there was a girl leader and a boy leader,

**

and then some other students that didn't have personality conflicts or wouldn't be like overpowered by the other kids that were in the group.

**

And they were all in groups of four.

**

And the directions that I told them were that,

You need to read through these independently, then you need to read through your game together.

**

And then I said,

You need to choose one person to write the directions, and you need to

**

all work together to come up with what the directions say.

So one person was just pretty much acting as a scribe. And I said,

**

Once you've got the directions written, I'm going to give you

the materials, you're going to need to put the game together, and then figure out how to play it.

**

So I didn't really structure roles for them too much,

**

because I had tried to do it before and they just were like not so very good at it,

**

so I'm like,

Ok, well obviously this strategy does not work with them.

**

So I was like,

Ok, well, if I structure it a little bit less,

**

maybe they'll be more successful.

So they were able to develop their own leader, and a different kid would be a leader on each part. Like one of the kids who was a strong leader would probably read through the directions

**

out loud, and a kid with really good artistic ability would—wrote up the directions. And

**

some of the kids were really good thinking about logic, so then they would help figure out if they had the directions translated correctly into regular language. And then some of the kids are really good with visual-spatial relations,

**

so then they would help like actually put the game together. So they played um, Coits, which is like horseshoes, but there's like a rope ring that you throw over instead of a horseshoe. They learned Jack Straws, which is like Pick Up Sticks.

**

They learned Jacks. They learned a couple different marble games. They learned Eleven Men's Morris, which is kind of like checkers. They learned a Native American game that was really complicated

**

And they learned another game, I can't remember what it was called, but it was kind of like a board game where you would roll dice and then move a little thing.

**

And they were occupied for about two hours,

**

[SHE CHUCKLES]

which was longer than they'd ever done anything. It was just—they were they felt really, really positive about what they'd learned and they were able to kind of explain um what they did.

**

I had them write like a little paragraph about

**

the game that they played and what they learned and what they thought about it after they were done.

**

Everyone had literally learned how to play the game and could explain it and thought it was phenomenal.

**

Then I would I moved like some people from one group and some people to another group, and so then they would teach each other how to play the games.

**

It was really fun. They had a really good time.

**

So then periodically through the year if we had some extra time

**

they were like,

[CHUCKLES]

"Oh, Teacher, can we play the Colonial games?"

So it was fun.

Interviewer

So you thought that after you played that that they were just able to do small group work better?

Prairie

Yeah. I think that was like the first time, it really, they understood like what it meant to be like a team.

**

And I didn't have to break up any arguments. Like there were no, like there wasn't any frustration about who was doing what job.

**

It was just really neat. I'm going to hopefully work something like that into my September experience for the kids so then they can start out this year on a

**

more cooperative foot.

[Prairie Paulina R1 Q2]

The interviewer's opening probe helped slow the pace of Prairie's story telling. In response, the expert improvised an almost point-by-point description of how she prepared her lesson. Prairie's plans and her students' behavior in school fused together into an extended vision of classroom life. The expert teacher's narration regularly moves between descriptions of what she planned to discussions of what happened in her class and then back to her plans. Action and imagination merged into a productive and caring landscape that threaded information about students with descriptions of pedagogy.

Later in her interview, Prairie said that when she surveyed her students at the end of the year about the lessons they liked best, one of the units that came up most frequently was Sign of the Beaver and Colonial Games. The expert teacher's students connected strongly to this content, and Prairie believed the lessons changed the way they acted in school. Most of the expert teachers I interviewed describe similar lessons that enabled them to push their classrooms upwards into higher levels of functioning. They told stories about their students learned to perform more effective and demanding lessons. Most of these instructional sequences had a similar structure. Students learned academic content that changed their understanding of the world at the same time that they learned to act in ways that made a concrete difference to the everyday life of their classrooms. New behaviors ranged from cooperative learning activities to the procedures necessary to complete important classroom projects.

In the following passage, expert teacher Addison Ashland described her efforts to teach a unit on human relations early in the school year. Addison's principal had asked

the class to participate in a city-wide writing contest and Addison folded this assignment into the year's opening lessons. The expert's students become inspired by this assignment and the Addison used the contest to organize their work. Throughout her narrative, the NBPTS-NTL teacher challenged her students to think about what it means to treat other people respectfully. She asked them to reflect on the meaning of justice and pushed them to understand the impact of their choices:

Addison

...So, my principal, the human relations commission in Chicago does a contest where the kids write about human relations and how they can have a positive impact on that. And my principal wanted us to be a part of that. So I had my kids, I a lot of teachers are just like

The principal says, 'We want you to do this.'

And they'll just say

We want you to do this. And it's due on this day.

But I can't do that. Especially with something as heavy as human relations. So we, we talked about it for weeks. And did all these little activities. So they could really understand what it meant, and how it's all about interactions, and how every difference effects human relations. Whether its gender or ethnicity or religion or you know

I'm in this gang. And you are in this gang.

Whatever it is. And they finally got it. And once they got it,

Okay, now we can write about it.

So we started out small, like in our room, and human relations in our room, and then we went to our school, and then we went to our neighborhood, and then we went to the city and the country and then the world. [...] But we went, we started small, and we started with independent thinking, and then small group sharing, like I, think-pair-share. And then we would go and share with the large group and then we just kept talking about [human relations]. We kept having a dialogue about what it is. And how we would tie it into everything we did. And I would just be like

Well, is that an example?

Like we would talk about current events,

Is this an example? And the war that we are having.

I was just pulling it into every little thing that we did.

**

And for weeks,

**

until we felt comfortable and everyone had to say,

I feel comfortable enough to write about it.

Like they had to be able to verbalize and write a definition in their own words of what they think it meant and, and I would, you know, I would look at that or hear that and be like

Okay, I think you're ready.

And then we started writing about human relations. And then I thought that made them more aware of their responsibility as a human being and how they do—whatever they think and whatever they feel—every little thing that they do, does impact human relations.

**

I mean, I think most people don't get that. And I just know that they, they really understood and

[3 SECOND PAUSE]

I, I think that they just felt empowered.

Oh yeah, I really do have a say in what's going on.

And one of the objectives in their essays was how they could make a difference. And so they started acting differently

**

in school.

[Addison Ashland R1 Q2]

Addison did not describe any difficulty in managing the complex series of small and whole group learning activities that made up her lesson. She was able to build on her students' enthusiasm and construct an instructional unit that changed her classes' understanding of who they were and how they might care for each other. Her kids became inspired with this content and spent school time working to apply abstract concepts about human relations to the daily challenges of their lives. Addison's transcript continues:

Addison

...and then they started. Their essays were like about what they do to make it better in the neighborhood of New Acapulco or Chicago. And they all came up with really great ideas, and they had to be obviously realistic.

Something that a person with their resources at their age could actually do to make a difference.

**

And one of my kids ended up being a finalist

Interviewer

How great

Addison

for the contest. So that was really nice. But she just had really you know nothing too crazy, like

I am going to change the world

But, you know,

I can make a difference.

**

And I can, being twelve or thirteen

She was twelve, She's going to be thirteen this summer. She, you know

I'm 12 and I can still contribute. I can still make, you know, New Acapulco neighborhood a better place

**

I can help. People understand that they shouldn't be judgmental, and I can do this, and I can do that

**

All of 'em wrote and all of them wanted to do real big things, but nothing that they couldn't actually do.

[Addison Ashland R1 Q2]

In this passage, Addison taught her students a moral lesson. She was able to help her 7th and 8th graders see the world in a new light and judge their actions according to a different standard of value. Addison helped them imagine what it might mean to make a difference, and she gave them skills that helped them express themselves. Her story collapsed hours of discussion and writing practice into a brief narrative of collective academic and personal growth.

This combination of moral and academic development was a major theme throughout the expert teachers' narratives. It was, as I will discuss in the chapter on

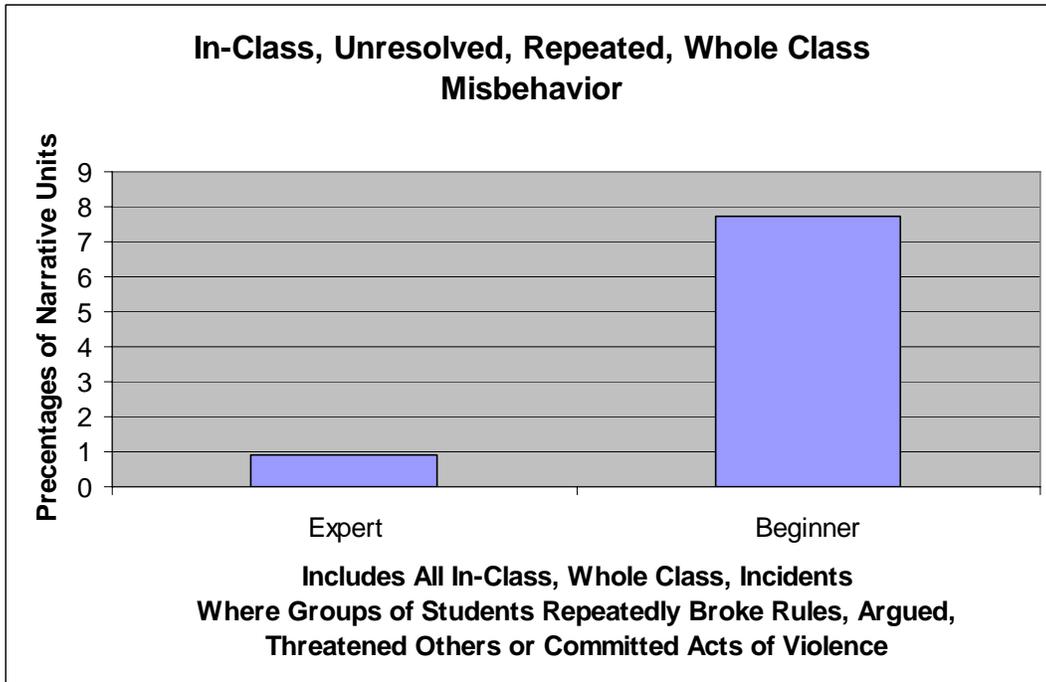
relationships, especially prominent when the veteran educators told stories about individual children.

Beginning teachers Halsted Hoyne, Taylor Touhy, & Keeler Kirkpatrick

The beginners' struggles to manage their classroom had real consequences for their practice. Focusing on academics become difficult, and schoolwork left them exhausted. Chart 6.3 below totals the experts and beginners' accounts of their difficulties managing whole class instruction. Almost 8 % of the incidents the beginners shared in their interviews were descriptions of conflicts that took place, not between the first year teachers' and individual students, but between the beginning teachers and the class as a whole. These incidents included descriptions of classroom moments when all of the beginners' students might fail to turn in homework. They described times when many different children might argue or refuse to follow classroom rules. Instead of scattered outbursts of defiance, the beginning teacher said that they regularly faced mass rebellion.

In contrast, Chart 6.3 shows that less than 1% of the incidents in the NBPTS-NTL teachers' interviews could be coded this way. Unlike the beginners, experts described smooth systems of whole class activities. If there was a problem, they dealt with it. If students could not manage a particular type of schoolwork, the class did something else. Expert rarely described themselves as facing recurring, classroom wide problems that were beyond their power to influence.

Table 6.3 Routine In-Class Misbehavior



Standardized Whole-Class Misbehavior Coded from End of the Year Interviews

Comparison	1
Analytic Codes Displayed	In-Class, Unresolved, Recurring, Whole Class Misbehavior
Experts	0.90%
Beginners	7.73%

Beginning teacher Halsted Hoyne told me she was overwhelmed by the demands of the first week of her job and spent the rest of the fall to struggling to get back in control. Her classroom would regularly erupt into screaming arguments between her and her students. There were moments when it veered into the chaos that pummeled through her first week on the job. A turning point came when Halsted figured out how to minimize the problems caused by Arthur, one of the boys who spent the opening of school wrestling across her classroom floor. She discovered that Arthur was much less likely to fight with another student, or get into an argument with his teacher, if he was allowed to sit at one of her classroom-computers. The boy would play on the machine when he got bored of his teacher’s lessons, instead of complaining about what was going on. If Halsted promised to give him a treat, such as a bag of ‘hot chips,’ Arthur might avoid getting into trouble for the entire day. As a result, Halsted began to use positive incentives for all students. She spent hundreds of dollars of her own money buying small

gifts. Despite concerns about whether this strategy was appropriate, she believed these incentives were necessary to make it through the day.

Halsted

...The other great thing about Arthur was that he could be bought pretty easily. So like a Macdonald's Gift Certificate went a very long way to get him to be into compliance. Or, you know, or a bag of hot chips, or anything, you know, he would really get it together. He loved getting stuff. So I was like

That's great.

I mean at least, you know, I, where I can like keep him in line.

I just get him a lot of stuff that he wants.

**

And it was great. You know. It did work. So. At first I felt really weird about that about that. I thought

Am I buying trying to buy?

And it was, I used that with all my kids. I'm like

Am I buying their attention and their respect?

And it was like

Who cares? I'm getting it. So. And that's the only way I can figure to get it now. So.

And I don't know.

[Halsted Hoyne R1 Q1]

One difficulty Halsted faced as she worked to implement her classroom management system was that the benefits of particular incentive tended decrease over time. She might reduce conflict for a brief span, and begin to focus her students' attention on their schoolwork, until her students started getting bored and trouble would break out. To use an example she shared in her interview, early in the school year, Halsted decided to reward her students each Friday for being good during the week. To track of her kids' progress, she created a bulletin board with a classroom good-behavior chart that had a set of pockets with each student's name. Halsted put green index cards in each of these pockets every morning before school began. During the day, students who didn't turn in an assignment lost their green card and were given a yellow card. Students who hurled an eraser at a classmate's head got a red. Every child who had a green card at the end of the

day got a stamp next to their name on the classroom good-behavior chart. On Friday, the kids with enough stamps received treats and praise. Unfortunately, Halsted said this system began to break down when, after a few weeks time, kids with high numbers of red cards, few stamps, and hardly any treats to enjoy grew resentful.

The beginning teacher told me that the card system was abolished the day the red-card boys lined up to go home from school, started fighting, and ripped the good-behavior bulletin board off the wall. The boys then grabbed the green cards out of their classmates' slots, stuffed them into their own compartments, and tossed everything else around the classroom while Halsted demanded that they settle down. Variations of this cycle occurred at least five or six times during the 2003-2004 school year. After each explosion, the first year teacher would figure out a new classroom management system. When something wasn't working, Halsted believed there was no point to using the same technique over again: "It, to me, it was irrelevant."

Halsted also began the school year without the technical knowledge necessary to create effective language arts lessons. Beginning teachers Taylor Touhy and Keeler Kilpatrick also had difficulty organizing this type of instruction, but Halsted's difficulties were extreme. Her pre-service teaching took place during the time in the school year when the Chicago public system conducted its high stakes assessments. Halsted's supervising teacher was so worried about his classroom's test scores he never let her "really teach." Halsted said that spent her student-teaching working in a classroom, but never engaged in the teachers' daily cycle of planning, performance, and reflection until September.

The beginning teachers I interviewed believed that if they worked hard enough and made the right decisions they could solve most of the problems they faced. Throughout their interviews, they discussed their efforts to figure out ways to organize their classrooms in ways that might lower the level of conflict in their classroom and help the class to work in peace. In the next excerpt, first year teacher Taylor Touhy shared example of this type of narrative. Taylor was overwhelmed by discipline problems during her first month teaching and was forced to leave her first position in the Chicago Public Schools. She spent the rest of fall semester working as a substitute. This transition was difficult for her, and Taylor spent a great deal of time struggling to decide how many of

her problems had been caused by her own poor choices and how many were due to circumstances beyond her control. The interview's third major question surfaced this inner dialogue:

Interviewer

Can you describe moments during the year when thought you'd learned something new about your teaching from your students?

Taylor

[5 SECOND PAUSE]

Yeah. I,

[3 SECOND PAUSE]

When I, I think probably the most learning that I did was, came as a result of me being displaced from a couple different places.

**

And then having the opportunity to step away from it and look back and think about the situation

**

from a clearer point of view. And after six weeks at my school in the beginning of the year in fourth grade, leaving there and thinking about all the hassles that I have had really made me think kind of about the issues about my own clarity in teaching and my organization kind of. And about how it kind of comes back to how my attitude in the classroom is affecting kids. But I just think I learned at a point how important being explicit is

**

to the kids and giving them a clear picture of what's expected kind of.

**

And not, not just meaning,

These are the rules of our classroom

but I gave this test one time at the beginning of the year on some English concept

[STRONG SADNESS IN HER VOICE]

and it was, it just, I didn't give clear directions and so it just bombed. It was kind of a different type of a test. It wasn't pencil to paper. You know they had to cut some things out and put them in the right places -- for it. And I, it was a cool idea but I wasn't clear and it, it just bombed. And at the time I

was so mad at my kids cause they hadn't listened and da, da, da. And then I step away, and I'm just thinking to myself,

I could've gone about that such a better way, in such a better way.

And just how, being how, just the clarity of my teaching just is so meaningful. And how that kind of stems into my own planning, like taking that extra time to really think,

Okay, yes, we're going to do this but how? And how am I going to go about doing that?

I think. So that's someplace that I really focused on or I was, I really learned something about my teaching.

[6 SECOND PAUSE]

I think probably some of the interactions that I had with students, some of the things that they maybe said to me or near me that I just realize you know, you, I get worked up if they said something mean about me or about someone near me or something like that, you know.

**

I worked in a school where those primarily African American and you know a lot of, a lot of times I would be in an area where somebody would say something, call somebody negatively a white boy or something of that sort. In the beginning, you know, all flustered red in the face, you know,

What's going on here?

and then, I just really, I really made myself think about

Why, why would he have said that?

and

What's coming, what's coming through his head?

and I, it made me just stop to think about, about my students and their lives as opposed to just, you know, he wasn't trying to be hurtful to me, I don't think.

**

So that interaction kind of really forced me to think about my students as individuals and kind of

Who are these kids? What are their lives? Why would he have said that? And how can I help him kind of step outside his head and maybe make a better decision next time or maybe try to open up his mind a little bit?

[Taylor Touhy R1 Q3]

Taylor said that one of the most important things she learned from her experience was the importance of thinking through her instruction and organizing the different pieces of her lessons almost by step. The beginning teacher discovered she could not take anything for granted. If she did not explicitly design each activity her lesson would crash.

Taylor had blond hair and fair skin and she stood out from the African American students she worked with during winter semester. Taylor did not grow up in an integrated neighborhood, and there were aspects of her students' lives that she said she did not understand. The beginning teacher had to learn how to read her students intentions, and struggle to understand the meaning behind their behavior. Sometimes her experiences made her angry and sometimes they made her sad, but she regularly worked to connect with the young people under her care:

Who are these kids? What are their lives? Why would he have said that? And how can I help him kind of step outside his head and maybe make a better decision next time or maybe try to open up his mind a little bit?

Taylor lived in a state of almost constant reflection.

Halsted Hoyne took a different approach. The problems she faced were so overwhelming the beginning teacher worked to minimize her troubles just to make it through the day. Halsted was employed in a large and disorganized building on the city's East Side where almost half the teachers who started the school year transferred or quit. Once a teacher left, Halsted said classrooms were staffed by a parade of substitutes, teachers' aides, and first year teachers. Discipline problems began to grow "out of control."

Halsted's students did not endure that fate. Her children had the same teacher from September until June. They shared Halsted's mistakes and they rose with her successes. Youngsters who struggled against a great deal of adversity spent the school year with a caring adult who also struggled against adversity. Three-quarters of the students in Halsted's classroom were boys. A large number of these students came to school with serious academic and behavior problems. One of the veteran teachers in Halsted's grade level was pregnant in September, and there was the suggestion in the beginning teacher's narrative that the school administration loaded the beginner's classroom with the grade's problem children to help the veteran make it through the year.

Halsted's transcript had more than three times as many mentions of unresolved whole class behavior problems than all the NBPTS-NTL teachers combined. No matter what happened during the school day, and no matter how badly she felt when she came home that evening, Halsted refused to leave her school. The beginning teacher believed she could not allow herself to feel guilty. She was determined to stay on the job and be there for her students:

Interviewer

Okay, can you describe some moments during the year when you thought you learned something new about your teaching or your students?

Halsted

[5 SECOND PAUSE]

Well, a huge thing that I learned was that, and this was something I learned about in school, but was sort of just staying in the moment. That was one of the most important things that I had to stay very mindful of the moment. Because if I let things sort of, if I started worrying about 20 minutes from now, things could get out of control really, really fast. I also learned that I am not above poor behavior. I was guilty of telling kids to shut up. I was, you know, guilty of locking kids out of the classroom. I mean and that's absolutely of something that I thought that I would never be capable of and I, and I did it. So I was really grateful to have this journal to reflect upon because I would have sometimes I would just have to snap at myself and say

Okay, you are the adult in this situation. You've got to remember that!

And that was something that I did not even thing that I was going to have to worry about.

**

But it turned out to be one of the most important things that I had to worry about.

[Halsted Hoyne R1 Q3]

One of the reasons Halsted was able to make it through the school year was that, in January, she was given a mentor teacher who helped her organize her classroom and connect to her students. Until that happened, the first year teacher worked alone. By the middle of October, most of the new teachers Halsted had grown to know left her school. There were days when the only things that kept her going were friends from her master's

class, her husband, and pure will. Every afternoon she walked out of her classroom and tried to let go of her mistakes. Every morning she walked back inside it.

Keeler Kirkpatrick, another of the beginning teachers I interviewed, described a similar set of challenges in her interview. Keeler was particularly eloquent when she discussed her will to carry on and her obligation to see the year to its end:

I hate quitting

**

I don't ,I don't, I don't. It makes me feel like a failure. I don't want to feel like I failed. My whole idea was

If I could make it through at least the school year.

**

If I don't come back next year that's fine, you know, but I've got to make it through the school year.

**

'Cause you also hear these stories. Kids in these schools. One of my friends who got hired in a different school, she got hired in the 6th week of school and she was that she was the 11th teacher in that classroom. Not substitutes. The 11th teacher that had been hired for that classroom!

**

And I mean when the kids see that the teachers don't care enough to keep coming back then why, why should they care about their education? And so I didn't want my kids getting that idea as well. I was like:

No! Your education is important. It should be important to you. It should be important to me. It's important enough to me that I am going to stay here. And I'm going to keep coming back every day and keep trying.

**

Because I didn't want these kids to sit there and be like

Well, no one cares about our education. Mr. Kilcoyne quit and Ms. Kirkpatrick quit you know. Whoever comes in next is going to quit too.

And then they would just give up.

**

and I mean I could make it through. I have the support from my friends and my family and the program and my administration to make it through and I have lots of people pulling for me. These kids didn't have that.

[Keeler Kirpatrick R1 Q 3]

It is important to point out that it is not impossible to create supports for new teachers that mitigate many of the difficulties the beginners described (Kapadia, Coca, & Easton, 2007; Kelly, 2004). The Chicago Public Schools at this time was working to improve its retention rate, and all of the beginners I interviewed discussed how parts of the system supported their efforts. Unfortunately, at least in 2003-2004, these efforts weren't enough to change the beginners' work experience. The new teachers still lived in the unforgiving classroom landscapes that had been experienced by generations of teachers in the United States' high poverty schools.

Conclusion

In the previous two chapters, I wove the stories teachers shared during their first round of interviews into a narrative that described about how the school year came to life. In accord with the findings of many other researchers (e. g. Berliner, 1986; Bohn et al., 2004; Doyle, 1986; Evertson & Emmer, 1982; Kounin, 1970; La Paro, Pianta, & Stuhlman, 2004; Leinhardt & Greeno, 1986; Pianta, Belsky, Vandergrift, Houts, & Morrison, 2008; Rimm-Kaufman, La Paro, Downer, & Pianta, 2005; Ware, 2006) I argued the ability to organize a peaceful working classroom was a function of teachers' knowledge and skill. Better plans and more skillful lessons gave experts the power to transform classroom spaces in what was once called the worst public school system in America into caring communities where youngsters worked in harmony. Peaceful, working classrooms were described as highly, structured social systems thick with activities that might evolve over time. Starting the year off well was viewed as a critical challenge that generated resources that supported students' efforts to manage the daily problems produced by life at school.

Throughout this discussion, the classroom was portrayed, with Bicklen (1995), as a hostile space that required knowledge, effort, and caring to transform. The high levels of conflict in the beginners' interviews were viewed as a consequence of their inability to manage a difficult and complex environment, rather than the result of negligence. The

academically focused communities the experts described in their interviews were seen as a function of their skill and dedication rather than a reliable product of the classroom support and management systems of the Chicago public schools.

My writings and the verbatim transcriptions that run throughout these chapters are designed to help readers imagine how the expert teachers' choreographed this work. In their writings on teachers' knowledge, Connelly and Clandinin use the term "storied life composition," to describe how the life of a peaceful, working classroom grows and develops over time. In these environments, time is experienced as an "authored" story that owes much of its texture to the teacher's agency. Throughout my writings and analysis, I have attempted to describe the contribution that classroom routines and procedures make to the stories that teachers tell. Highly productive routines create a classroom setting recurring problems are solved automatically and academic work flows productively from one subject to the next. Similar to Anderson's (2007) depiction of the human mind, classrooms were depicted as places where many different types of systems act in parallel. Time was structured by interactive of systems of classroom management, systems of instruction, and recurring interactions between teachers and students, students and students, and students and content matter. The successful development and orchestration of these social structures was viewed as a critical dimension of teachers' expertise.

The verbatim transcriptions I threaded into these writings came from many different locations in the interviews. As I discussed in the methods section, I did not give the teachers a timeline and ask them to discuss the development of their classrooms from the first day of class until the year's end. I attempted to collect this data more naturalistically, by asking participants to describe how their schoolwork made a difference and encouraging them to voice stories about what they felt mattered most. As a result, my writings about the growth and development of the teachers' work places are somewhat artificial: Many of the transcripts threw the reader directly into the life of the school year, rather than beginning with a portrayal of its development. The writings, charts, and passages used to illustrate my analysis were designed to create what Tyler (1986) describes as an imaginative vehicle. I organized the different pieces that I hoped would allow the reader to enter into the teachers' professional knowledge landscapes and

think through the findings generated by my analysis. My goal was to create a text that employed the abstract concepts I discussed in my literature review to allow readers to see, hear, and feel the educators' inner worlds.

I do not claim that the impression generated by my writings is the same as that produced by working through the teachers' stories as a whole. Readers should note that, as the charts indicate, the beginners described working in harsh and violent landscape. The passages I published in these chapters describe only a small portion of the difficulties the first year teachers described in their interviews. Halsted and Keeler told me there were months when their work was so stressful they would regularly come home and cry. I made this choice because there are simply so many descriptions of the problems beginners face in the literature (See, especially, Codell, 1999; Roehrig et al., 2002; Ryan, 1980; Vanover & Saldaña, 2005), that I did not want to overwhelm the reader with what Tyack (1974) described as, "scenes of classroom horror." Instead, I focused my writings on the first year teachers' efforts to manage the technical demands of their schoolwork. It is thus my opinion that the contrasts between the two groups remembered work experience are stronger and more extreme than what I have presented here. While the experts' practice was not free of blemishes, the worlds (Brunner, 1986) they described in their interviews were qualitatively different than those depicted by the beginners. Belmont and Prairie constructed classroom activity structures that positively shaped their students' choices across the school year and lifted the communities they guided to high levels of academic and moral accomplishment. Indiana, Halsted, Taylor, and Keeler's choices created classroom systems that, with the best of intentions, did them and their students harm.

References

- Anderson, J. R. (2007). *How can the human mind occur in the physical universe?* New York: Oxford University Press.
- Benner, P. E., Hooper-Kyriakidis, P. L., & Stannard, D. (1999). *Clinical wisdom and interventions in critical care: A thinking-in-action approach*. Philadelphia: Saunders.
- Benner, P. E., Tanner, C. A., & Chelsea, C. (1996). *Expertise in nursing practice: Caring, clinical judgment, and ethics*. New York: Springer Publishing Company.
- Berliner, D. C. (1986). In search of the expert pedagogue. *Educational Researcher*, 13, 5-10.
- Biklen, S. K. (1995). *School Work: Gender and the cultural construction of teaching*. New York: Teacher's College Press.
- Bohn, C. M., Roehrig, A. D., & Pressley, M. (2004). The first days of school in the classrooms of two more effective and four less effective primary-grades teachers. *The Elementary School Journal*, 104(4), 269-287.
- Borko, H., & Livingston, L. (1989). Cognition and improvisation: Differences in mathematics instruction by expert and novice teachers. *American Educational Research Journal*, 26(4), 473-498.
- Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.
- Carter, K., & Doyle, W. (1986). Teachers' knowledge structures and comprehension processes. In J. Calderhead (Ed.), *Exploring teachers' thinking* (pp. 147-160). London: Cassell.
- Codell, E. R. (1999). *Educating Esmé: Diary of a teacher's first year*. Chapel Hill, N.C: Algonquin Books of Chapel Hill.
- Doyle, W. (1986). Classroom organization and management. In M. C. Wittrock (Ed.), *Handbook of Research on Teaching* (3rd ed., pp. 392-431). New York: Macmillan.
- Evertson, C. M., & Emmer, E. T. (1982). Effective management at the beginning of the school year in junior high classes. *Journal of Educational Psychology*, 74(4), 485-498.
- Evertson, C. M., Emmer, E. T., Sanford, J. P., & Clements, B. S. (1983). Improving classroom management: An experiment in elementary school classrooms. *Elementary School Journal*, 84(2), 173-188.
- Foster, M. (1991). "Just got to find a way": Case studies of the lives and practices of exemplarily Black high school teachers. In M. Foster (Ed.), *Qualitative investigations into schools and schooling* (pp. 273-309). New York: Aims.
- Gay, G. (2000). *Culturally responsive teaching: Theory, research and practice*. New York: Teachers College Press.
- Irvine, J. J., & Fraser, J. W. (1998). Warm demanders. *Education Week*, May 13, p. 35.
- Kapadia, K., Coca, V., & Easton, J. Q. (2007). *Keeping new teachers: A first look at the influences of induction in Chicago public schools*. Chicago: Consortium on Chicago School Research.
- Kelly, L. M. (2004). Why Induction Matters. *Journal of Teacher Education*, 55(5), 438-

448.

- Kintsch, W. (1998). *Comprehension: A paradigm for cognition*. Cambridge, UK: Cambridge University Press.
- Kleinfeld, J. (1992). Learning to think like a teacher: The study of cases. In J. H. Shulman (Ed.), *Case methods in teacher education*. New York: Teachers College Press.
- Kounin, J. (1970). *Discipline and group management in classrooms*. New York: Holt, Rinehart & Winston.
- La Paro, K. M., Pianta, R. C., & Stuhlman, M. W. (2004). The Classroom Assessment Scoring System: Findings from the pre-kindergarten year. *The Elementary School Journal*, 104(5), 409-427.
- Ladson-Billings, G. (2001). *Crossing over to Canaan: The journey of new teachers in diverse classrooms*. San Francisco: Jossey-Bass.
- Leinhardt, G., & Greeno, J. G. (1986). The cognitive skill of teaching. *Journal of Educational Psychology*, 78(2), 75-95.
- Leinhardt, G., Weidman, C., & Hammond, K. M. (1987). Introduction and integration of classroom routines by expert teachers. *Curriculum Inquiry*, 17(2), 135-176.
- National Partnership for Teaching in At-Risk Schools. (2005). *Qualified teachers for at-risk schools: A national imperative*. Washington, DC: National Partnership for Teaching in At-Risk Schools.
- National Reading Panel. (2000). *Teaching children to read: reports of the subgroups* (Publication Report). Washington, D.C.: National Institute for Health and Child Development.
- Pianta, R. C., Belsky, J., Vandergrift, N., Houts, R., & Morrison, F. J. (2008). Classroom effects on children's achievement trajectories in elementary school. *American Educational Research Journal*, 45(2), 365-397.
- Recht, D. R., & Leslie, L. (1988). Effect of prior knowledge on good and poor readers' memory of text. *Journal of Educational Psychology*, 80(1), 16-20.
- Rimm-Kaufman, S. E., La Paro, K. M., Downer, J. T., & Pianta, R. C. (2005). The contribution of classroom setting and quality of instruction to children's behavior in kindergarten classrooms. *The Elementary School Journal*, 105(4), 377-395.
- Roehrig, A. D., Pressley, M., & Talotta, D. A. (2002). *Stories of beginning teachers: First-year challenges and beyond*. Notre Dame, Ind.: University of Notre Dame Press.
- Ryan, K. (1970). *Don't smile until Christmas: Accounts of the first year of teaching*. Chicago: University of Chicago Press.
- Ryan, K. (1980). *Biting the apple: Accounts of first year teachers*. New York: Longman.
- Shavelson, R. J. (1983). Review of research on teachers' pedagogical judgments, plans and decisions. *Elementary School Journal*, 83(4), 392-413.
- Taylor, B. M., Person, D. P., Clark, K., & Walpole, S. (2000). Effective schools and accomplished teachers: Lessons about primary-grade reading instruction in low income schools. *The Elementary School Journal*, 101(2), 121-165.
- Tyack, D. (1974). *The one best system: A history of urban education*. Cambridge, MA: Harvard.
- Tyler, S. A. (1986). Post-modern ethnography: From document of the occult to occult document. In J. Clifford & G. E. Marcus (Eds.), *Writing culture: The poetics and*

- politics of ethnography* (pp. 122-140). Berkeley: University of California Press.
- Vanover, C., & Saldaña, J. (2005). Chalkboard concerto: Growing up as a teacher in the Chicago Public Schools. In J. Saldaña (Ed.), *Ethnodrama: An anthology of reality theatre*. New York: Rowman & Littlefield.
- Walker, C. H. (1987). Relative importance of domain knowledge and overall aptitude on acquisition of domain related information. *Cognition and Instruction*, 4(1), 25-42.
- Ware, F. (2002). Black teachers' perceptions of their professional roles and practices. In J. J. Irvine (Ed.), *In search of wholeness: African American teachers and their culturally responsive practices* (pp. 33-45). New York: Palgrave.
- Ware, F. (2006). Warm demander pedagogy: Culturally responsive teaching that supports a culture of achievement for African American students. *Urban Education*, 41, 427.

Chapter VII

Relationships

The expert teachers did not focus their complete attention on choreographing instruction. Some of their labor was closer to therapy (Louden, 1991). The accomplished, veteran educators continually endeavored to transform the lives of the children they served and to help vulnerable students shape new skills and identities out of the hurly-burly of their classrooms. Addison, Belmont, Prairie and the other NBPTS-NTL teachers worked as what educational researchers describe as other-mothers (Collins, 1991; Irvine, 2002). The expert teachers pushed their students to achieve, and they advocated for them when they get in trouble. They took responsibility for the children in ways that went beyond a narrow definition of their role and built deep bonds with young people. Belmont's discussion of her work with Antonia, published in Excerpt 3.1, in the methods section is a quiet example of this labor. Some of the NBPTS-NTL teachers' work was more dramatic.

Accomplished educator Addison Ashland spent long portions of her interview describing her efforts to, quite literally, save her students' lives. Addison fought to give the 7th graders in her classroom the love, knowledge, and craft they needed to survive in neighborhoods where violence was commonplace. Some of Addison's students were neglected. They were required to wake up, eat, dress, go to school, come back home, and do their homework without their family's supervision or support. Addison cared for boys whose mothers had abandoned them and whose primary role models were street-gang leaders. She counseled girls who partied late into the night and whose family members were incarcerated for violent crimes. Addison demanded her students stand up for themselves and make a contribution. She compelled them to do their best.

Addison, similar to the other expert teachers, was adamant about the power of school knowledge—reading, writing, social studies, mathematics and science—to benefit the children she served. Throughout her interview she testified to the practical benefits her students might receive from communicating skillfully and thinking critically about everyday problems. She wanted her students to grow to be respected members of their communities and to have the understanding necessary to analyze complex social and ethical problems. Knowledge, to use a term discussed frequently in sociological theory, was *sacred* to her (Durkheim, 1995; Goffman, 1967).

Creating a caring relationship with a vulnerable child is not easy. All of the expert teachers I interviewed were able to organize socially and academically beneficial classroom environments for their students. The experts might face minor challenges managing a particular stretch of instruction, but similar to the mother of a large family, each was able to prepare a nourishing, daily round of lessons. One major area of difficulty, however, was the labor required to pull disengaged students with academic or emotional problems into their classroom's circle of instruction. Some students resisted the expert teachers' efforts. Some children lacked the skills necessary to work independently or contribute to a group project. Some youngsters responded to the pain they suffered from family conflicts by hurting other people. The NBPTS-NTL teachers described themselves as fully capable of managing misbehavior. Difficult students were not allowed to interfere with the activity of the class as a whole. Turning a vulnerable young person around and teaching him or her to become an engaged classroom participant, however, was described as a challenging task that might require months of careful labor.

Sometimes calling family members helped this effort. Sometimes it didn't. Sometimes a particular assignment might strike a child's imagination and carry that young person into a new sense of self. The stakes were high. The NBPTS-NTL teachers believed the young persons they served would suffer if they did not learn how to trust a caring adult and master the skills necessary to succeed in school. The veteran educators also understood that if they could not create a connection with a problem student, they might spend months managing poor behavior, bad attitudes, and sulks.

The major theme of this chapter is that the expert teachers had an enormous

resource to support their efforts to build positive relationships that the beginners lacked. The NBPTS-NTL teachers' classrooms were alive with engaging instruction. The expert teachers regularly discussed lessons and activities their students enjoyed and that helped children grow. Children might begin school resisting their efforts, but time was on the experts' side. The daily press of the experts' instruction softened bad feelings and transformed patterns of poor behavior. Engaging lessons built classroom connections that pulled vulnerable students out of themselves and into the school community. Relationships developed that made school fun.

In the final section of this chapter, I will publish 5 stories of caring I took from the teachers' interviews. These experts will be presented without commentary and allow the reader to experience the teachers' stories with little filtering. The writings, charts, and excerpts that proceed this collection might be seen as an attempt to help give readers background knowledge to support their efforts to create a rich understanding (Kintsch, 1998; Taylor, 1971) of the landscapes shared in those texts.

NBPTS-NTL teacher Dorchester Damen's story of how she worked with Allison, an African-American student in her multi-ethnic classroom, exemplifies the experts' skill at connecting with vulnerable students. Allison was described as a disengaged student who had flunked her CPS high stakes exam the previous year and was required to go to summer school after 3rd grade. Dorchester was one of the few teachers I interviewed who is able to describe the exact moment her relationship with a vulnerable student changed:

There is a little girl named Allison and at the beginning of the year I realized that Allison was significantly behind academically and, really, socially too. She had a lot of difficulty making friends that were true kind of friends.

**

you know she'd hang with someone one day and then she is screaming at them the next day.

**

and that kind of sort of thing

**

so I think that for me, I choose her [to discuss in the interview]. I made an impact on her because I was able to reach her in some ways that I don't necessarily always have the chance to reach other kids.

**

Allison struggled with reading and math, so therefore she didn't really like doing the work.

**

She was constantly trying to find ways to get out of it, that

I have to go to the bathroom. I have to do this. I have to do the other.

**

And, so, therefore, I had, at the beginning of the year, a really difficult time getting her, you know, to figure out what her weaknesses were.

**

Because she really blocked me out in so many ways.

**

And then what happened after a couple of months of school year. My school is a magnet school. So that that most of the kids are bussed. So at the end of the day there are literally 30 buses that line up around the whole school block. And you have to take your kids to every single bus as they move along. So we go out and Allison would start just holding my hand at the end of the day.

[Dorchester Damen R1 Q1]

This connection did not occur by chance. From the beginning of school forward, Dorchester said she worked to change Allison's attitude and behavior. The expert teacher said she gave Allison books on animals, books on kids, books on clothes, the latest Britney Spears magazine. Dorchester called the child's family. She asked other faculty members about Allison. Nothing seemed to help. In Dorchester's account, Allison spent the first month of school acting out. The child's transformation began with a writing assignment. Dorchester had the class journal as part of their language arts period. Kids brainstormed about topics they are interested in and drafted ideas that they might expand into more polished pieces of writing. At first, Allison resisted. As Dorchester explains, the child refused to do any real work:

I noticed this, you know, when we first started our, our journaling. That, you know, she didn't do it at first, but

**

it's, it's like with Allison you have to find something that really clicks with her.

**

Because she won't always do it, but we were working on a particular story

**

and she decided that she was going to write this whole story about horses. And she just wrote pages and pages

**

you know about this horse and his whole struggle to be a champion. And I, I, I think it was based on some movie that she had watched, but, you know, based on her skill level I, I, I was still impressed with her ability to kind of write this story. She could add in parts that you know she wanted to add in and

**

and, you know, come to me for help and revision and things like that.

**

So, she did that one. And then she did another one. This is this is all based on you know her working on her own, because she's not getting a lot of parental support at home,

**

you know, in terms of academics.

[Dorchester Damen R1 Q1]

Allison began writing her story about a horse who wants in late September. Dorchester said the child did not reach for her hand until mid-October. From the beginning of school until that moment, Dorchester had to manage conflict and poor behavior. Allison's attempt to connect with her teacher came as a surprise:

And, you know, I have to say that,

[TEACHER SPEAKS SLOWER]

if Allison hadn't come to me with that handholding thing at the end of the day, you know.

[SPEAKS QUICKLY]

And this is what really bothered me when I thought about this is as I was writing this up [for the interview]. You know,

What kind of what kind of connection would I have made with her?

**

If any at all?

**

Because this is something that she really initiated. But I, I mean once she did that

**

it was like,

Okay! This is my in.

**

Let me take this and run with it, you know.

**

[Dorchester Damen R1 Q1]

Building off this opportunity was not a simple matter. Dorchester had to think-on-her feet and decide how best to grow this connection:

We would just talk everyday.

**

And it was really interesting. Because at first, you know, I knew that Allison had so many struggles in the classroom

**

that I stayed away from classroom stuff. I stayed away from any instances of problems that she might had.

**

I just strictly concentrated on, you know

What are you doing after school? Where are you going swimming today? Blah, blah, blah. What are you doing on the weekend? And where did you get those new shoes from?

**

that kind of thing. To kind of build a rapport with her.

**

And I said within my writing that I felt bad that she actually initiated this. I didn't.

**

She did. She was the one that came to me to hold my hand everyday.

[Dorchester Damen R1 Q1]

In her teacher's account, Allison underwent a strong, healing change. The moment-to-moment benefits of living and working in the NBPTS-NTL teachers' classroom gave the child the resources she needed to grow. The change was not instantaneous. There were still moments when Allison exasperated her teacher:

Because, you know. in the classroom I am always

[SPEAKS QUICKLY]

Allison, where's your pencils? Get started! Let's go! Allison stop yelling at him! Allison stop doing this! Allison!

You know, by the end of the day, she would be furious with me.

**

But it amazes me that no matter how bad a day that she had, she always came to hold my hand.

**

Always.

[Dorchester Damen R1 Q1]

During her talks with Allison at the end of the day, Dorchester said she asked the child to reflect on her classroom behavior. Dorchester used these sessions to help Allison make more productive choices. The expert teacher showed the child how to write notes to other students whose behavior did not meet Allison's high standards instead of getting into arguments with them. Dorchester taught Allison how to put herself in other children's places and recognize how her choices contributed to her problems. Dorchester also worked to improve Allison's academic skills. She tutored her after school and showed the child how to evaluate her work and ask for help. The NBPTS-NTL teacher constantly encouraged Allison to write. She regularly gave her positive feedback:

Dorchester

...So, and it was for her, I think, it was finding something that she was good at.

**

You know, and I think that at the beginning of the year she just kind of felt that she wasn't good at anything in school

**

and so it was like all day long this, this, this

Let's play this game of trying to cover up what I can really do
and what I am really capable of.

**

And then, you know, as the school year progressed.

**

I started to really encourage her writing

**

that was the one area where I could say,

Allison, this is amazing! Look at what you did! Blah, blah, blah.
This is awesome!

You know. That was you know the one chance that she really was able to
shine and

**

get that positive feedback and that kind of stuff, so. I think that made her
feel good as the

**

you know, as we worked on in the school year.

**

especially Writer's Workshop.

[Dorchester R1 Q1]

Allison began to control her temper and put more effort into her schoolwork. She started to make some friends. Instead of being the girl who flunked 3rd grade and had to go to summer school, Allison became her teacher's pet.

Later in the interview, Dorchester told me that one of the high points of the school year was a social studies unit on the Wild West in May. Students were required to break into groups, look up information about a famous character from that era, and write reports about that person. As part of this unit, the groups created a skit that described key moments from their character's life. The unit became a major opportunity for Allison's growth.

Allison, she did more work. Because, like I said, she's a writer. So she was able to write a lot of the plays that her group wrote and, you know, just. And she actually kind of blossomed at this time. Because usually I put

Allison with stronger kids, so that she was the one that kind of took the lead from them. But at this time, it was late in the year and I allowed the kids to pick

**

who they were going to work with and I didn't put any constraints on who they were going to work with. They just couldn't have more than five people in the group.

**

So Allison was working with two kids that are special ed, so I was like,

Uh, oh. What was that going to turn out like?

And you know, I mean, Allison just took over. She was very bossy,

[INTERVIEWER LAUGHS]

but, you know, the kids kind of needed that. You know

You stand right there. These are your three lines. Say it! No, you said it wrong. Say it again!

And I was just like

Whoa!

[INTERVIEWER LAUGHS]

I mean she just, she just took over.

**

and she I don't know whether she, I think there was kind of, especially among the girl groups, there was this kind of competition thing.

**

I kind of felt like they were competing to see who was going to have the best skit. You know, even though I wasn't giving prizes I never said, you know,

Whoever is the best gets ice cream.

I just felt that wave, that kind of undercurrent in the classroom. And Allison really was pushing these other two kids.

**

You know, her writing ability if I had to grade it on the same scale as everybody else is it wasn't same kind of writing. But just, so she is putting forth that same kind of effort. She's, you know, giving me some output and work that, that, that was good for her.

[Dorchester Damen R1 Q2]

Allison became one of the leaders of the class. She conceptualized a difficult project, motivated other students to pitch in, and created a product of genuine value. Rather than fighting with her teacher and dragging down the class, Allison pushed the other vulnerable children up and helped them grow. Academic became a source of identity for the young person. In Dorchester's words, "Allison, she did more work. Because, like I said, she's a writer."

Almost all of the stories of student success shared by the NBPTS-NTL teachers had this same structure. Experts reported intense one-on-one relationships with students that required judgment to construct and craft to manage. Experts also described the almost therapeutic benefits students received from spending six hours a day doing academic work in their classrooms. Students found strengths that they were not aware and became engaged in academic subjects that had once been meaningless. Relational and instructional practice reinforced each other. Lessons that allowed vulnerable students to succeed created opportunities for praise and good feeling that strengthened classroom relationships. Stronger relationships, in turn, supported higher levels of academic engagement. When children felt good about their teacher, they became more open to learning.

One issue that my data cannot allow me to discuss deeply was how these changed connections impacted other students' perceptions of the class. It is my guess, even though Dorchester does not mention it, that it mattered to her classmates that Alison, the girl who had flunked her 3rd grade exam and was always acting out, was now writing them notes asking them to improve their behavior. Or, to use an example I return to later, it seems likely that students' perceptions of their class was influenced by the fact that Geoffrey, the boy who spent the first day of school running around the room, was now sitting at his desk surrounded by books. The collection of stories that I publish at the end of this chapter also have strong examples of the teachers' care work that might have influenced children's views about the nature of their classroom community as well as their moral imagination and their understanding idea of how to lead a good life. (Aristotle, 2000; Foster, 1997; Ladson-Billings, 1994).

The beginning teachers I interviewed cared for their students deeply, but the relationships they constructed were not supported by effective sets of classroom routines.

In their account, the beginners lacked a strong grasp of the situation. They had difficulty orchestrating the moment with poise and grace. As I will discuss in the quantitative section of this chapter, below, beginners did not get the same *lift* out of instruction, nor did they report taking pride in their students' accomplishments with the same frequency. Beginners built relationships in "a war zone," rather than in a peaceful working classroom.

In some ways, the beginners might be described as acting as "othersisters" rather than othermothers. Mothers tend to be powerful people who have a great deal of influence over their children's lives. First year teachers Halsted Hoyne, Indiana Ingleside, Keeler Kirkpatrick, and Taylor Touhy told me explicitly that they cannot command the same type of respect as the experienced, African American teachers at their schools. The first year teachers had to construct different ways of working with their students' and figure out how to organize their classrooms around alternative sources of authority. Much of the work the first teachers were most proud took place outside the regular routines of their classrooms. Indiana and Keeler, for instance, discussed how they gave students they had developed strong relationships with extra assignments. Favored students also tended work with their teachers after school, and during this time they focused on academic work the teacher could not organize during the regular school day.

In the next passage, first year teacher Keeler Kirkpatrick describes creating a beneficial relationship with one of the eighth graders in her classroom. Her narrative shows both the moral commitment to helping others that was a prominent theme of the beginners' narratives and the difficulties that their lack of skill in managing their classrooms posed for their work.

Interviewer

...And if you could just tell me the story about a student that you made a difference this year.

Keeler

When I first read that question the first student that popped into my head was Annie.

**

She is probably my one of my quietest students.

[INTERVIEWER ADJUSTS TAPE PLAYER. 18 SECOND PAUSE.]

Not quietest students,

**

loves to read

**

when I first got to the school I came to the school at the 7th or 8th week of the school year

**

so I she constantly had a book open

**

and you know kids teased her constantly about how she read all the time.

**

And so, I really I didn't want her to be ostracized by the rest of the kids. Didn't want her being teased that much or to make her withdraw

**

from the class, so I really. Her favorite was the Harry Potter and so I made sure to go to the bookstore and buy all the Harry Potter books I could to have them in the classroom library so she could use those, to read those I mean. And then I would discuss like different parts of the books with her and then I would find other books that I thought she might enjoy the work. She was a fairly high reading level compared to the rest of the kids.

**

And so I found some other books that I had enjoyed that I thought she might and make sure to give them to her and say, you know

Why don't you read this?

And we discussed them afterward during times when she finished work and other kids were doing something and after school or at lunch or at some other point during the day and then eventually she started also writing her own books.

**

and then she got sick and tired of waiting for the next Harry Potter book to come out and started writing Harry Potter Number Six

Interviewer

Oh my gosh

Keeler

And it ended up being 62 pages long

Interviewer

Oh my gosh

Keeler

And periodically about every ten pages a show she would give me the 10 pages or so that she had written the whole thing that she had so far

**

and I would read over it and

**

kind of give her feed back on it. I really saw her writing improve during that. I wouldn't necessarily correct her grammar

**

and her punctuation because I didn't want her to feel like it was a homework assignment. I didn't want her getting feeling like it was like something she had to do for school and tedious.

**

I wanted to keep her creative instincts going,

**

but I would as I would tell her things that I loved about it and what you know looked forward to next time.

**

And it really improved over the time. She actually started one and then quit it and then started the second version.

Interviewer

Oh my gosh

Keeler

So, it ended up being this fabulous story and then she ended up writing a couple of other shorter forgotten stories really realistic fiction and I would she would always give them to me to read and I would talk to her about it. And it really helped to boost her confidence.

**

in any writing assignments I would give her in class.

[Keeler Kirkpatrick R1 Q1]

Annie was inspired by her teacher's assignments to become deeply engaged in her

schoolwork. The work built trust and improved Annie's confidence. Many of the instructional methods Keeler described in this passage were similar to the Writer's Workshop techniques that Dorchester discussed in her narrative about Allison. A major difference, however, as will be discussed at length in Chapter 8, is that Dorchester and most of the other expert teachers learned to use these methods to transform their entire classrooms. Keeler reported her ability to provide this type of learning experience to the other students in her classroom was limited.

In the next passage, the first year teacher's narrative moves from her description of her work with Annie to a discussion of her difficulties with the rest of the class. The relationship between teacher and student is described very tenderly. It is easy for the reader to enter into the connection between the child and the first year teacher. Keeler's pride and happiness in her student's success are palpable. The tone of the narrative changes, however, when Keeler talks about the writing instruction she orchestrated with the rest of the class. These problems were foreshadowed in the previous section when Keeler described how she responded to the way the class teased Annie. Instead of responding to the matter directly, Keeler worked off to the side and seeded her classroom library with books Annie might like to read. The transcript continues:

The teasing with the other kids because I saw that I was very hands on with her and I love reading too. And you know really encouraging her to continue to do that. The kids, it never got to the point where she felt that she was being shunned by the rest of the kids for reading so much. And I mean her self-confidence really improved. And by the end of the year, or not the end of the year, when they started getting their letters from high school, the acceptance from high school

**

she had gotten into a fairly decent high school in the city and she was really nervous about going there. And they signed her up for these honors classes. And I, I think she was worried about taking them, I was like

Annie, I know that you are going to do really great in these.

I was like

This is what I see for you 10 years down the line.

I was like

In 10 years you are going to have got a scholarship to college

[HITS TABLE]

you're going to major in journalism or literature or something and become a famous author and I am going to buy your book when it comes out.

And she was really, I think that she was really grateful that I was willing to read those stories. And she was always excited when she would give them to me, and she would kind of slip them on my desk on the sly so that the other kids didn't know that she was writing it. She would always come in the next day going,

Did you read my story? Did you read my story?

**

and it was really great to see her progress in her writing because even though I wasn't correcting the grammar and punctuation it got better as the story went along cause she would use the book the previous books to help her

**

in the other books vocabulary and the situations that you know occurred in the story.

Interviewer

What was the story about?

Keeler

It was Harry Potter and it was the 6th year and apparently Doubledoor, since the Slitherines and the Griffendoors don't get along, Doubledoor wanted to find a way to get them to agree. So he basically made all the Griffendoors and Slitherines spend the summer in each other's homes.

**

So Jenny Weasley had to go to Draco Malfoy's house for the summer and Draco and Jenny ended up falling in love and always had like this romantic affair. And he gave her this great flower and then they go back to school and its all secret because the house two houses still don't get along. And then Malfoy's dad makes him become a Death eater and he has to save Jenny from Boultemores. And everything winds up, you know, great at the end. He asks her to marry him and she's like

Yes!

Very cute!

**

and it had a lot of great foreshadowing and suspense in it like the real Harry Potter books do

**

It was just great.

Interviewer

Okay, great. Maybe to expand on that a little bit. Could you tell me what you normally do for your writing teaching.

Keeler

[SHE DOES NOT TALK AS FAST]

For writing teaching I tend to, there's I mean my school really focused on the three main types of writing that are tested on the state test. That's what they want me to focus on. So it's the expository, persuasive, and narrative

**

and I, I learned a lot this year it was my first year

**

I was really all over the place with my teaching

**

with and so right now I am thinking what I am going to do next year.

**

So this year, it wasn't extremely good for expository. I tried to the teachers was kind of like writing out instructions for something so we did the whole

Write me instructions how to make a peanut and butter sandwich pretending that I don't know anything.

**

And so and then like they remade their papers and from what they said I tried to make a sandwich and if it wasn't complete instructions then I couldn't make the sandwich.

**

And so that was like I kind of did that expository lesson. For persuasive the cluster of schools that my school is in the Kingsbury high school cluster.

All the elementary schools that feed into Kingsbury high school

**

kind of like a little coalition of schools there, they send out a number of essay topics and they have competitions for the students to compete in and they win saving bonds and

**

and usually those are persuasive. One of those was, you know, Jean Baptist Dusable was a, you know, founded Chicago. We need to name a street or build a statue after him, tell me which one should we do and how are we going to go about doing it.

**

And like to basically to convince me to make to build your statute and that you can do it. And so generally my persuasive topics came from there from the essay topics that they would send to us. And then stories I did an Olympics unit a very minor Olympics unit and had them write in their story and I told them they either had to be a participant in the Olympics, a judge or a spectator

**

so they picked the perspective that they were going to be

**

during the Olympics and I wanted it in the first person and said to Write me a two page story about their Olympic experience And that was a lot of resistance. It was the length of the papers.

**

It was very difficult to get them past one page.

**

Usually if I assigned two pages I'd wind up with students turning in paragraphs. Or

**

maybe a page. But I had a couple of students who would you know write the two pages or more. It was really pulling teeth to get them to write a lot.

**

But if I told them that we were going to go up to the computer lab and type the story they were very excited. And they would tend to try to write a bit more. So that's how I did that. I would I would definitely stress the standard writing structure introduction, you know, body,

**

conclusion with the body having the topic sentence and the supporting details you know a minimum of three paragraphs, three paragraphs in the body and

**

and standard 5 paragraph essay just because my kids when they came into my class. The first time I had them write something I got these papers that I could barely understand

**

which was sad for 8th graders. And so I wanted to stress writing

[TAPS TABLE]

structure

[TAPS TABLE].

And we would do the writing process. You would start with the rough draft and I would collect it every night and I'd just make minor comments

**

like one night I'd look for punctuation.

[TAPS]

One night I would look for like spelling.

[TAPS]

One night I would look structure and so

**

and I would give them back to them every day and then they would have to revise it and edit it and then on Fridays we would make our final copies and go up to the computer lab and type them sometimes if we were able to get in.

**

So I would just really want to focus on the structure of how to write a paper

**

and brain storming and all that the students they often didn't take the time to think and brain storm before they wrote. And then their papers would be all over the place or they wouldn't write anything 'cause they didn't want to stay there and think about it.

[Keeler Kirkpatrick R1 Q1]

When Keeler altered the focus of her story from her student to her class, the texture of her narrative changed. Her description of Annie was filled with positive emotion and excitement. It is easy to enter into her pride and delight, and to feel grateful she was there to act as a trusted confidant. Keeler's description of her whole class teaching, however, was filled with frustration and conflict. Keeler describes her students' efforts with fairly negative language:

I was really all over the place with my teaching...

So this year, it wasn't extremely good for expository...

It was very difficult to get them past one page...

The first time had them write something I got these papers that I could barely understand which was sad for eighth graders...

The students they often didn't take the time to think and brainstorm before they wrote. And then the papers would be all over the place...

High stakes testing and writing contests guided Keeler's curriculum. Students did not seem to enjoy these lessons, and the youngsters did not work very hard. Keeler's difficulties managing her classroom did not make it impossible for her to build positive relationships with her students, but management issues seem to make connecting more difficult. The beginning teacher had to do all the work. Her daily classroom choreography did not create the type of opportunities for beneficial interactions Dorchester described in the previous narrative about Allison.

Rather than end this section on a low note and, perhaps, describe the first year teachers' stories of relationship failure and contrast these narratives to the difficulties encountered by the expert teachers, I will end this section with beginner Halsted Hoyne's description of being on the receiving end of a caring, professional relationship. In January of 2004, the classroom teacher who had been assigned to work as Halsted's mentor transferred, and Halsted's administration asked a retired teacher to come in and work with the beginning teacher. Halsted's story helps make up for one of the Expertise in Urban Teaching Project's major omissions. I interviewed teachers, not students. Children do not speak for themselves. Their voice is heard only through their teachers' stories. Halsted's narrative shows how a vulnerable person can grow through a relationship. Even though I cannot publish the narratives of Antonia, Allison, Annie, and the other public school students who attended the classes of the teachers I interviewed, I can publish the story of how Halsted's mentor teacher, Mrs. Harrison, came to her aid.

In the next passage, Halsted expanded on her description of her mentor teacher after briefly mentioning her during a previous part of the interview:

Interviewer

Can you talk about the lessons you used to do with your retired mentor? What did she do? What was she

like?

Halsted

She was great. One lesson in particular we did the Brown vs. Board of Education. And it was really interesting because she had gone to school at a time when you know segregation was in place

**

and Jim Crow Laws were in place.

**

And she took it from the point of view with them that when she was a little girl they never got new textbooks. They always got the old textbooks from the White schools. And she sort of took it like she goes

And we didn't have hardly educated teachers. We had wonderful teachers who cared about us but we didn't really highly educated teachers.

And she would be like

And YOU have

She turned it on them, she's like

You have all these beautiful resources

Because we, I did

**

I mean I had a great classroom library that was already there when I got there, I just had to organize it. We started a new math program this year

Interviewer

What was it?

Halsted

Everyday mathematics, its University of Chicago program. And they invested in the math in all the manipulatives and so we had all this great stuff and you know

[SHE LAUGHS]

they did have an educated teacher too. And so she kind of like would was came at it with them from the point of view of, you know,

I didn't have this and that's what we fought for. It was so you could have this and you have all this and you know I just don't think you appreciate it. And I want

She was just always looking for ways to get them to understand what they did have, because so much of where they were at was what they didn't have. And she also was she was great at modeling

[SHE LAUGHS]

modeling mature you responsible behavior for all of us, for them and for me

[INTERVIEWER LAUGHS]

She also would do the she would model the reading the silent reading for them.

**

She would take kids one on one to do like fluency, reading inventories, and she would walk she would circulate the room just when I was sort of doing a direct instruction she would sort of circulate the room just and always ask kids if they could explain to her what they were doing. And a big thing at my school was the Illinois, the learning standards they had the descriptors and the benchmarks. And we would have to take the benchmarks and put them up in the wall in kid friendly language so that a kid could tell you, you know, well

What are you doing?

Well, I can learn

New vocabulary words or

I can use context clues to define vocabulary words.

So she was really great about reinforcing that. She would walk around circulate the room and get kids to sort of tell them what they are doing which I think you know was huge. And I am trying to think. And she maintained our classroom library. Because she had been a librarian for 25 of her 30 years teaching so you know I thought that was really helpful and I would have I would send like one or two kids to go the classroom library with her and she would they would help her organize it. And it was good because then they could do it on her own when she wasn't there.

Interviewer

What was her name?

Halsted

Mrs. Harrison

[5 SECOND PAUSE]

And she was so great.

[Halsted Hoyne R1 Q5]

Mrs. Harrison did not solve all of the beginning teacher's problems or radically transform the workings of Halsted's classroom, but the mentor teacher raised Halsted up. The months after Christmas may move very slowly in a classroom filled with unhappy

students and discipline problems. Chicago winters may go on forever when schoolwork is a struggle and colds and the flu make every workday a strain. Mrs. Harrison did more than listen to Halsted's problems. She worked in the beginner's classroom and modeled concrete, research-based practices Halsted could use on her own.

Halsted's narrative did not stop at this moment. When Mrs. Harrison walked into her classroom, January had just begun and Halsted faced many months of struggle. In a sense, Halsted's narrative points out the limits of even the best teachers' work. One teacher in one classroom cannot eliminate the poverty, racism, and injustice that prevent poor children from living up to their families and communities' highest aspirations. The social problems that confound Chicago schools and neighborhoods are beyond any one individual's grasp. But one person working in one classroom can teach lessons and create connections that will help vulnerable students during the school year and—if the lessons are skilled enough and the connections are strong enough—the years to come. Halsted's narrative can be used to imagine the benefits of these connections and to visualize how a life might be lifted up by a succession of skilled and determined teachers.

Quantifications

In this section, I describe my efforts to analyze the emotional quality of the teachers' narratives. These codes and charts support and extend my most important theme. As I have argued throughout these chapters, the expert teachers reported working in transformed classroom environments that accelerated students' academic and moral growth. Vulnerable students grew as learners, and they improved their ability to work with other children and adults. My analysis shows that reports of the emotional quality of the teacher-student interactions differed between the two groups. To preview the major finding of this section, expert teachers shared more incidents where they described classroom-instruction with positive emotion. Dorchester's story about Allison exemplifies this emotionally laden change process. Regular doses of positive emotion were an explicit part of Dorchester's instructional program. In the expert teacher's words

And then, you know, as the school year progressed.

**

I started to really encourage her writing

**

that was the one area where I could say,

Allison, this is amazing! Look at what you did! Blah, blah, blah.
This is awesome!

You know. That was you know the one chance that she really was able to
shine and

**

get that positive feedback and that kind of stuff, so. I think that made her
feel good as the

**

you know, as we worked on in the school year.

**

especially Writer's Workshop.

[Dorchester Damen R1 Q1]

Feeling good was viewed as both a cause and consequence of Allison's growth. Success motivated the child and, instead of shutting down at school, she became open to learning.

Expert teacher Ohio Ontario's description of the academic and personal growth of Eric Oaks, one of her special education's students, is another strong example of this pattern. In her account, Eric was transformed from a friendless and disengaged special education student to a motivated participant who was so comfortable in school that, "You can't get him to shut up." Unlike Allison's parent, Eric's mother became engaged in her child's development, and there is clear evidence of a strong partnership between home and school. Throughout the passage Ohio speaks in the highly inferential language Benner and colleagues (1996) describe one of the hallmarks of expert practice:

Ohio

...Who else? Eric Oaks. You know, its so funny because maybe I see my best growth in my special ed kids, but Eric Oaks, he was supposed to be self-contained in special education

**

But the new rules, try to get them in the regular classroom.

**

And the special ed teacher told me

Just you know, two periods. It was okay, just try him out.

It was like

Okay, what do you mean try him out?

Just keep him in here—he's a good kid—if he doesn't give any problems.

**

And he didn't. He didn't give me any problems at all. I was like

Okay, no problems. That's fine.

**

And, I was just like

Maybe.

You know, I felt like special ed teacher should be here the majority of time.

You know, I, I shouldn't worry. But she didn't.

**

Because she had such a heavy caseload. So I made sure, like grouping wise, I would group him with my stronger kids.

**

Whatever. And again he was one of those kids,

**

socially, wasn't social. He wasn't talkative. He didn't talk to anyone. He didn't do anything. Now, you can't get him to shut up. Like

**

at the beginning of the year, no one talked to him. He would do whatever. Make friends, that type of stuff. Two things with Eric, again he was another writer,

**

just, you know, writing such a biggest component, little paragraphs,

I went to the zoo. I had fun at the zoo.

You know that type of stuff. He's, he's not cognitively delayed. He's, he is deaf in one ear

**

and LD. He was like a severe LD

**

in reading and math.

**

and, and so self-esteem too,

**

he would never look up at you.

**

Like he would always, like

Well, I did it.

And its just like, okay. So writing, it was just okay. And then elaborate stories like

I went to the zoo and people poked the cage and

Wow! It was amazing to see

**

such growth.

**

And you know also he has the support with the special education teacher when she can make it in by.

**

Just amazing. And same thing with math, like I was saying to his mom just like

First grade level, I don't think he knows how to multiply or anything like that

**

And mom worked on that.

**

By the time he was finished he knew his multiplication really fast like this,

[SNAPS FINGERS]

like that.

[SNAPS FINGERS]

Beginning of the year, nothing. I was just like

Where are we going to work with him at?

You know. Did not know how to regroup numbers, and, you know, mom played such an important role. Mom was like

I'm on it. I'm going to do it.

**

I'm going to get it there.

It was dividing numbers. It, it, it just, just it was just amazing. I was just like
Wow! Look at you! That's just totally, totally awesome.

Yeah, isn't that nice.

[Ohio Ontario R1 Q1]

Eric underwent a healing and potentially life changing change. Similar to Allison, Eric worked with his teacher to engage in a major program of personal and academic development. Teacher and parent worked together and helped the child grow. Small signs of change spiraled into greater gains. Ohio's excitement is palpable:

So writing, it was just okay. And then elaborate stories like

I went to the zoo and people poked the cage and

Wow! It was amazing to see

**

such growth.

The boy's success was described with high levels of positive emotion. Similar to expert teacher Prairie Paulina's long string of stories about her class's efforts to read Sign of the Beaver that was excerpted in Chapter 6, the extended sequence of positive incidents Ohio shared about Eric Oaks were typical of the student stories shared in the experts' transcripts. As I will discuss, the expert teachers dwelled in the memories of the successes they achieved with their students. Children who suffered from a great deal of adversity connected with a caring adult and, in their teacher's account, began to actively engage in their learning. The NBPTS-NTL teachers carried memories of their students' successes with them across the year, similar to the way the beginning teachers carried memories of their students' misbehavior.

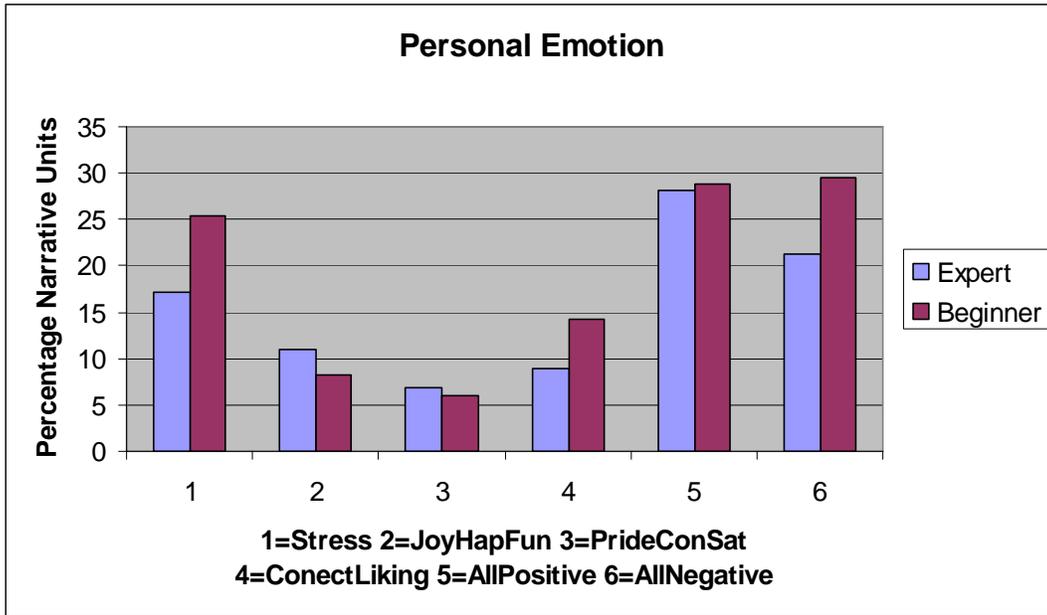
As I discussed in the methods section, I began to code for emotion after I had finished coding for instruction. I took the about 2000 separate incidents generated by my previous analysis and then looked for emotion words that revealed evidence of teachers' feelings. I used a hermetic (Gadmer, 1975) approach to the analysis. I began with standard definitions of emotions from the emotion literature (e. g. Fredrickson, 1998; Kanov et al., 2004), but I also looked for other emotions that were present in the narratives or ways to organize the analysis that made sense given the needs of the investigation. When teachers talked about being "amazed" or "feeling really great" I

coded that incident for happiness. When teachers talked about being “nervous”, “angry”, or “depleted” I coded for different types negative emotion. I also evaluated the content of the incident for examples of acting happy or angry. Thus if a teacher danced for joy, but did not use the word “joy,” or if the teacher yelled at a student but did not use the word “angry,” I would still code these incidents for that particular emotion.

These codes and these totals should be viewed as provisional. As I will discuss, I had to adapt some of the definitions because they did not fit my data well. I also make no claim to being a scholar of emotion and do not claim that all my coding choices were definitive. However, emotion was such a major part of the teachers’ stories that I thought it important to discuss it. The charts in this section are labeled ‘Exploratory,’ to emphasize the provisional nature of this work.

The raw coding totals for each of the analytic categories displayed in the charts are listed in Appendix, along with each code’s definition. I made this decision both to avoid overwhelming readers with detail and to encourage readers to use the charts to examine the shape of the individual teachers’ narratives. Those charts show that I coded each incident for whatever emotions I found in it, and sometimes attached two, three or more labels to the same narrative unit. I decided it was better to make decisions about how to differentiate related emotions after I had finished coding, rather than during the process of labeling hundreds of pieces of text. Once I finished that initial analysis, I combined emotions with similar qualities and created the rough hierarchy of positive emotions that is shown below. Incidents that could be coded for happiness, joy, and fun were pooled together as examples of strong positive emotion. Incidents that could be coded for pride and satisfaction were also pooled together, as long as they were not also coded for happiness. Incidents that could be coded for connection, but not happiness or pride were given a third label. Thus, in the charts that follow, a connection that made a teacher happy was coded under happiness. A connection that made a teacher proud was coded under pride. Only bonds with lower levels of emotional intensity are categorized with a code for connection. All incidents with negative emotion were group together not because these incidents were the same, but because they described fairly toxic events that differed strongly from incidents coded for positive emotion.

Table 7.1 Exploratory Analysis of Teachers Reports of Personal Emotion



Comparison	1	2	3	4	5	6
Analytic Code Displayed	Stress	Joy, happiness, or fun ¹	Pride, Conviction, or Satisfaction	Connection or Liking	All positive emotions	All negative emotions
Expert	17.16%	11.02%	6.80%	9.00%	28.14%	21.27%
Beginner	25.31%	8.26%	5.97%	14.24%	28.82%	29.51%

Table 7.1 shows that when the teachers talked about themselves, and their personal feelings, there were few differences between the two groups’ reports of their emotional states. Beginners did report more unique feelings of connection that cannot also be coded for happiness or pride than the experts: about 19% of beginner’s standardized incidents could be coded this way versus about 14% for the NBPTS-NTL teachers. The individual totals for connection, not shown, show an even stronger difference favoring the

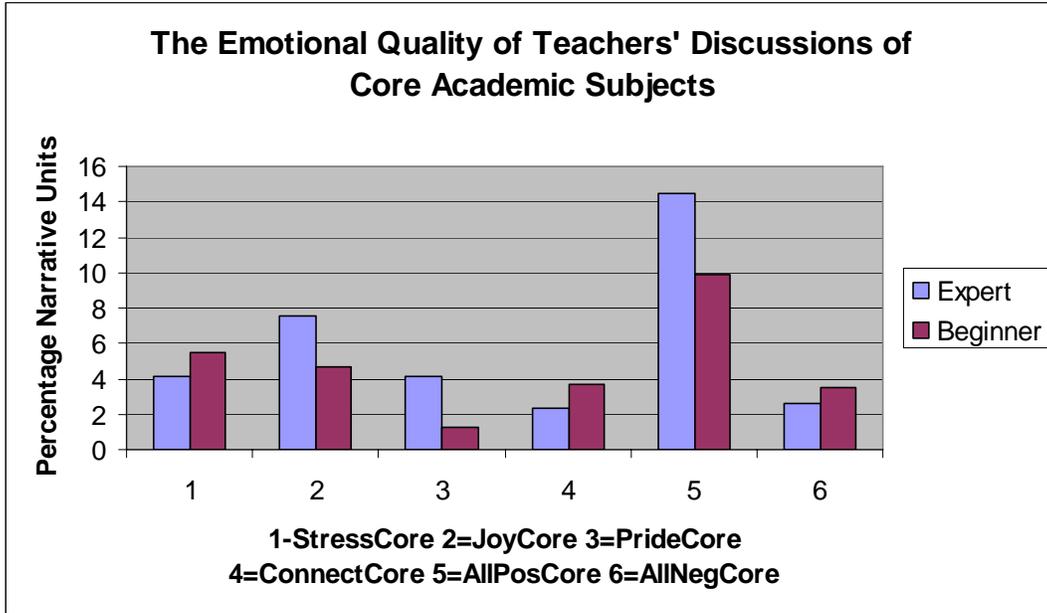
¹ Comparisons 2, 3, and 4 are coded hierarchically. See main text, above for description.

beginners. Making connections with students or someone else in their school was an important theme in the first year teachers' narratives. For the experts, this work might not show up because connection was more taken for granted. A feeling of togetherness might go unnoticed in classrooms where discipline problems are not reported to be a major focus of attention. The beginners also shared more negative emotions when they talk about their personal feelings than did the experts, but these differences were not large.

Table 7.1 is important because it alerts the reader to one major omission in my writings. The major focus of these chapters is on classroom related events and incidents. I have not published narratives of teachers' stories of working with their administrators or the CPS bureaucracy. I have not published the educators' musings about the state of the world. When the teachers' narratives are totaled up without discriminating their work with children from other parts of their transcripts, the differences between the two groups are less distinct. Table 7.1 also shows that expertise did not protect the veteran teachers from frustration and other forms of negative emotion. The NBPTS-NTL teachers experienced fewer negative emotions and stress than the beginners, but there were many aspects of their work where they experienced disappointment and difficulty. Table 7.1 also shows that my interview techniques surfaced narratives where the beginners shared positive incidents about themselves and their work.

To investigate these differences more deeply, I used my NVIVO database to analyze the amount of emotion the expert and beginners shared about teaching core academic content. I wish to examine the number of incidents where teachers shared positive emotions when they discussed reading, writing, social studies, mathematics, and science. I conducted this analysis by using NVIVO commands to select all mentions of teachers' academic instruction and then quantified the emotion codes I had attached to these pieces of text. Table 7.2 shows the results of this analysis.

Table 7.2 Exploratory Analysis of Teachers' Emotions When Discussing Core Academic Subjects



Comparison	1	2	3	4	5	6
Analytic code displayed	StressCore	JoyCore	PrideCore	Connect-Core	AllPosCore	AllNegCore
NBPTS-NTL	4.17%	7.58%	4.13%	2.32%	14.44%	2.63%
Beginner	5.46%	4.72%	1.30%	3.72%	9.90%	3.53%

The most interesting comparison on the chart is the last, Comparison 6. It shows the dramatic decline in reports of negative emotion when both groups discussed instruction. Both the experts and beginners lost more than 80% of the incidents that could be coded for negative emotion, when I removed nonacademic incidents from the analysis. When teachers discussed academic work in their end of the year interviews, they usually felt pretty good. Classroom management issues and issues outside of the classroom, such as conflicts with administrators or the CPS bureaucracy, accounted for much the teachers' reports feeling angry, afraid, sad, or guilty.

The NBPTS-NTL teachers also reported more positive emotion when they provide instruction in reading, writing, social studies, math, and science than did the beginners. Table 7.2 also shows that the positive emotions the experts described when they discussed academic incidents were more intense. Experts felt more happiness and pride in their work, while the beginners felt milder feelings of connection.

I then decided it was important to code teachers reports of their feelings about their students' emotions. There were many descriptions of children that used emotion words, but did not mention the teacher, such as "He felt sad." I wished to make these discussions part of my analysis. As a result I created codes that labeled other people's emotional states and grouped them into two broad categories: compassion/concern for children's struggles and then pride in young people's accomplishments.

One difficulty I faced during this analysis is that the narrative incidents I coded, rarely recorded the full *flight* of an emotion. The landscapes of events teachers use to understand their work are closer to kaleidoscopes of fragments, than formal narratives with clear beginnings, middles, and ends. As a result, my definitions and coding choices may seem simplistic to scholars with extensive knowledge of the literature of emotion. For instance, when I began coding the teachers' narratives, I attempted to use the definition of compassion from Kanov et al. (2004). This definition emphasizes that compassion consists of both empathy and action for the person who is cared for. However, the individual incidents I coded rarely gave me access to a description of the entire run of a compassionate response that might begin with recognition of a person's suffering and then move to action on that person's behalf. As a result, I had to revise the definition I used in my coding. Compassion, according to my revised definition, is engrossing oneself (Noddings, 1984, 2000) in another's needs and problems and feeling that person's struggles, pain, and sorrow. Action may be part of this focus, but it does not have to be. In Ohio's narrative, her description of Eric's self-esteem was coded for compassion:

and, and so self-esteem too,

**

he would never look up at you.

**

Like he would always, like

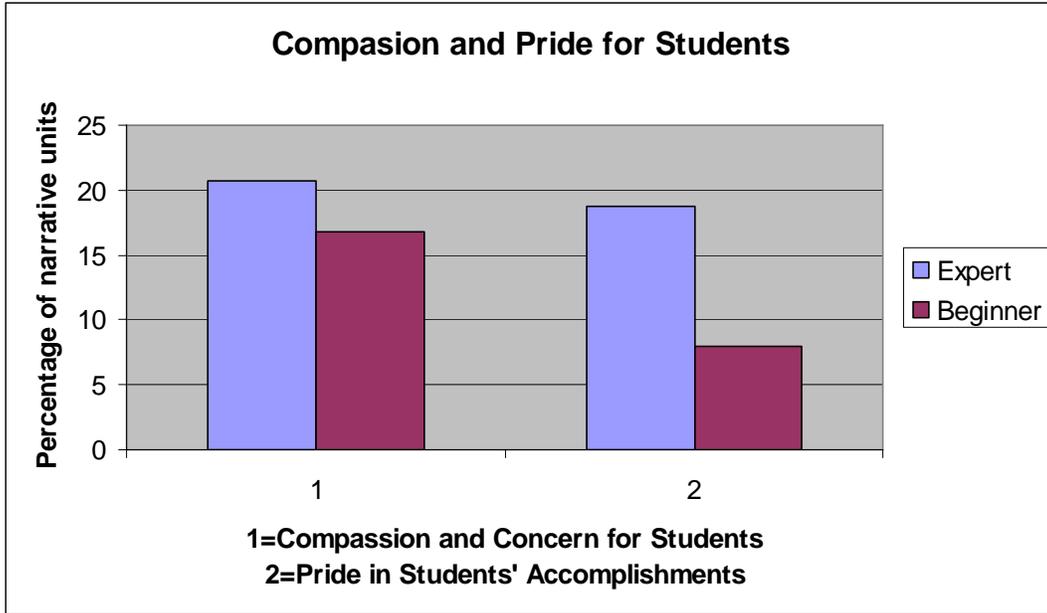
Well, I did it.

And it's just like, okay.

I created a separate category for concern, which includes mentions of anxiety for that person. In the charts below, I combined these codes together under the label “compassion/concern” but emphasize these incidents label events where the teacher connected to another person’s suffering.

The next table, Table 7.3, shows that when teachers describe people other than themselves, expertise did make a difference. The experts felt more compassion/concern for the people they discussed in their interviews: 21% of their standardized incidents could be coded this way as opposed to 17% of the beginners. The major difference, however, was that the experts teachers discussed feeling more positive emotion, mostly pride, in others’ accomplishments. About 19% of the standardized incidents in the NBPTS-NTL teachers narrative could coded this way, versus 8% of the incidents in the beginners’ stories. It is my opinion that these contrasts are a direct result of the expert teachers’ agency. The accomplished teachers tend to report more incidents where other people did things they felt good about because they created classrooms where good things were more likely to happen.

Table 7.3 Exploratory Analysis of Teacher Reports of Empathy and Positive Emotion in Others’ Accomplishments



Comparison	1	2
Analytic Code Displayed	Compassion and concern for others	Pride and positive emotion in others' accomplishments
Expert	20.67%	18.75%
Beginner	16.84%	7.99%

Comparison 2 in Table 7.3 shows that the NBPTS teachers were two times more likely to share incidents such as Addison Ashland's discussion of her work with Anthony:

So he I don't know what happened but he.. We have to set goals every quarter for the kids for reading.

**

And he his goal was he surpassed it by more than 300%. And so every month we have to pick someone to be student of the month and so because he did such a good job with his reading goal, I just said, you know

You need to be student of the month. And you've earned it.

And so that was a really big deal. Like he never gets awards. Or never gets recognized. He's never, ever

**

done anything that someone said, you know,

Good job, Asez, that was awesome.

[Addison Ashland R1 Q1]

Or Sheffield Sedgwick’s description of Al’s success in the CPS regional math competition.

Lo and behold he did, he got [his glasses] and he won first place.

[BOTH LAUGH]

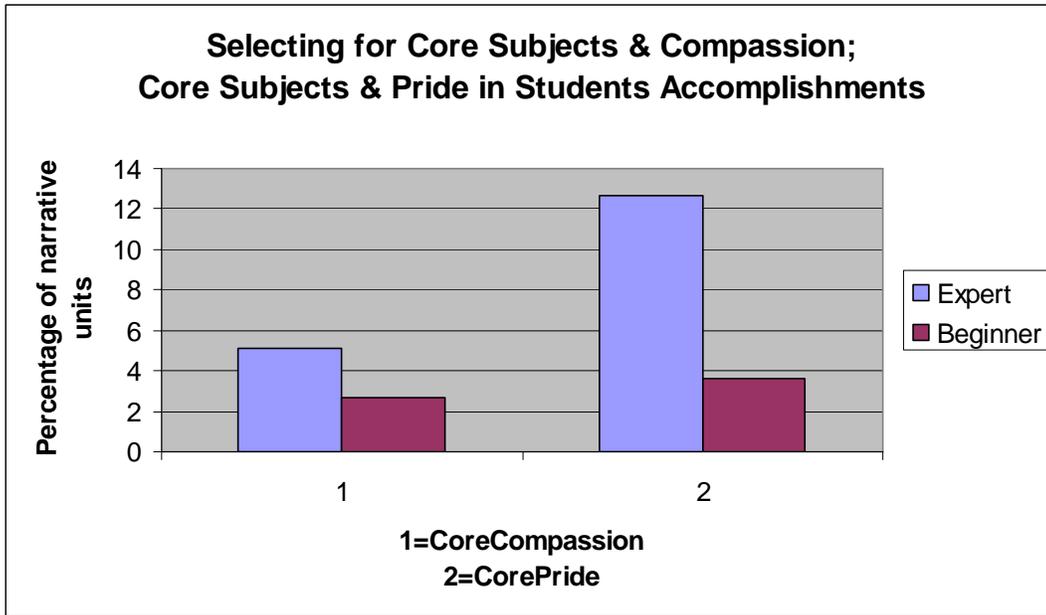
It was so cool, I mean it, cause it was like he was this close to not even being in it, you know.

[Sheffield Sedgwick R1 Q1]

The experts’ classrooms were described as places where events happened that made them feel good.

To investigate these differences more deeply, I used my NVIVO database to analyze the amount of other-focused emotion the expert and beginners shared about teaching core academic content. I wish to examine the number of incidents where teachers shared positive emotions for their students’ efforts in reading, writing, social studies, mathematics, and science. The differences between the two groups are quite large. Table 7.4 shows the expert teachers reported more than 3 times as many standardized incidents where they felt good about their students’ accomplishments than beginners: about 13% of their incidents could be coded this way compared to 4% of those of the first teachers. Combining totals from Table 7.3 and Table 7.4 shows that more than 2/3rds of the incidents where the experts felt pride in another person are student activities in reading, writing, social studies, math and science—12.63% / 18.75%. Less than half of the incidents when the beginners felt good about someone else’s actions can be coded for this content—3.60% / 7.99%.

Table 7.4 Exploratory Analysis of the Emotional Quality of Students’ Core-Academic Activities



Comparison	1	2
Analytic code displayed	CoreCompassion/Concern	CorePositiveOther
Expert	5.19%	12.63%
Beginner	2.65%	3.60%

Comparison 1 in Table 7.4 shows that academic achievement mattered to the NBPTS-NTL teachers. They were about twice as likely to feel compassion about a student’s difficulties engaging in academic work. These difficulties are compensated by the findings of Comparison 2. It shows that experts were almost three times as likely to feel positive emotion when they discussed their students’ academic activities. In a sense, Comparison 1 describes the expert teachers’ ability to recognize and empathize with a child’s struggles, while Comparison 2 shows the benefits of the teachers’ labor. Readers should understand, however, that the two types of incidents were not always connected in causal accounts. The experts might discuss student problems and then describe successes without providing extended descriptions of how the child changed.

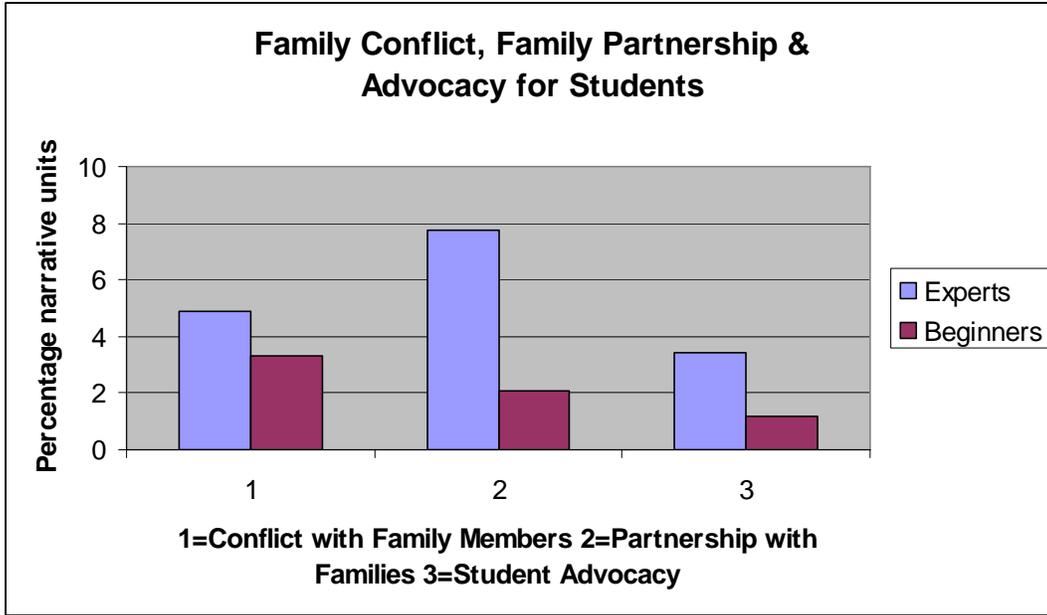
Taken together, the charts show that instruction was a source of positive emotion for both groups of teachers. The experts, however, reported that they thought about it more often and feel better about it when they did. The narratives I publish in throughout this chapter describe what the expert teachers reported as one of the primary forces that generated this positive feeling: the expert teachers’ ability to motivate children to

undertake long-term projects of personal and academic growth and then to support young people's efforts to engage in that work. Keeler's story about Annie shows that long-term growth was possible in the beginner's classes, but her narrative also shows the difficulties teachers experience caring for children when they cannot create a peaceful working classroom.

Difficult Connections

At the beginning of this chapter, othermothering was described as a powerful relationship between a teacher and a child which supported a long-term project of personal and academic growth. This relationship may require a great deal of emotion work where the teacher connects with the child's struggles, takes action to help the youngster grow, and then feels happiness in the young person's success in ways that support further positive development. In the literature of culturally responsive pedagogy, othermothering is viewed not only as a deep and beneficial relationship with a young person, but as a strong connection with members of the child's family and community (Gay, 2000; Irvine & Fraser, 1998; Ware, 2006). Table 7.5 shows some evidence for this more community-based conception of expertise in the interviews I collected. The expert teachers reported that they worked in partnership with parents more frequently than the beginners, and shared more incidents of advocacy for children in their end of the year interviews.

Table 7.5 Family Conflict, Family Partnership & Advocacy for Students



Comparison	1	2	3
Analytic code displayed	Conflict with Family	Partnership with Family	Advocating for Students
Experts	4.91%	7.78%	3.42%
Beginners	3.32%	2.08%	1.18%

In my opinion, however, the chart provides somewhat underwhelming evidence for a family or community connected conception of expertise. As I have discussed throughout these chapters, the NBPTS-NTL teachers tended to report that they focused their energy inwardly, towards their classrooms, rather than outwardly, towards colleagues and communities. When the expert teachers did describe beneficial interaction with family members, which was the definition of family partnership in Table 7.5, much of that interaction was focused around schoolwork. The experts kept families informed of their students' progress, and they discussed children's difficulties and successes. Family-members who had spent previous school years receiving calls about low achievement and misbehavior, might now receive regular communications about progress. Children who had difficulty adjusting to school might now tell their families stories about new friends and accomplishments. However, the experts rarely reported that they could influence home environments in the way that they could transform their classrooms. There were

many discussions of family members with whom they were not able to create positive relationships, and much of the contact the experts did achieve was passive. Expert teacher Ohio Ontario's description of a strong partnership with Eric Oak's mother, published early in this chapter, was not typical.

Benner and colleagues make the ability to reach outside the local hospital unit and influence events that impacted their patients' care one of the primary dimensions of expertise in critical care nursing. In Table 7.5, advocacy was defined as work that helped students academically, socially or materially outside of the classroom that went beyond the usual range of the teacher's labor. Teachers might advocate for students by engaging in acts such as speaking up for them when they got in trouble, finding support for them when they were in need, or organizing special education services. This is a broad definition, and it is a bit puzzling that this dimension of expert practice is not strongly developed. Table 7.5 shows that only about 4% of the incidents in the experts narratives could be coded this way. When I designed the interview guide, I assumed the interview's opening question, "Describe a student or group of students for whom you made a difference." would surface more of these accounts.

One explanation is that 3 of the experts I interviewed were either new to their school or had transferred to their building the year before that. A fourth expert was transferring out of her building in July of 2004 because conflicts with her new principal made it difficult to teach and advocate on her student's behalf. More than half the experts thus began the year without either the local knowledge or social capital to engage in extended advocacy outside their classroom walls. This is an important consideration for the reader to take into account when evaluating the Expertise in Urban Teaching Project's research design. It shows how my sample differs, perhaps problematically, from other studies of urban teacher's expertise (see review in Ware (2006)). Using NBPTS certification to select teachers has many benefits, however, it is also the case that only four teachers in my sample worked in their school long enough to be picked up by the community nomination techniques used in Ladson-Billing's (1994) monograph or similar research strategies.

This issue also has implications for comparisons between teachers. When they met their students at the playground in September, 4 of the experts in my sample lacked

to social capital that comes from teaching students' brothers, sisters, cousins, and friends or having colleagues who watched their back. Expert teacher Prairie Paulina shares some of the benefits of pooling together resources from a wide range of sources, especially the family, in the following passage. Prairie graduated from a major Midwestern research university and got a job in the Chicago public schools immediately after college. She taught the same grade, in the same city classroom, every year:

Interviewer

Could you tell me a story about a student or a group of students for whom you're teaching made a difference?

Prairie

Sure. I have a couple different stories that I can tell you. The first story I have is about a kid named Arnie

**

and he is a really quiet student.

**

Very, very, very quiet. I teach in a predominantly Latino population so a lot of the students are quiet

**

and are reluctant to speak. And Arnie was really struggling with math and reading,

**

and he came in to me struggling. So his mom works at school so I was able to meet with her

**

almost daily to kind of update her on what he was doing

**

and what he needed help with at home.

**

It got to the point where we were doing some higher-level math concepts. We'd move from like just basic addition, subtraction, multiplication, and division, into measurement and geometry and he was just falling apart. So then I was able to meet with him in the mornings

**

in a kind of clandestine way, because we're not actually supposed to do that. But he was coming early with his mom, so then I could just kind of go and get him. And so we did one-on-one work,

**

and I helped him with the homework that he had struggled with

**

and we used some manipulatives and I did some explaining in a different way, and that made a big difference for him. The kids that struggle are identified and they're put into an after-school tutoring program.

**

but that's one of the areas I know you said where your National Board teaching makes it difficult for you to serve your students,

**

and I know that they need this extra help but the way the program is set up isn't the best for them.

**

So I know that I need to do it, because otherwise they won't get served,

**

but it's definitely not meeting their needs. It's kids that are already below grade level, they're at risk, a lot of them are failing

**

math or reading or both.

**

And it's two days a week. It's an hour after school,

**

and the ratio of kids is 20 to 1. And it's still grade level material rather than material that's on their level,

**

so I don't feel that it makes a big difference. And a lot of the resources that were given are geared for test-taking rather than remediation.

**

So that's a sort of a source of frustration. So that was something that Arnie was already doing that wasn't working for him.

**

And I also noticed that he was a really fluent reader,

**

but his comprehension seemed to be breaking down somewhere so I did an IRI with him

**

and discovered that he had really low vocabulary.

**

He was really good with main idea and not good with inferences or sequence.

**

So then I worked with his mom to development some vocabulary games that they could play at home and to have her ask him some questions, which she periodically did after he read,

**

other than,

“What is it about?”

Because he could tell her like what it was about very bare-bones,

**

but he wasn't getting any depth to what he was reading.

**

So that made a big difference. And then I referred him to—one of my friends works at a sort of like a Sylvan Learning thing,

**

but it's new. It was started by the guy who, what's the other big company that's not Sylvan Learning?

Interviewer

I don't know.

Prairie

I don't know, either. But it's that same sort of one-on-one tutoring sort of thing.

**

And I'm not sure if he was enrolled in that, but they offered scholarships,

**

so I provided that for the mom.

**

So she was really excited about that.

**

So that's one student that I know my instruction made a difference for.

Interviewer

So what was, what do you, so what do you think his problem was? He was just very low or he?

Prairie

He didn't have a lot of confidence in his abilities,

**

in reading especially.

**

And because he was already shy, he wasn't very involved all the time in his learning.

**

So, I was working with him one-on-one to kind of get him more involved

**

and to bring him up closer to grade level,

**

because Arnie was pretty behind.

[Prairie Paulina R1 Q1]

Arnie had weak skills in reading and mathematics and had started tuning out of class. Prairie created a relationship with the child and found a variety of supports to help his development. She worked with Arnie's mother and showed her how to help the youngster with his schoolwork. Prairie tutored Arnie in the morning and got him a scholarship for a commercial after school program. She pressed the boy to engage in class. The other expert teachers described themselves as capable of benefiting their students, but their work rarely was reported to organize so many different contextual factors to support their development.

One of the many intriguing findings in Entwistle and Alexander's (1997) quantitative investigation of high poverty schools in Baltimore was that higher levels of

conflict with parents was correlated in their surveys with higher levels of student achievement. Effective teachers, in their view, tended to interrupt family processes that did not support students' academic growth, and these efforts may generate reports of conflict in parent surveys. The John Hopkins's researcher's findings support the mostly qualitative finding from studies of culturally responsive pedagogy. If a child has more than one mother, there may be times the two will disagree, especially if there are problems in the home.

Findings from the Expertise in Urban Teaching Project support this perspective. Table 7.5 shows that the expert teachers tended to report more conflicts with parents as well as more mentions of partnership. Much of the family conflict the expert teachers described occurred early in their relationships, when the teacher actively worked to build connections with vulnerable children to improve poor behavior. Once the teacher and student began to connect, mentions of conflict with parents tended to decrease, although this was not always the case.

I believe it is important to share a narrative from expert Dorchester Damen that illustrates the limits of this classroom-focused conception of teacher's work. It discusses how Dorchester built a relationship with a troubled student who might be beyond the grasp of a beginning teacher. Geoffrey began the school year openly confronting Dorchester and disrupting her class. He continued to resist his teacher's efforts to a lesser degree for many months. Eventually, Dorchester was able to turn the situation around and Geoffrey became, in her words, "one that kind of crawled up in my little heart and just stayed." However, Dorchester spent long portions of her narrative trying to figure out what more she could have done to help the child. The expert teacher was sure she had made a difference in her student's life, but she was not sure that she had done everything she could have. Dorchester's discussion of Geoffrey is quite long, but I have published it in its entirety to allow the reader to see the strength of Dorchester's work as well to feel her struggles and concern. The passage also raises some concerns about Dorchester and the other experts' instructional practice that will be discussed at the end of this section.

Interviewer

Any other kids?

Dorchester

Oh, I could talk forever. Let's see. Other kids. Other kids. Are you looking for kids that have changed over the year, primarily?

Interviewer

Yeah. Or kids that were very interesting to you that, really, that you focused on, that, you know, that you learned something from. Things like that.

Dorchester

MMMNHHMMM. Well Geoffrey I learned a lot from Geoffrey. I struggled with Geoffrey all year long. He started 4th grade. Usually you get a honeymoon period with a kid, at least the first two days of school. I got no honeymoon period with Geoffrey.

**

He was, he was kicking some kid under the desk and you know running to kill him by 9 o'clock the first day of school. I was like,

Whoa, where do you come from?

**

So in my frustration with Geoffrey. I ended up sticking him. This is my traditional Ms. Damen thing, like, this is the front of the room. His desk was pushed right up against the wall, by himself for probably the first three weeks of school.

**

Because no matter who I put him with, he was just always you know exploding into some kind of natural disaster and you know I, I don't like sending kids out of the room.

**

That really bothers, I just feel like their not learning anything outside the room even if they're by themselves in a corner. Maybe they're hearing something or

**

you know so I prefer to keep them in the room so I just found

[SHE SOUNDS BEMUSED]

he worked really well up there by himself

**

at the front of the room.

**

And then after a couple of weeks he was able to you know kind of move in with the other groups and, and not be so much of a distraction for

everybody else. But Geoffrey was a really good reader, but an awful, awful, writer.

**

I mean in penmanship

**

so bad that you know it was almost illegible.

**

I wanted to have him staffed [for special education] immediately because you know you'd get like one sentence out of him and it was all, you know, little markings of some foreign language that you have never seen before. I mean literally, its like

What does that say?

**

You know, it doesn't even look like letters of the alphabet

**

it was so bad, but I decided against it, initially because I thought,

Well, maybe I need to give him a chance.

Because he, he was a halfway decent reader, you know,

**

if you questioned him of something he could give you a decent answer.

**

You know in math he wasn't so bad. So I wanted to give him a chance. He was another one whom I went to see his 3rd grade teacher almost immediately

**

Like, okay, what's his story?

And he has a pretty pitiful story. His, his, his story is that his mom had died of an overdose when he was in kindergarten. And the dad, I think that the man that is raising him is Geoffrey's father, but he is not the older, his older sister's father. And, you know, the dad is probably 65 himself and, you know, he's like

Hey, I clothe them. I feed 'em. They're clean. What else do you want from me?

You know. That kind of thing. So there's just not a whole lot else happening. You know, real laid back older kind of guy.

**

So, you know, he really wouldn't get on Geoffrey's case for doing homework or about trying. Nobody was going to sit and work with him in any kind of way. So, you know, the fact that Geoffrey had gotten as far as he had

**

at this point was just miraculous

**

to me.

**

And, but Geoffrey was another one that kind of crawled up in my little heart and just stayed. But, you know, I found that he, he, he really struggled in a lot of ways. You know in

**

not so much in he, he had a little click of friends that were seemed to be pretty true friends, you know.

**

Geoffrey got invited to birthday parties and things like that, you know, and the kids really, really liked him.

**

He was just a little loud. Kind of, you know, overbearing at times, but the kids, really, really they took to Geoffrey.

**

But you know I struggled with Geoffrey in with his academics I guess. Mostly, you know, he still wasn't on level on reading. He probably still had stanines of 4 and, you know, I think in some areas in math he had 5's but, you know, his handwriting was so bad and, you know, his, his writing his capabilities for putting together a coherent paragraph those that was pretty difficult for him. I have to say that's one of the things that I regret was not having him at least tested.

**

Because and it may not be too late. I could probably have him tested at the beginning of the year. But I regret not having done it sooner.

**

Because sometimes you, I don't really like to have kids staffed. I don't want that special ed. label on kids

**

you know, and the way special ed works at my school is that they're pulled out.

**

So, you know, their missing class time while they are pulled out

**

and sent somewhere else. And, you know, Geoffrey's pride is, is a big part of who he is and

**

to be stuck with the special ed kids, I didn't really want that for him.

**

But at the same time,

**

I want him to gain all the skills that he can possibly can gain

**

by the time he graduates.

**

You know, so meeting his needs is, is, you know, it's, it's a struggle.

Well, what do you? Do you have him tested? Do you not have him tested?

And you know that kind of thing.

Are they going to find anything or are they not going to find anything?

**

But, you know Geoffrey he's, he's, he's, he's a special kid.

[CARING EMOTION IN HER VOICE]

He is and

Interviewer

What did you do with his writing?

Dorchester

Well with his writing, we started out with just sentences,

**

you know. And I would give him like cursive sheets to take home.

**

So that he could practice his cursive because it was just, it was illegible. You could just not read it at all.

**

And even though he wouldn't do the academic kind of homework, if I say
Write a paragraph on George Bush or if I said you should blab-
blah-blah.

**

He's not going to do that. But he'd do his work in handwriting each week.
You know, so that improved. His handwriting improved.

**

And after a while that helped his writing to improve,

**

in general. We went from one sentence to a paragraph to, you know, when
everyone else was writing 5 paragraph essays he would give me two
paragraphs, you know, which was a, was a definite improvement,

**

you know, from what I was getting from Geoffrey at the beginning of the
year. Still not on level,

**

it's an improvement. And he's another one that's not doing any revising.
You know, its like

Hey, I did it the first time. That's it.

**

You know,

I'm going to read my book now.

**

You know, and he's another one. I kind of wonder like how much he was
really. He spent a lot of time faking what he could what he could do.

**

What he was capable of doing. You know where all the other kids in their
desks they they'd maybe have a chapter book and a picture book

**

Maybe, you know, a chapter. My kids were really into these Betty and
Veronica books. Those, those you remember those cartoons?

**

Okay, one of the kids must have had a garage full of these Betty and
Veronica, they were these thick little, they looked like little chapter books,

but they were these little cartoon books. So they and they were floating all over the room. So kids would have a copy of one of those and then like a regular chapter book.

**

Geoffrey, he'd have seven chapter books on his desk. Five on his desk. Four stuffed in there.

**

And at any given time he would be sitting there reading Harry Potter and I'm like,

I know you can't read Harry Potter. I can't read Harry Potter.

[BOTH LAUGH]

I know you can't.

I mean half the stuff in Harry Potter. I'm like

What is that?

And I'm like reading it with my dictionary. You know, so it was like he was trying to fake

**

who he was. And you know that's, that's part of the problem that I have with American education the way that we run our schools.

**

You know, this age based way that we run our schools it's because so many kids are faking what they are capable of doing and they are able to squeeze through the cracks and by the time you figure out their story it's January

**

and, you know what I am saying?

**

Because you've got 30 to 35 kids

**

and many times you are not always teaching. You feel you are doing more crowd control than teaching.

**

But you know. So Geoffrey was another one who was really good at Johnny, what's the answer to P?

**

You know that kind of thing. So you're grading his test and going well like,

Okay, did he really do this? Or did he copy this from somebody?

**

You know, so it took me a long time to figure out

Who is he? What is he capable of? You know, what is he not capable of? What does he really need help with?

**

Well, and then as the year progressed we started this after school program the 5th grade teacher next door Mr. Drexel. He got this really great relationship going with Geoffrey. So Geoffrey spent, which I am kind of jealous of in a way, but I said,

You know what, maybe because this is a male bonding thing he needs somebody, you know, that he just doesn't have in his life.

**

So Geoffrey did spend a lot of time with Mr. Drexel. You know, and then after school working with me, too. I found that Geoffrey worked so much better in small group settings.

**

You know, he would come and he would ask questions and he would

Okay, how do you do this? Okay, I got this one wrong, why?

**

You know that kind of thing

**

where he really wanted to learn and he was really flourishing, but you know not in the classroom with 35.

**

But after school and I mean just really, you know, remarkable improvement over

**

what he would do during the school day.

**

But you know

**

our schools are not set up to, to teach small groups so it, you know, it always works to the detriment of those kids that need the help.

**

So.

[Dorchester Damen R1 Q1]

Dorchester's high standards for herself and her teaching turn events that a weaker teacher might be proud into occasions for regret. Dorchester was able to connect with Geoffrey. She helped him transform from a disruptive force to a popular student who was surrounded by books. Under her influence, Geoffrey grew as writer and improved his ability to communicate. By the end of the year, Dorchester had helped the child bond with a male teacher, and Geoffrey was participating as a full member of Dorchester's after-school program. However, Dorchester wanted to do more. She was not able to connect with Geoffrey's family in a meaningful way. She hoped the boy might become motivated to do his schoolwork and actively participate during the regular school day, but this did not always happen. Despite working with him for a year, Dorchester was still unsure of Geoffrey's abilities.

So you're grading his test and going, well, like,

Okay, did he really do this? Or did he copy this from somebody?

**

You know, so it took me a long time to figure out

Who is he? What is he capable of? You know, what is he not capable of? What does he really need help with?

She was never able to figure the boy out.

Dorchester carried more guilt than any teacher in the Expertise in Urban Teaching Project. She was new to her school and, unlike Ohio Ontario, she experienced the transfer as a loss of voice. Dorchester was paired with another 4th grade teacher who taught in a traditional, by-the-book style, and at the beginning of the year Dorchester said she did not always teach the way she thought best. She felt uncomfortable with the school's parents and was nervous about maintaining appearances in front of her new principal. The first part of September might have been a particularly difficult time as Dorchester worked to build relationships with Allison, Geoffrey, and her other students without a strong connections with parents or supportive relations with school staff. Dorchester's skill and devotion to her teaching eventually enabled her to create a more beneficial classroom space. She reported that she ended the school year with a number of successful units that she enjoyed teaching.

Dorchester's story about Geoffery, however, touches on an area of difficulty that runs both through her interview and, to some extent, the other expert teachers' narratives. Special education services at Dorchester's school were disorganized and fragmented. Dorchester was unsure whether these services benefited her students. She did not trust the system well enough to have Geoffrey tested. In the next passage, Dorchester describes how students were pulled out of her classroom in ways she believed were contrary to best practice:

Interviewer

Okay, let me turn the tape. The next question is, can you talk about any obstacles. And you've talked about a bunch but, can you talk about any obstacles that got in the way of your teaching?

Dorchester

Obstacles that got in the way of my teaching. In this year in particular?

Interviewer

Yeah, this year in particular.

Dorchester

I think that I've always felt this every year that class size is always an obstacle,

**

especially when you are working with kids that really need you to be able to spend some time with them individually.

**

You know or even in a small group.

**

So class size I would definitely say is an obstacle but always will be. Scheduling.

**

I am at a school now that has really just tough, tough time with schedules.

**

Pulling kids out and bringing them in and, you know, I just kind of wonder you know if I could shadow one of my special ed kids

**

what is the day like for them? What are they really get out of the day?

**

of

Go see Dr. So and So. Okay, come sit here and read me this story. Okay, go to your regular classroom now. Okay, now go to the social worker over there.

**

Just, what, what are they really getting from that?

**

You know, I mean, I just kind of wonder that.

**

And then, like we'll be, like for instance, we read The Lion, the Witch and the Wardrobe at the end of the year and they were really into The Lion, the Witch and the Wardrobe and then we did this comparison between the movie and the book. I was shocked by how when the social worker came to get these kids, how excited they were to jump up and leave in the middle of the movie.

**

And even though we had these great discussions and they were so excited about getting to see the movie and

**

but, its like they're so programmed into

Okay, good, I get to leave now.

That no matter what, they are leaving from

**

They are happy to leave.

**

You know, and I just, and it made me wonder

Did I do something wrong? Was there something I could have done to engage them more?

**

You know because you know to be honest with you I wanted them to, at some point, to push back. I wanted us to be doing something where they said,

No, I'm not going.

**

You know

NUH, HUH. I'm here doing this,

[HITS TABLE]

and this is what I am doing

[HITS THE TABLE].

Bye!

**

You know, because its like they never have. They are never in anyone place for more than 30 minutes. They are constantly going here and there and everywhere.

**

You know, but, and I don't know if that is so part of their routine

That we just get up and leave.

Or is it something that I didn't do well enough?

**

You know, so that scheduling I thought was an obstacle this year for me.

[Dorchester Damen R1 Q4]

Dorchester found it difficult to build relationships with students who were rarely inside her classroom. Special education services did not support her instruction; instead they fragmented vulnerable students' school day.

These problems influenced Dorchester's work with Geoffrey. Not only did she avoid getting the child tested, but she did not describe creating a treatment plan to remediate his work in her classroom. Working with Geoffrey on his handwriting and pushing him to write better stories and essays seem worthwhile instructional choices, but there might have been other ways to improve his schoolwork. Dorchester said she believed this was case, but she lacked the relationships and knowledge to push Geoffrey as far as she wished. She was never sure how best to help him.

Similar difficulties show up in expert teacher Belmont Barry's account of working with a struggling student. In the passage that follows, Belmont's concern and compassion are palpable. Readers should have little difficulty entering into the connection between the child and the adult. However, similar to Geoffrey's story, it is

unclear whether Belmont's instructional choices were the best possible. There is a sense that Belmont crafted a response to a problem that was somewhat beyond her grasp, even though the connection and her instruction seemed strong. Belmont began this next passage without prompting. She was discussing a different group of male students when this boy came to mind:

Belmont

And sometimes I said that he was my toughest writer. He would just come in and out, trying to get his

Interviewer

What was he like?

Belmont

Attention. A non-writer. Very difficult. Very, very difficult. I had to transcribe what he, his thoughts.

**

He would tell me, it was a lot of jumbled ideas and I would just really guide him. You know

**

Oh, do you mean? Oh, okay. So you are in the house now.

He wanted to write story after story after story, but it was so difficult. Because he would go way off.

**

He would just keep going, and going, and going, and going. So really trying to help him as much as possible. Really sitting with him, probably 15 minutes almost every day during Writer's Workshop and really sitting with him, and saying

Okay, what are we working on? Okay.

Really getting him to go back to a piece that we had started.

**

You know, he always, in his writer's notebook he had 3 sentences on each page. And it was like a different topic every time. And he would never complete anything. And so, really sitting and trying to organize his ideas and really guiding him and he would tell me, if I said

Oh, do you mean this?

Sometimes he just

Uh-Uh.

**

And sometimes he would say,

No.

**

That's not what I mean.

**

Ohhhh. Okay.

So getting a lot of his own ideas out. I didn't want to write it for him, so really trying to guide his ideas and just putting it into a more organized sort of way. Because once he would just sort of loose interest. You know

**

he had. He was a, he was a big attention problem and can't stay focused. So when I worked with him, he was wonderful.

**

He was able to produce things pieces for his writing folder. And I worked with him I'd say most of the time on formal writing. Because we do writing together two days a week which would be essays or research or whatever we have to do. And then the other three days it's writing on their own.

**

So usually it would end up that he need so much extra time to that when it was time for writing on his own, he would still be working on an essay or a descriptive paragraph that we all wrote together or something like that. So I would be able to use that time for him to finish up. And he wanted to finish up

**

before going on to his own independent writing. So he never, I don't think he ever felt like

Oh, I am missing out on independent writing.

First of all it was so difficult for him anyway. But he wanted to keep up, so when it was writer's workshop day he would say

Can you help me with my descriptive paragraph from yesterday?

**

Yes.

and you know

[COMPASSION IN HER VOICE]

really helping him as much as possible.

**

And a lot of writing together.

[Belmont Barry R1 Q1]

There was no mention of special education assessments or personnel anywhere in this passage. The boy might have been receiving services, but they are in the background of Belmont's description. The student benefited from Belmont's instruction and clearly belonged in the regular classroom, but similar to Dorchester's narrative, there was feeling that more could be done.

One of the problematic aspects of using narrative interviews to study expertise is that standards of best practice changes, but a story collected at a particular moment remains frozen in time. Benner and colleagues (1999; 1996) emphasize that many of the techniques used by the nurses in their study had already become obsolete by the time they published their work and warn the reader to avoid using their text as literal guide to practice. The pace of technical change in classroom is not as fast as in hospital critical care units, but that does not mean that those environments cannot and have not changed. There is no evidence that special education reform had reached the schools of any of the teachers in this study, with the exception of Ohio. As a result, it is somewhat problematic to judge teachers on their ability to meet the demands of a reform program, such as Response to Intervention, when they lack the tools and resources to meet those guidelines.

Expertise does not mean that a professional will be correct all the time, nor does it mean that her actions will always be successful. Expertise is the commitment to do one's best and to change one's practice based on study and feedback (Charness, Krampe, & Mayr, 1996; Ericsson, Krampe, & Tesch-Romer, 1993; Ericsson & Lehmann, 1996). It is a journey and an evolution; it is not an end state. Expert baseball players strike out. Expert physicians make mistakes that may hurt their patients. The narratives I have published in this section show some of the limits of the experts' practice. Movement across schools in CPS made it difficult for the accomplished teachers I interviewed to

understand parents, caregivers, and communities well enough to act as members of their student's extended family. Conflicts with administrators and poorly functioning classroom support services made it difficult for them to organize a wide range of resources to come to their children's aid. The experts' descriptions of their work with their neediest students were not always in line with the precepts of special education reform. They needed to do more, but lacked the resources to act according to best practice.

Five Narratives of Caring

In the next section, I publish five narratives without commentary. These narratives speak to the themes I have raised in this chapter and help deepen and enrich the issues I have discussed. Rather than analyzing the beginning teachers' efforts manage difficult connections, I publish two worthwhile cases of the beginners' relationships with very needy students. These narratives allow the reader to connect with the best of the new teachers' work without minimizing the instructional difficulties that shaped the stories they shared during their interviews. I then move on to three narratives from the expert teachers' interviews that contrast the beginners' efforts. These stories describe the best of urban teachers work. Each narrative describes the teacher's effort to form deep bonds with students who suffered emotional difficulties. Each story is presented to evocate excellence in professional and moral practice (Benner et al., 1999; Benner et al., 1996; Tyler, 1986).

In the first story, beginning teacher Indiana Ingleside's described of a group of students who overwhelmed her grasp. At the time of the study, CPS flunked students whose tested achievement did not meet grade level. The system also forced schools to close classrooms in the middle of fall semester if enrolment was lower than projected. As a result, Indiana's school dumped—there seems to be no better word—a group of students whose achievement was two or three years below grade level into her sixth grade classroom and left the students and the beginning teacher to fend for themselves. Indiana's struggles help clarify the discussion of the expert teachers' difficulties described in the previous section. Where Dorchester Damen and Belmont Barry said they struggled to raise vulnerable students to their highest potential, Indiana struggled just to

make it through the day. The beginner improvised a set of instructional supports that did not seem adequate and, eventually, all of the students were removed from her classroom except for the boy who was the subject of her story.

There are a number of pauses woven through Indiana's narrative and the reader might want to stop and count the seconds during each of those long moments. The beginner's story sways with the music of her concern and good nature. One can hear the caring in Indiana's voice as well as the commitment that carried her through the challenges of the school year. It is also possible to imagine some of the boy's struggles and to visualize what the connection with his teacher meant to him.

In the next narrative, beginner Halsted Hoyne described one of the great adventures of her first year in CPS. Halsted shared how she built a relationship with Arthur, one of the boys who spent the first week of school wrestling across her classroom floor. The beginning teacher's story is one of the longest in this set. It stretched from Halsted's classroom, to the Arthur's father's funeral, to the school playground where Halsted would meet with the boy after he was given a special education placement. The narrative described Halsted growth as a teacher and showed how Arthur developed under her care. Halsted was a Buddhist. Throughout her first year in the public schools, the beginning teacher worked to stay calm, remain mindful and keep free of self-blame. Arthur's story attests to the importance of knowledge that might grow up in a family or a religious institution for teachers' work. The narrative helps the reader imagine what it means to endure.

Two narratives from the experts' interviews follow. In both stories the NBPTS-NTL teachers discuss their efforts to intervene in the lives of troubled male students. Ohio Ontario described how she worked with a student with a conduct disorder and helped him learn how to monitor his emotions and change his behavior. During one portion of her narrative, she gave an almost moment-to-moment account about how she talked the boy out of a tantrum. During this portion of the interview, Ohio's voice projected a firmness and a sense of purpose that can be heard on the printed page. In the next passage, expert teacher Prairie Paulina described her work to help a student who brought a knife to school. Prairie had built a strong connection with the boy's family, and while this bond did not prevent the incident, it allowed her advocate for the child after the

event.

Expert teacher Addison Ashland's stories about two girls in her classroom, Charlotte and Dahlia, end this section. Addison described how she struggled to advocate for both young people and carry them through moments when they were suffering and in pain. Both girls' family problems were so severe they were at risk for being ostracized by other students. When the youngsters sat in Addison's class and participated in her lessons they had the opportunity to, for a moment, feel connected.

Addison said she grew up in the Chicago suburbs and went to a Jesuit college where she majored in finance. She participated in an internship at a Wall Street firm and was so disgusted by the behavior she witnessed that she switched majors and became a teacher. Addison began her career as a substitute and then landed a job in a CPS magnet school where she connected strongly to the older teachers in that building. Addison developed as a professional under their care. She learned how to teach in ways that benefited her students, and she grew confident in her abilities. Addison said her work situation changed when a new principal was elected and the older teachers in school were marginalized and then pushed out. Eventually, Addison also left the magnet school and found her current position. The expert teacher said she had little connection to the administration in school or to other educators who worked in her building. Addison did not agree with her current school's philosophy. When I asked her whether she had learned something new from her teaching for the interview guide's 3rd question, Addison, alone of all the other teachers, said that she had not changed at all. She said she had not developed in any real way during this placement. Readers can get a sense of Addison's loss in the final section of the interview excerpt, when Addison described the relationships she continued to enjoy with her previous students.

Addison's story helps connect the Expertise in Urban with Chicago and its school system's greater history. All of the students Addison described were poor. Most of their families had journeyed from cities and villages outside the United States. Their children now grow up in poverty in overcrowded apartments in Chicago's West side. Some of Addison's students joined gangs. Some got in trouble with the law. The world Addison worked in is a Chicago that has been extensively chronicled by other writers (Algren, 1961; Royko, 1971; Wilson, 1987). It is a place of constant struggle and competition where

citizens are not united for the common good, but by “the almighty dollar.” It is a city where the poor have always been cheated, and their children have never been given the opportunities they deserve (Herrick, 1971). Addison taught in a city that, in Algren’s words “went to work too young.” It was a place that always had two faces:

One for winners and one for losers; one for hustlers and one for squares.
One for the open-eyed children of a thousand windowed office buildings.
And one for the shuttered hours.

One for the sunlight traffic’s noontime bustle. And one for midnight subway watches when stations swing past like Ferris wheels of light, yet leave the moving window wet with rain or tears.

One face for the Go-Getters and one for the Go-Get-It-Yer-Selfers. One for poets and one for self-promoters.

One for the good boy and one for the bad. (Algren 1961; p. 15)

Addison worked to help her student survive life in the city’s streets. She was able to recognize the good and evil in their choices, even as she compelled them to do what was right.

Addison told me she got to school early each morning and worked herself so hard she sometimes she tripped down her school’s central stairway when she went home at night. Addison had started going to Bickram yoga when she transferred to her current position. The flexibility and healing she received from her practice pulled her away from her school. Instead of working a hundred hours a week, the veteran teacher started looking for a better balance. In late August of 2004, Addison told me that she had decided it was impossible for her to return to school. She said that she did not think she would ever work as teacher again.

Addison’s narrative might be seen as a way of saying goodbye to a way of life that shaped more than a decade of her existence. She stepped into the system a few months after college and walked out an adult. Almost all of the knowledge that shaped the performances she evokes came to her courtesy of the Chicago Public Schools.

Beginning Teacher Indiana Ingleside

Interviewer

[SOFTLY]

Well, I don’t know about that.

[LOUDER]

Talk about your own classes. What would you do, specifically, with like the 13 year olds in your class. What would you do for them?

[4 SECOND PAUSE]

How would you manage that?

Indiana

Well, I had two at the beginning of the year that eventually got taken out cause they were just really distracting other kids. And I got them half like I got them in October because we had to close down one of the classes. All the kids from the 3rd/5th grade class got dispersed into the 2 existing 5th grade classes. And, a lot of times they didn't, they didn't come. They didn't even come to school, but when they were there

[4 SECOND PAUSE]

I would just, just, you know

[4 SECOND PAUSE]

try anything to keep them

[5 SECOND PAUSE]

occupied, basically, you know,

**

[10 SECOND PAUSE]

you know a little extra help. Probably, you know, I would probably stand by them more and make sure that they were following. Of course, these were the kids who need the most help with the fundamental basic things and when you have 30 kids in your class it's really to give them what they need, and I couldn't actually. I didn't. I didn't give them what they needed.

[4 SECOND PAUSE]

[SHE LAUGHS]

Interviewer

[VERY SOFTLY]

That's okay.

Indiana

[8 SECOND PAUSE]

And there is not any

[8 SECOND PAUSE]

like

[SADNESS IN HER VOICE. BY THE MIDDLE OF NEXT PARAGRAPH SHE IS CLOSE TO TEARS BUT SHE NEVER ACTUALLY CRIES.]

I thought that there would be people to come in and take them out and help them, but there's not. There was never anybody who came in like and took out the kids who didn't know their multiplication tables yet, which I thought there would be. Kids who just needed just really basic help in reading. There's kids in the 5th grade who didn't know like 1st grade sight words. So sometimes when everyone else is independent reading, you know, hopefully books on their level as best as I could find them books on their level. I would just take, luckily for some reason I bought the sight word flashcards, probably not even thinking that they would need them, but I did. And so I would just go through sight words and have them read really basic books to me, or and we would pair up and I would read a page and they would read a page. But I, you know, I didn't do a good job differentiating instruction as much as I would like to and

[4 SECOND PAUSE]

[THE SADNESS BEGINS TO LEAVE HER VOICE]

So I gotta, I have to do better with that for next year too. But yeah

[SHE LAUGHS SOFTLY; RECOVERS]

So then half way through the year, those kids, they got placed in other classes because of their age. And then I had another 13 year old all year who basically was alright. I mean, he assimilated himself pretty well. So he wasn't, he wasn't a real big problem. But actually he had this 13 year old attitude like, you know, everything I said he just said the opposite.

[LAUGHS SOFTLY]

Interviewer

Oh really.

Indiana

So, in like April or May, I think it was like April, he was, I can't remember what he said. I said something to the class and then he said something just totally the opposite and I said

You know what, you can disagree with me, but I still love you anyway.

In front of the whole class.

[INTERVIEWER LAUGHS]

And then, everybody was like

OOOOOOOOOOOO!!

And then, he kind of just chilled out, because how can you like, you know, be mean to somebody who just told you that they loved you. You know, and so then I didn't have a problem with him for a really long time.

[BOTH LAUGH]

He just kind of, you know, he just kind of smiled and you know got over it, but

[4 SECOND PAUSE]

so, you know, its kind of always been my philosophy to just kind of kill them with kindness, and so it most of the time it works, and that goes back to the thing about not yelling. Cause that just makes it worse. I mean, I guess for some people, for some teachers, it's really effective, but for me it wasn't. And also I think because these kids, I feel that these kids hear a lot of negative things and get yelled at a lot. It's not, they don't even hear it anymore. They are so immune to it. It doesn't even mean anything to yell, and sometimes they even think its funny and so

What's the point?

You know, so you, just have to, you know, I think be very strict and firm and mean what you say, but not in a yelling type of way.

[Indiana Ingleside R1 Q3]

Beginning Teacher Halsted Hoyne

[HALSTED READS THE STORY SHE HAS PREPARED FOR THE FIRST QUESTION OF THE INTERVIEW.]

Arthur is a special child. Arthur is a very small adorable boy who was born addicted to crack. He was adopted by a wonderful man who then got very sick and died while Arthur was in my room.

**

The first week of school I broke up about 10 to 20 fights involving Arthur.

**

With another little boy. And in fact they were the two smallest boys in my class. I then figured out that these two were mortal enemies and should never be in the same room together. The other boy was moved to another room, and I was left with Arthur. Arthur had personally prided himself on the demise of

two fully certified teachers and a whole slew of subs the previous year. I think he was determined to make me another notch on his roster. At times, I saw this kid get so out of control that it would take 3 to 4 adults to restrain and remove him from the classroom. Because his father was sick he was staying with grandparents who were equally overwhelmed. They took him to a counselor two times a week. The counselor came in to observe him several times. Everybody agreed that this kid needed special services and a self-contained room. He had never been referred and this was a 3rd grade classroom. The case manager of my school told me that I could not refer him for services, as she was already too overwhelmed. This changed the day he told the assistant principal that he would have her shot for removing him from my room. My mentor, the assistant principal and I all went to the principal on my and Arthur's behalf. I needed help with this kid and nobody knew what to do. Finally I was told that he would be evaluated in 3 months. In the mean time, he had bitten me twice. Cause numerous problems for my class and for my floor. Getting angry at this kid did not work. He could get a whole lot angrier back. I was stuck. I had to figure something out with him because he was here until March and I had twenty other kids that had to work harmoniously with Arthur, and he with them. He loved sitting on the computer. It helped him to stay calm to have something to do and he was still participate with the classroom discussions. He is a smart kid and when feeling relaxed he can be quite a bit of fun. After his father died we got especially close. I attended his father's funeral which I think really touched him and his family. After that we were best buddies. I found that the best way to deal with him was just to show him how important I thought he was. Things were going great and then his staffing came up. His grandparents, his counselor and every professional in the school agreed that he needed to be in a smaller class with more individual attention. And just like that, he was moved. [LAUGHS]

The transition was very hard for him. He kept coming to my room and talked to me nonstop and talked about me nonstop to everybody. I honest missed seeing him and missed him in class. After all that, we had forged after all that we had forged a wonderful relationship. Eventually, he got in his new routine and he came to visit me two to three times a week, and I was always happy to see him. I think that I helped Arthur

because I helped him to get placed in a better classroom for his needs. I stuck it out for him and I showed him that I cared for him and I am still a friendly face that he can turn to when he his out of control. The last of week of school the social worker told me that he still talks about me all the time in their sessions and his family has often told me that they appreciated the time I had with him. I appreciated Arthur because I was able to stick it out with an infamous student, so I have now gained respect from my peers. I like spending time with him because he is smart and funny. I will always remember. I will always have this experience to reflect back on for future Arthurs.

Interviewer

That's great. Why don't you just tell me about. Could you just. Could you expand on that story or tell me more.

Halsted

Absolutely. I'm going to refer to here

[POINTS TO HER JOURNAL]

though. So let's see. Okay. This was the day he told the assistant principal that he was going to have her shot. He just. It was. He came in really angry. He told me that he was not going to do what I told him to do. I went and he wasn't going to budge too either, out of the room. So the assistant principal who was also brand new to the school, like I was. She sort of chased him around the room. Finally he was a little he was a little kid so she just picked him up.

[HALSTED LAUGHS]

And carried him out and that was when he was screaming he was going to have her shot. So being new, I wasn't really sure if this was normal.

What to do? Did he really need to be in a self contained? Was it me?

So I met with her. I think every day that week I met with her going

What am I supposed to do? What am I supposed to do?

So finally I wrote a psych consultation to get him referred. And it took several weeks between the assistant principal, my mentor who was another third grade teacher, the other assistant principal, and finally we got to the principal. And the principal was able to sort of push his paperwork through a lot quicker. So, and I even remember a particular quote she said to me was

I know that you have troubles with Arthur. He is a special child. We're going to work on this.

So and the other thing is that the year prior, and he was a very violent kid. And he threw a brick at another student.

Interviewer

Oh my gosh

Halsted

Yeah, he was. When I would describe him. I had a sister who was a social worker and I would describe his behavior and she would say

He doesn't sound like he should be in an elementary school. He should be, you know, in the psych ward.

But, lets see

[HALSTED FLIPS PAGES]

Where else.

[7 SECOND PAUSE]

The other thing that used to get to me in the beginning of the year was this kid was rude and angry like mean.

**

He was rude to everyone and mean. But everyone who knew him treated him like he was, they were like

It's so great to see you! Oh, how are you!

And that used to and that used to really go

What are you doing? This kid is a jerk.

But I have to say. I find myself now being that one who does that with him

**

And I understand that that's the way to sort of communicate with him. He will only respond positively to positive, you know, communication. If you get negative with him. He can like

[SNAPS FINGERS]

turn like a dime. And he can get mean and like vicious. I mean he's a little kid. I don't even know how much he weighs. But he was the smallest kid in my class and at times it definitely did take between 3 and 4 adults to restrain him and or move him out of the classroom. I felt really sorry for his grandmother, but I also felt like I worked really hard to build a decent relationship with her. My school is at 100% African American so I felt that that was a really important thing especially as a Whi, a Caucasian teacher to, you know, say

I'm not here to judge you. I'm not telling you know this kid

I just I think they had dealt. I think a lot of their prior experiences with Caucasian teachers had been a lot of judgment and a lot of blame. So I wasn't in a position to that anyway. But I wouldn't have, anyway. So. I just, you know, I would call his grandmother and in the beginning of the year she would just tell me how terrible he was. And how she, you know, she had raised six kids of her own. And she had never had a kid like this. And I didn't really know his history. It wasn't until later on at the staffing that I learned about his being born, you know, with a crack addiction. And then I didn't really fully understand that it was the woman he lived with, it was her son.

**

that was just a really great guy that adopted him and just took him in

**

and loved him.

**

And when I went to his funeral. It was just so obvious that this man was such a pillar of the community. I mean there had to be like two or three hundred people there. I mean the church was packed. Everyone had wonderful things to say about him.

Interviewer

How did he die?

Halsted

He had you, not exactly sure, but it turned, I want to say he was on kidney dialysis for about a year or two

**

And I don't know what that came out of.

**

But, you know, it just wore him down,

**

and he passed away. And I don't think even that Arthur was living with him the whole time I had him in my classroom I think.

**

He was already too sick.

**

And he was already living with his grandparents, you know. And then one thing else that I noticed about Arthur was that when I had him one-on-one or away from the rest of the kids or had him alone in the classroom he was

completely different kid. He was like, I say, he was, I figured out that he was a really smart kid.

**

He was really funny. He was really cute. I mean

**

He was charming. He was all. I mean just everyone really did fall in love with him. And that was one of the things that I was saying. Like I was so confused by that,

**

but now I completely understand why that happened. And even when he got moved to a different classroom, I would see his new teacher all the time and she would like, the first couple of weeks she was just like

OOHH!

And I went

How's my buddy?

[HALSTED LAUGHS].

And she was like

You can have him back.

So it was just funny. I think that's he tests everybody like that. I mean I think he's just so used to people sort of bailing on him.

**

And he puts them to a very rigorous test.

**

And let me see what else.

[FLIPS THROUGH PAGES]

He did. Actually I did find out, after he had to leave my classroom he did have to spend a couple of weeks in the psych ward. So I really don't know what happened with that. And, but I, just to me that still validated, because we had gotten such a great relationship going and then I felt really guilty that they had sort of moved him to this other room. Then when I heard that I was like

No, no, no.

It was right. It was the right thing. And obviously he needs to be with people who can help him you know better than I. I don't know, what else. I mean I really never got him to do much academic work

**

it was more about a personal relationship with him and I just felt really good, you know, that I didn't bail on. Because there were definitely days when I was like

[WHISPERS]

I am not going back. I am not going back

[REGULAR VOICE]

But yeah, I didn't. So with him it was really more about like meeting his emotional needs and meeting you know interpersonal communication sort of.

**

You and the other great thing about him was that he could be bought pretty easily. So like a Macdonalds Gift Certificate went a very long way to get him to be in a compliance. Or you know or a bag of hot chips or anything you know he would really get it together. He loved getting stuff. So I was like

That's great.

I mean at least, you know I where I can like keep him in line.

I just get him a lot of stuff that he wants.

**

And it was great. You know. It did work so. At first I felt really weird about that about that. I thought

Am I buying trying to buy ?

and it was I used that with all my kids. I'm like

Am I buying their attention and their respect?

And it was like

Who cares, I'm getting it. So, And that's the only way I can figure to get it now so

And, I don't know. I mean. I don't know if you have any questions.

Interviewer

Well could you tell me how you sort of you said that you sort of he was very difficult at the beginning and then he sort of turned around and could you talk about how the turning around process er

Halstead

I think a big part of it for me was I sort of had to accept that he was staying in the room for a certain amount of time. I mean eventually he was going to be out. But I knew he was there. And I so for me it was like

Well what I am doing isn't working. So I have got to figure something out

**

Because he's not going anywhere.

And so, having the computers in my room was a big turning point

**

he loved. He was really, really bright on the computer. Like I could that was why I start realizing how really, really smart this kids was

**

verbally he could explain everything he was doing on the computer. He could you know he was great on maneuvering the internet. He could find things. I would give him internet assignments. Have him look stuff up. We did a, we did, I was in charge of the Martin Luther King assembly in January

**

He was adorable. My whole goal was that I wanted him to dress up as like a little young Dr. Martin Luther King. But we never quite got that far. It was just lucky that he got to go up and stand up on the stage with everybody. But when we were doing that there was all these great websites I found about Martin Luther King and these timelines and so I would give him I would him you know I would design a like a work sheet or a page to fill in just write off stuff he could do like he could search. He could find the web site on his own and he could fill in the information. He did great with that. He was really interested too. In African American history obviously

**

And, you know, civil rights history and which was also a good turning point for me because then I realized I have to get more African American literature in here. I've got to get you know more in through. I've got to design more lessons around things and people that they can identify with. It wasn't just him. It was my entire class. Because actually designing these internet lessons for him was great because then I was able to use them with my whole class. And on the day his dad died really stands out for me. He came in, he wasn't he was pretty normal. He was really calm. I mean not normal that's a weird, that's a bad term, but he was very calm.

**

Nothing seemed out of the ordinary. And he came right up to me and very quietly he said.

I am very sad today.

And I said

Well what's wrong.

And he told me his dad had died. And I said I was really sorry. I gave him a big hug. And he wanted. The kids, four periods a week they go to another teacher for computer or music or whatever and he didn't want to go to the outside class and I, you know, I said that was fine, he could stay with me. And the reading specialist came into my room during my prep period. I wasn't even alone in the room with him. I had a retired teacher mentor that would come in and help me one day a week

**

And she was there that day. So it was her and I and Arthur and all he wanted to do was to sit on the computer and I said that was fine. You know, everything to keep him calm,

**

I knew he was upset. I mean obviously. I've lost a parent. It's an upsetting thing and the reading special came in and just said

You can't be in here. You have to go to your class.

And that, it was like, she started sort of getting real direct with him. Telling him,

No, you are going to your class. You cannot stay in here.

And I said and I sort of pulled her aside and I said

You know, his dad just passed away this morning. He's really calm. I don't mind him being in here.

And she was like

No, you are being very nice. But that's ridiculous. He has to go to his other class.

Whipped him into a frenzy. Just

You're going to this class.

I'm not going to that class

You're going to this class

I'm not going to that class

I mean, just really, and I stepped back, because honestly I did not know what to do.

**

I mean she's my superior at this school

**

He's, you know, yeah technically I'm not supposed to keep them out of their extracurricular

**

classes or whatever But

**

I thought,

Please

Interviewer

Please

Halsted

This is a very special circumstance. Ended up whipping him up. He's in tears at this point. She's dragging him down to his class. I mean she did. She dragged him down to the classroom. Took him to other the classroom. And that in and of itself, ate up about 15 minutes of my prep. Because she was. Her whole point was that

He can't be in here because you need your time.

**

I was sitting at my desk doing my work.

**

My mentor was sitting at her desk doing her work

**

He was sitting there, it was great. It wipped you know it took 15 or 20 minutes out of my prep period and then by the time she got him down there, it was time to take him back.

**

So, but I learned a really important lesson. I mean just watching other adults deal with him was a really great thing because I learned a lot of lessons about sort of talking to kids talking especially to him and this was a great example of

When you start ordering him around he shuts down and

**

he's not a kid that's going to be told what to do.

**

He's just not.

**

And you just, I think as the adult you just have to accept that and just figure out other ways

**

to get him you know to comply with what you need him to comply with

So then he was real sweet that week. He came up to me, he said

You know my dad's funeral is this week

And I said

Well, do you want me to come?

And he said

I really want you to come.

And he was great. He looked it up on the internet, like the address of the church. He wrote down the name. He wrote down the address and he wrote down the time and then he came to school that whole week and his dad and that was a Tuesday

**

His dad's funeral was a Saturday

**

and he was in school the whole week

**

with us.

**

And except for like one day they kept him out. I guess it's a pretty big deal in African American culture to purchase the outfit that you lay the person out in. So he missed school for that. That was like the one day he missed. But, and you know I called his grandmother and wanted to double check the time on everything. And so, I went to the funeral.

**

on that Saturday which was really an amazing an experience for me. I was the only Caucasian in the church. People were sort of looking at me. I felt the need to explain myself.

**

But I learned a lot about this man that had adopted him by going to this service and I learned a lot about the family he was living with.

Interviewer

What did you learn about?

Halsted

I just learned that he was with a really kind family, who really. You know because my experiences with his grandmother had been

I'm calling her up to say oh this happened today

**

or he bit me. If he bites me again I'm filing a police report.

You know or stuff like that. And her response was always

Well do what you got to do. There's nothing I can do.

**

And, but when we were at the when I was at the funeral. I watched him, I watched Arthur through the whole service. And it was a long service. Like almost two hours. And he sat still for two hours.

**

And I said

He can sit still for two hours

**

I've never seen him sit still for two hours.

When something's important to him

Or I don't know what it was. But you could tell the people you know the people he was sitting with

**

the other members of the family

**

its just like if he. They treated him a certain way and he had a different name too at home.

**

They called him Paul and we called him Arthur at school and I never quite figured that out. I don't know if Paul was his birth name and they changed it, I don't know. But it was just really interesting to sort of watch him with his family and just watch his family. And, of course, so many people got up to speak about this man and eulogize him and just all the interesting thing he had done in the community he had served like on the board of the church. You, I could not even tell you but he was definitely a community volunteer and just it just sounded like he did some wonderful and amazing things. And they also mentioned you know that he adopted kids. I think

he'd adopted two kids and he had three of his own that were natural. And so just sort of watching him sit there and listen about his father. I knew he loved his father so much. And it was just amazing to see him sit there still for almost two hours because I had never seen that and he used to sleep a lot in class. That I mean, he was medicated. And so I was wondering, like part of me was wondering

Well did they medicate him for this?

But I didn't think so. Because he would have been asleep. If they had

**

sort of over medicate him.

**

Cause he used to sleep in my class a lot

**

when he was, when they were still sort of figuring out his meds. So I don't remember what the question was, but it just, I mean I just, after that it was like we you know we were really we were like this.

[HALSTED SQUEEZES HER HAND TOGETHER.]

**

Honestly after that experience he was just so thrilled that I had come and I was really thrilled that I had gone. I was really thrilled that I had gone.

**

Really. It meant a lot to me too it just you know. I know it meant a lot to him. His grandmother said it meant a lot to her that I had come

**

And also in terms of forging a personal relationship with them, I just remember. I went to several special Ed. staffings this year and when I would go to them I knew every parent of my kids. I knew them by name.

**

You know it wasn't just

**

That's his mom. I don't know her name.

But I knew every single one of them by name and when I walked into Arthur's staffing it was like

They still sort

Like the other people who don't know them as well refer to them as
Grandma and Grampa and in the 3rd person, you know I just I felt when I
walked in I was like we were sort of we were all sort of a little team,

**

his grandparents and I and

**

and his counselor too his outside counselor that had

**

come in a couple times

**

so

**

Yeah, I don't know

Interviewer

How do you you said that what did you say to the
people at the funeral you said you talked with them

Halsted

Yeah I spoke with the people there because I think I think they were
wondering why I was there

**

and I just explained that I was Arthur's teacher and just met some different
people and all they had to say was what a wonderful man he was. And you
know I it almost weird it was like I mean I teach in that neighborhood. I'm
not frightened in it but you they were really they took kind of responsibility
for me. They walked to and back to my car and they tried out my car it was
like somebody from the church who did that

**

They walked me to my car and made sure it started and got out and it was
just I was like

Wow this is really

Yeah because I didn't like I the neighborhood I work in is a very rough
neighborhood but I guess I don't think about that much anymore. I'm pretty
used to it. So. I don't know.

Interviewer

That's fine, anything else or we will go onto the
next question about him.

Halsted

Um

Interviewer

Talk about maybe like when he he said that when he would come back and see you during the how did that go?

Halsted

Well, that was very interesting because he was actually moved to a classroom that was in a different building than mine.

**

So he would meet where my class would land in the morning he would meet me there a couple times a week and then he would meet me there after school and on Fridays. I told him if I got a good report from his teacher on Friday then I would have something for him. And I used to say things, like I would talk to his teacher all the time. I would find out how he was doing and one week it was very funny I said

I heard that you had a couple of good days this week. I heard you had some not so good days this week.

And he looked at me and goes

Well, I would agree with that.

[SHE LAUGHS]

I think that's true.

And I was like

Okay, so

I just thought it was really great that he, he could be very honest with me. and he didn't, he didn't sort of feel the need to, you know, sugar-coat the situation. He never came to me,

I'm being good

You know, if he wasn't being good he would say things to me like

I'm having fun.

And I'm like,

I know you're having fun, I don't know if you are necessarily doing everything you need to be doing.

And, but I loved seeing him. It was just great. He was just so full of energy. Run up to me and give me a big hug. Just really like

Hey, Ms. Hoyne. How are you? Its so great to see you.

You know, just really just really awesome.

**

And I would find little things to give him every week. And

**

he liked that and as I say, he liked he enjoyed getting things.
So, but I don't know.

Interviewer

That's great, no that's really great. How did the other kids react to him.

Halstead

In my classroom the other kids by the third week of school. I mean they knew him. They had been in school with him since I mean they had been with him in second grade a lot of them had been in the same room where he had sort of been the prime reason why they had lost two of their teachers.

**

And at first you know, the kids were like

Arthur is doing this! And he's doing this! And he's doing this.

I would try like when I did not fully understand the situation I would you know try to do the stuff you learn in the manuals, you know pull two kids aside

Well what happened? What happened?

I eventually realized that the kids the other kids needed to sort of accept the fact that this is the way he was and that they needed to deal with him differently as well.

**

And I seem to recall, I never said this to them directly, I never said

You treat him differently

I used to just say

You know, There's really not much I can do about Arthur, but, you know, there is really not much that you can do about it either, but the things you can do is control yourself. And if he's bothering you, you move away. Or if it gets to the point where like there is something really awful like he hits you or he pulls your hair. Then you come to me and I will figure something out. I'll get him. I'll get him taken out of the room or whatever.

And the kids used to say,

Why is Arthur get to sit on the computer all day?

And this other kid answered,

Because he is special.

[BOTH LAUGH SOFTLY]

And I don't think he meant it like special ed

**

You know he just meant

**

He's special.

**

So I just think eventually they sort of figured out that they needed to deal with him differently as well.

**

And you know I had other kids that just never sort of figured that out. Never accepted it. And a lot of them were pretty relieved the day he got moved out. A lot of kids were kind of relieved.

**

So on one, I have one. I do as I am talking I remember one very specific incident with him. Yet I was taking my kids on a field trip in November. And I made them earn the field trip. I and my whole thing was that I was just trying to work on behavior with them all year. I wasn't even academics or home work or anything else, other than

Was your behavior appropriate this week?

And you know, his wasn't. And he wasn't allowed to go on the field trip. He was furious with me. And he came into the room and I said,

Well you are not going on the field trip. I have to take you to another classroom to stay.

And he's like

NO!

I said

No, you have to.

And he's like

NO!

And I was like. And the bus was here, and they were buzzing me. And so I'm like trying to find someone to help me and move him. No one will help me.

**

And I went to the disciplinarian. I said
Can you help me.

She's like

That's not my job. You're supposed to find a room for him to get to be in.

And I said

I found I have a room for him to stay in. I can't physically get him there.

**

Without probably ripping his arm off.

**

And so then finally. They took him down. The assistant principal who had sort of, like after he had threatened to shoot her they sort of became really good friends as well. And on some days when no one could deal with him, he would just follow her around all day. He'd just stay with her all day. Sometimes he'd go into the office and just sit there and they'd say,

You know, as soon as he got to the office, we did we forgot he was there. He was so quiet. He sat there. He fell asleep. He did this.

So, with that the, the day of that field trip, that was really funny cause everybody was sort of talking about it.

**

The next day.

**

People were just like

**

It just became one of those like infamous stories.

She couldn't get the little kid to move. No one could get him to move.

**

So. Yeah so. What else, so... Yeah so he, and he actually.

He did have a could of really good friends in the classroom and a could of people that he sort of hung out with. And I said I would still see on the play ground after school hanging out and stuff. So I mean he definitely had relationships with kids.

**

and that one little girl, he was looking for someone to sort of take care of him and

**

so some days he would sit. I only had 5 girls and 16 boys

**

so some days he would just sort of sit himself with all the girls and they would take care of him. And they'd you know they would fix his paper for him. They'd sharpen his pencil. They'd just sort of nurture him and that's what he wanted. And like one day, I remember, he was just sort of like, this was kind of weird. I felt weird about it. He was sucking the other girl's thumb. Like he was, and I was like

Okay, you can't do that.

But I mean he was just sort of looking for, you know, some contact, physical contact. Some nuturing, and you know he liked it. From the girls and they really liked taking care of him

**

Until he got you know, until he did something if he got angry or pushed them or you know went over a line then they were done, but. So yeah, I mean I remember the one little girl just loved, just loved, you know, him sitting by her. And, and he developed a real big crush on one of the little girls, one of the really tiny little girls in my room. And he would defend her and he'd open doors for her and he'd give her his computer time and it was really very sweet.

[STRONG EMOTION HER VOICE.]

So, and you know I think that he's in a much better place being in a smaller classroom with more one-on-one interaction because he really needs attention.

**

He just

**

He does. So..

Expert Teacher Ohio Ontario

Interviewer

What about this year, can you talk about your students, this year?

Ohio

This year, Oh! This year! I had one student. It's so funny it's a boy

**

and he in years' past, he, its so funny behavior but he, he used to have tantrums

**

all the way up to until until 4th grade.

**

and, and I remember, you know, academically, he was okay academically.

**

It's just that when he felt like someone was doing something wrong to him.

**

He, he, he just went off and like

I'm right. I'm right. I'm right.

**

Nothing else, he wouldn't listen to anyone. The principal couldn't talk to him. His parent's could barely talk to him and stuff like that.

**

And I remember one day talking to him at a time when he wasn't having a tantrum. he was doing his work, and he was just, you know, what we think of as a perfect student a model student.

**

And Bill, Bill was like, like I said to him

Bill, look at this, this is great you are able to do this by yourself and you know

**

there's no problem with you.

You know I was like,

but one thing you need to understand is when you have a conflict, you need to be like this. This perfect student.

**

And I remember talking to him

Oh, Miss Ontario, I try. It's just that people think of me as doing stuff wrong.

Well, I was like

Do you ever do anything wrong?

And he's like

No, no.

[INTERVIEWER LAUGHS]

Well, let's really think about this, Bill.

[INTERVIEWER LAUGHS]

He like

Yeah, sometimes. But, Miss. Ontario

I was like

Not the "but". Let focus on like what what you do wrong sometimes.

And he's like

Yeah, you know, sometimes I tell lies, and stuff like that.

And I was like

So when you get in that situation. What are you supposed to do?

**

Stop and think about the situation.

I was like

Okay, what ever, let's see if you can do it.

**

And you know, other times, with me,

**

he was able to do it. Like but with other teachers, he was not. And you know I was just like, trying to let him transfer that into that and I just remembered his mom saying

He's never been like this. Teacher's always yell and scream at him. No, no talking to him.

And it was like,

**

He just needs someone else to talk to. I just wish he can transfer that behavior.

**

to other, you know, other people.

And you know, like

**

at towards the end of the year he was like

I'm going to try Miss. Ontario. I'm going to do it. I'm going to do it.

And you know it was better, but it wasn't perfect. So, Yeah. And. And it's sad to think about when the behavior, but I don't know. Like for him it made a difference in his life. You know being able to think about it.

Interviewer

So what you specifically what would you have him do?

Ohio

When, when he goes into his tantrums

**

Okay, first of all I I see if he can handle it in the classroom

**

or if he needs to be removed. And. And so for example if he needs to be removed, I say,

You know, Bill. You're

I don't say tantrum.

[TAPS TABLE]

I say

Bill, we're having a conflict. You know do you want to step outside and me

And he might be like

No, no.

I give him a choice. I say

Step outside and talk about this.

**

Or, or other consequences need to be taken.

**

Because we can't interrupt every everyone's learning.

You know I was like, you know

[VERY FAST]

What do you think about other people.

But first of all I don't attack him in front of everyone. I would actually go up to him and sit next to him and talk to him about it and

**

and it would take him some time to settle down and make the right choice but he makes

[TAPS TABLE]

the right choice.

**

And then in the hallway I asked him you know to explain what happened. His side of the story. Because if, if you talk to him and you say

Well I saw you do A and B

No, I didn't do it!

That type of stuff, but if you say

Okay, what happened?

**

The first thing that he will say is

No one ever listens to me. To the

And I'm like,

Okay, Bill. Calm. I'm listening. What happened? What happened?

And he'll go back to the,

so I can be angry

and I was like

No, No, what happened?

And he'll say what happened. And I was like

So what should you have done?

You know, always go back to

What should you have done?

I should have told the teacher, but

And I was like

[OHIO SHAKES HER HEAD]

MMMPPHHH!!

And then I would try to stop him there.

Tell the teacher. If you told the teacher, what do you think might have had happened?

**

And he was like. And you know, basically what I am doing with that is calming him down and having him think about you know his actions and what what he did

**

And so. It usually works. It calms him down

**

and we'll go back. We'll go back in the classroom, but he needs to understand. The biggest thing that he understand, which is the hardest thing is

You told the truth. But there is still

[TAPS TABLE]

a consequence for it.

**

And at the beginning that was the hardest thing for him.

I told you the truth! I did it.

But I was just like

You know what Bill, but you know there is a consequence for it

And then, you know, after doing that for awhile. Talk to him. But then the hardest thing was like when this happened at home, because his mom

**

would come on by.

This happens all the time.

And I was like

So, what do you do?

And she was like

I just tell him to go away.

**

And so that not backing me up

**

was the hardest thing

**

And talking to her

**

and telling her, you know,

This is what needs to happen. This is what I do at school. Can you please

[TAPS TABLE]

take it home. Have him

[TAPS TABLE]

follow through with it.

And I was like

[VERY FAST]

Think of some consequences. It might take out the garbage. It might be sweeping the floor. It might be, "You have to be in your room for 10 minutes." Or something, but I was just like

**

But you have to think of some consequence for it.

**

So it worked. I mean it helped. It it wasn't the perfect but it was much than at the beginning of the year. Tantrums.

I'm not talking.

**

I'm not doing anything

**

Disrupting the classroom.

**

Yeah so

Interviewer

Very good. And how through the year how did that go?

Ohio

Through the year?

**

I mean in the beginning it was difficult. But towards the end I was just like.
I always would say

Bill, look at you.

I would always. You know I would always

[SHE CLAPS]

praise him

**

Especially when he can, he's like

Oh. I am so sorry.

Like with the kid before he was just like knock 'em or hit 'em or just you
know, whatever. And, and you know he'd have been like

**Oh, I was wrong. I'm sorry. I should never have instigated
this type of stuff.**

**

But there were entire days when he just lost it. Couldn't handle it.

**

And I always talked to mom. My communication with my parents was so
important.

**

Because I was, you know one day I was like. She was like

Well, first of all he went to bed 12:00 o'clock at night.

That was the trigger

He didn't take his medication.

He was on meds.

**

That's another trigger and. And dad woke him up. Once he had finally
gotten to sleep, it was time to get to school.

**

So dad woke him up and that was it

**

I was like,

Okay, so.

So it was much better from Point A to Point B for me. I

**

I just hope I want, well my thought is

How is next year going to be?

**

You know, so, its going to be very interesting for him.

**

but I'm not. I'm not the one whose going to be there.

**

So we'll see.

**

We'll see, but hopefully I will just be able to help the other teacher

**

by passing on the information.

**

about the tantrums. Yeah.

Expert Teacher Prairie Paulina

Interviewer

Now you talked about Edward? What was—?

Prairie

Yes, Edward, Edward is the youngest (7 SECOND PAUSE) of seven, and he was the fifth of his siblings that I've had.

Interviewer

Oh, my gosh.

Prairie

So every year I've taught except for the year before last I had a Parker. One of Edward's brothers or sisters. So I fortunately had a really, really good relationship with his family

**

because I'd had Paul, Michael, Victoria, James.

**

And Edward has some learning issues

**

in math. He's ADHD,

**

and he is, probably should be labeled Behavior Disordered,

**

and is not. So from the first day of school, I was positive giving Edward positive feedback. Anything he did that was good, I would give him positive feedback. I called his mom every day

**

for the first two weeks of school just to touch base with her and let her know how he was doing. Oh, something I didn't talk about—another way that I communicate with the parents is I send home folders on Friday

**

that have their work in them,

**

and there's a place for the parents to write comments and for me to write comments,

**

so we can communicate back and forth. So if all their work's in, they get a sticker,

**

and then the parent signs, and then if there's missing work I'll write it and then the parent will make a comment or I'll make a comment.

**

So that was a really important tool for Danny, but not as much for Edward because his parents weren't as on top of him.

**

So what eventually happened was

[TAPS TABLE]

right before Christmas I noticed a change in

[TAPS TABLE]

Ed's behavior. And I was calling and calling and calling and not getting any response,

**

and the Friday folder had stopped coming back.

**

[5 SECOND PAUSE]

Christmas came and went and January started and I thought maybe Edward would be better,

**

and it was the same thing—not bringing in homework. He'd been really verbally disrespectful to many of the adults in the building,

**

many of the kids in the class he'd been just saying terrible things to.

**

He was always very respectful with me,

**

because we sort of had a relationship coming in. So I started calling again,

**

no response, no response, no response. And then Edward brought a knife to school.

Interviewer

Oh, gosh.

Prairie

And I was like,

I told you, he had big issues.

[SHE LAUGHS]

I'm like,

This is obviously a cry for help.

So that sort of facilitated like a whole set of structures for Edward to kind of get him back on track.

**

And that kind of gave his parents a wake up call.

Interviewer

What were the structures?

Prairie

He then went on a very specific homework plan where he would go home and after school and his uncle was there and his uncle would sit with him while he did his homework.

**

He went back to the doctor, he had not been taking his medication for his ADHD. His father doesn't like it.

**

And I was explaining to him—I had done some behavior modification stuff with him in the fall because I knew—I could tell he wasn't taking his medication and I said to his father,

Look, this is what we did. This isn't working. I tried checklists, I tried sticker charts,

**

I tried sending notes home. Nothing was consistent. We tried rewarding him with computer time.

**

He just can't keep it together without medication.

Which is why he was medicated in the first place. So he got back on the medication, and that helped a lot. So then he was able to focus and he was able to complete his homework and he was able to stay on task for the most part while he was in class,

**

so then he was getting a lot more positive feedback and so then he was making better choices.

**

And so then we could work more in the same way that I worked with Danny where we worked on his relationships with other kids, and he also was seeing a social worker.

**

So that made a big difference. And so like January through May was very good for Edward, and people kept coming up and telling me,

I've seen such an improvement in Edward since 3rd grade and 4th grade. He's making good progress. We just want you to know.

So that was really positive. And then as usual, when kids like that are confronted with a change like the end of the school,

**

they kind of fall apart again. So June was a little rough.

**

But I think he's got some structures established now that will really help him be successful in 6th grade.

Interviewer

So what would be the structures, would be the medication or the—?

Prairie

Well, hopefully his parents know that he needs to keep on that medication.

**

He can't get in any more trouble at school or he'll be expelled. So they've got a closer watch on him I think than they did.

**

Which is good.

**

And he hopefully is learning how to be more responsible with his homework. He missed a couple of field trips because he did not have his work completed.

**

So he was much more consistent

[TAPS TABLE]

in doing his homework

[TAPS TABLE]

at the end of the year.

Interviewer

Could you tell me about like how did you find that he had a knife?

Prairie

Ah. He had had it in the closet,

**

and they're not allowed to go in there during the day, and—

Interviewer

So that is?

Prairie

The coat closet's in the classroom.

Interviewer

Ok .

Prairie

We don't have lockers.

**

So they put their book bags and their coats in the closet. And the special ed teacher came to pick him up and pull him out for some special one-on-one math attention, and he went with three other kids in my class, and he asked me if he could get something out of his book bag—and I can't remember what he asked me for,

**

but whatever it was it was something he needed to take to this teacher and so I said

Yes.

And when they came back they were going to Science Lab, it was a Monday, and one of the little girls said to me,

I'm afraid of Edward.

And I said,

Why are you afraid of Edward? Has he said something to you?

And she said,

I don't want to tell you.

And I said,

You know what, this is really important. If someone is making you feel afraid,

**

(TAPS TABLE STRONGLY FOR NEXT 3 WORDS)

that's intimidating and that's not fair and you won't be able to learn to the best of your potential. And its, you know, the one thing that I'm here to make sure

I tell them this all the time

the one thing that I'm here to do is to make sure that you're safe,

because that's a really big issue for a lot of the kids because there's a lot of gang activity in the neighborhood

**

and walking to school,

**

to and from school

**

is dangerous. Even lately for the teachers there's been

**

a lot of violence after school. So I tell them,

"When you're here, you're mine

[TAPS TABLE]

and you're safe

[TAPS TABLE].

And that's like my number one job. If I know you're safe then I can teach you.

And so I said,

What's going on? Is he threatening you? Is he making inappropriate comments?

And she said,

No, he has a knife.. in his pocket.

And I said,

You are so brave.

**

I am so proud of you.

**

Thank you so much for telling me. I will take care of this right away. You should be so proud of yourself because you just did a very brave thing.

So I sent her up to science and then I went down and told the chain of command that I needed to tell and then they called Edward down from the Science Lab

**

and had him empty his pockets and there was no knife there and so they said,

“Edward, where’s the knife?”

He had put it back in his book bag, so then he went and got his book bag and emptied his book bag and it was in there. So that’s why you gotta do both halves of the education—the academic and the social.

Interviewer

I: So you said that you were calling his mom like from the beginning of school?

Prairie

Yeah. Well, I had had so many of his brothers and sisters and she—and his mom knows that Edward is has some pretty special issues, and so I wanted to start out a really positive relationship in the beginning in case

**

there was trouble. So just in the beginning

[TAPS TABLE]

I would call her every day just to give her an update and say,

“Edward did this really well. He’s got his homework in. Keep it up.”

So then later

[TAPS TABLE]

when there was a problem

[TAPS TABLE],

I was calling repeatedly, but she knew there was a problem and she didn’t want to talk to me.

**

So it went too far, obviously. It’s really important to me to set a positive relationship with the parents first,

**

because then they’re on your side if there is a problem, and they know it’s not you. I make sure that I call every parent in this past year I didn’t meet with every single parent, but I try

[HITS TABLE]

to. I had a lot going on this fall so I wasn’t able to meet with every single parent. The year before I went and held kind of like office hours at the public library in their neighborhood

**

and just had parents come in and talk to me. Just so I at least saw every face and so they would know me.

**

Because if they don't come to the Open House or to the Parent Coffee,

**

which are both held during the day, then you don't see them. So I usually meet with parents before school and after school, and then there's a certain percentage of parents that don't get home until later,

**

so that was the percentage I met at the public library, and those were some of the parents that I missed.

**

But it was just a handful. And I did talk to them either through a translator or on the phone. That's like my biggest source of frustration is that I can't verbally speak with all the parents because my Spanish is not that good,

**

and it's really, really hard on the phone.

**

But I really firmly believe that you need to start off with the parents so they know who you are and that you're a partner.

**

Because a lot of the parents don't have a lot of education,

**

or they've had bad experiences, and so they think that teachers are really threatening or that what the teacher says is always 100 percent right, and I want them to know that what they know about their child is equally as important as what I see, because they see things at home that I don't always see.

**

So that's really important to me.

Expert Teacher Addison Ashland

Charlotte, Dahlia on the other hand. Two amazing people that I'm really, really worried about. I don't know if their gonna be alive much longer. But really, really good people. Charlotte, has her whole family is involved in gangs. She lives in a building where her mom lives downstairs. She lives

upstairs with like an elderly grandmother who needs someone to take care of her. But you know she's responsible for getting herself up and getting out and making sure she's fed and dressed and got her work done and ready for school and

**

she's on the street a lot. And like I had her last year and

[VERY QUICK]

she didn't do anything. She barely came to school. She missed more than 40 days last year is was about 40, probably more like 45. Which is like an entire quarter.

**

And she was always late when she did show up. She was always dirty and unkempt and always tired always hungry. You just

Okay, I'm totally neglected. And here I am.

**

And she didn't contribute. I mean she talked non-stop. She didn't do any work. She might start something, like put her name on a paper. Or write one little thing down. She never finished anything.

**

Unless it was a test. And her tests were she failed everything. She just would write whatever.

**

She never did any projects. Whenever she, they got to pick you know what they wanted to do she'd be like

Whatever

She just picked but she wouldn't even do it. Like it wasn't. She wasn't invested at all. This year, she decided to you know make a difference and I don't know take control whatever and she never missed a day until the 4th quarter and she was really sick. She was tardy a few times but nothing compared to what she was. Last year. Like once in a while she would be tardy. And the fact that she came everyday until May is huge. Never missed a day in school. She was doing her work. Most of her homework. She was doing the schoolwork. She was finishing most of the long-term projects

**

She was taking a real leadership role. She was just you know trying to reach her potential.

**

I know one of the most discouraging things last year was like
Charlotte, oh my gosh you have so much to offer.
You know, but I think she just, she wasn't ready.

**

She wasn't ready. And this year, I don't know, she was like,
**You know what I'm old enough, its hard enough and I want to
learn I don't want to just be nothing and get nothing out of
school.**

She really really smart. She doesn't, she doesn't think she is. She'd be like,
**Ms. Ashland, I'll, I'll go up to the board and I'll demonstrate
how to do this but I don't think that I know how.**

I said

We'll why don't you just try and then we'll all see what you do.

**

And you know and she would go up and she would, she would write down
her problem and then go through it step by step and explain to the class.
And, you know, sometimes it would be wrong and there would be a mistake
and it didn't matter. I mean nobody cared. And my whole thing is like
Charlotte, we want you to make mistakes, because that's how
you learn!

And so she would go up and she would be like

We'll I'll try it but I don't really know what I am doing.

And I'll be like

Fine, Okay, you don't know what you're doing.

[DEFINITIVE]

Go show us. But you don't have to know what you are doing.

And then usually she did.

**

But she just wasn't very confident. But I think this year, her by the end of
the year, she was more confident. She wasn't putting herself down or saying
like

I can't

Or

I don't know

Or she was more,

I'll try it

or

I think its this.

So, I don't know what happened with her. If she just grew up or what. Her brother was just convicted of murder.

[4 SECOND PAUSE]

And, or charged with murder. He's not convicted yet. He's going to go to trial.

[4 SECOND PAUSE]

And I've got to actually. I've got to make a little note. I've got to call the principal, because Charlotte wants to go to summer school and they are really weird at my school about stuff. Like I make recommendations for who needs, who its going to be worthwhile for and who is going to just, ruin it for everybody

**

if they are in that room

[LAUGHS]

So and who's going to take it seriously.

**

And really going to get something out of it. And Charlotte's like

You know, Ms. Ashland

That's how her scores were just like so great this year. You know the scores increased. You're going to get better scores in reading and math if you are going to practice reading and math

**

Right, so either you're going to blow it off and your scores will reflect that. Or you're going to take school more seriously. And you're going to get your reading and math practice. And you're scores will reflect that.

So of course this year her scores were great. And so she didn't get selected for summer school. That's the other thing, they use that for summer school. And I'm like,

You know, can't you just get take our recommendations. You

know who needs this and who's going to get something out of it and who cares about the scores.

I mean, maybe the scores can be part of it, but not

Well, her scores were fine.

Alright, well, you know, she's going to be out on the streets. She wants to come to summer school, let's let her come over. She lives across the street from school.

I mean its not going to hurt anyone if she comes to schools for three and one half hours every day. You know, but it would really help her. And it would get her up in the morning and she would get to come in and have breakfast. You know, I don't know. I just. So I've got to call the principal. To tell her

That you know she's got to let Charlotte in the program.

Because Charlotte is like all worried about on Tuesday,

[WHISPERS]

Ms. Ashland, what about summer school?

I'm like

Charlotte, I don't I don't know yet. I'm working on it

Because last time I asked they are like

No,

I'm like, because they think that she's a pain and her family is a pain and now that her brother's all convicted, CHARGED with murder whatever. I'm like, you know, I just don't like how they judge families. Like a brother does something and a sister does something and they are all bad. I'm like you know what,

Whatever.

So, she's a great kid. I just you know hope that she gets to stay long enough to like really

[4 SECOND PAUSE]

go to high school finish high school maybe go to college. I could see her, being in a gang and getting killed like in the next couple of years. Or maybe she'll just be so turned off by it.

**

That she'll just stay away. I don't know. She's not, strong enough. But she did take a lot of leadership roles this year she really did. But she's more of a follower

**

So I don't know if she has the courage to be like,

You know what, I don't want anything to do with that. I am going to do my own thing.

I don't know though. She's growing and changing a lot right now. I mean she's 13 so we'll see what happens. I think that the fact that she is raising herself and she did so well this year that maybe she is definitely heading in the right direction but I

[WHISPERS]

she's on the street everyday.

**

And I know what people say that they've seen her you know, here and there and doing this and that. And you know I over hear a lot of conversations and

[4 SECOND PAUSE]

I think she

**

I don't know what's going to happen with her, and I am just glad she wants to go to summer school. I hope they let her. I actually talked to my principal for a long time the other day though about me staying and she wants me to stay and I want to go, so maybe I'll be like

If you let Charlotte go to summer school.

[BOTH LAUGH]

I'll stay at this school for another year.

We'll see if we can work out a deal. Oh and Dahlia, she is gosh another great person. She's just so angry and so,

I'm a hard ass. What do you want me to do.

**

You know, like, I see right through it. But from the day I met her, I was just like

Oh God! She's, she just needs like you know some nurturing

**

She's not. She's not a real hard ass but she super intelligent. Oh my God, the girl is brilliant. And she like dresses like a boy and acts like a boy and does all this like gang stuff. Like she writes all the gang stuff and she'll wear like the shoelaces a certain way her pants a certain way. She shaves all around her hairline. It's weird. She does all this crazy stuff. She shaves her

eyebrows. All this gang signs and a lot of it is like guys. What guys would do.

**

And she kind of acts like her attitude is very tough, like a guy. And she kind of talks like a guy. So I don't know what she is going through, but very just kinda

[WHISPERS]

I'm a hard ass. Back off.

[REGULAR VOICE]

And she will tell people, like another another teacher was like you know

So, did you just decide that you don't have to wear a uniform?

Because we had uniform codes.

**

And she was like wearing maroon shorts. Its navy pants and a white shirt with collar. And she was wearing like maroon shorts. I don't even. You know what, that's not a fight that I am going to even, you know

She's here. And she's not beating the crap out of someone.

[BOTH LAUGH]

I'm not going to I don't care if she's not wearing maroon shorts. I don't care.

[INTERVIEWER LAUGHS]

I'm not even going to announce it. But another teacher's is going to see her and say, you know whatever. And she's going to be like,

YEAH, BITCH.

I'm like,

Oh, Dahlia.

And then the other teacher's like

You know

I'm like listen,

I realize that we are supposed to come down on them for this. But at that this stage of the game

[INTERVIEWER LAUGHS]

I am not going to address this. Okay, if you want to say it, I'm sorry that she responded the way she did. But she's very defensive and I you should just come to me because I can't

don't get that response from her. But, I also don't attack her.

You know, I won't ever put her on the defensive. And the couple times where she has kinda of jumped down my throat there's only been like twice. I'm like,

You know what, you need to rethink how you're responding to me. Because I what I said to you does not warrant that reaction.

And she'll be like,

You're right. I'm sorry.

But it's just so innate for her to just lash out. And a whole bunch of other people. Like every day someone's like

Dahlia said this. Dahlia called me a bitch. Dahlia told me to fuck off.

I'm like

God, you know, did she hit you?

These are all like people who work in the building. And I'm like

[WHISPERS]

Oh God.

So I mean she. I have her like writing letters and going to these people and making speeches. I mean I talk to her all the time about this, but I tell, I tell everyone

You guys, don't jump on her. Don't like yell at her and come down at her. Put her on the defensive, you know. And maybe she won't call you a bitch.

[INTERVIEWER LAUGHS]

And tell you to

[WHISPERS]

fuck off. But, I mean, maybe she still will. I'm sorry that's the reaction you're getting and I know that's not appropriate and I know that she dresses like she's in a gang and looks like she's in a gang and acts like she's in a gang and people have a real problem with that.

Anything that has to do with gang. My school has zero tolerance. Which I totally understand and support. But, its just going to make like being. Disciplining her the way that people do there is just going to make her come back the next day with something even more like tattooed across her forehead, you know, something even more severe. And

[WHISPERS]

but you know people don't understand.

[REGULAR VOICE]

I'm, I'm the only person in the school that doesn't have like a problem with her. Because I can see through. And that I can see past the gang stuff. And she's not in a gang,

**

but I know that she has spent a lot of time in the street. And so she's you know and I know she hangs around with all the people who are in gangs. But I know she hasn't joined one yet. But no one believes it. You know But I, I, I trust her 100%. To tell me the truth. And she's very. Like she totally opens up to me and, you know, I just believe what she says

Interviewer

What does she say?

Addison

She tells me, you know

I'm not in a gang.

Or

But I do hang out with this person. And we did do this and I was with my cousin who hangs around with these guys who are in this gang and we got taken and we got pulled over and taken

And she'll tell me like

I was with this person. It was 12:00 o'clock at night. You know my mom was at work. And

I'm like, because she will come in. I'm like,

Get the look off your face. Get rid of the attitude before you get in this room.

Because she'll come in,

[WHISPERS]

pissed off.

[REGULAR VOICE]

I'm like I go to pick her up and she's like. I'm like

Okay, listen. Loose it, right now. Get it out.

And she's be like,

You know,

I'm like

Okay. You need to get rid of the attitude. Get the look off your face. Whatever you're pissed off about. If you want to talk about it, then we can talk about it. But you can't come in starting the day like this. Because you're going to ruin all of our day.

**

Everyone is going to have a bad day, because you're not going to let us do anything

**

But know that you're pissed off at something.

And she's like

Oh, you know.

I mean at first it was real, she didn't like that I even acknowledge that she was mad.

**

But, you know, after a while she's like

Yeah, jeese, you know. I am going to ruin everyone's day.

So, she responded pretty well. But she would I mean she would only pull me aside once in a while like

Ms. Ashland, I really need to talk to you,

And usually that's when she would just cry and let me know what's going on and her mom and her sister and you know her dad going to jail because he was convicted of murder and she watched the whole trial. You know. There was no reason for her to be there, but her mom's like

Oh, if her dad get's put away she is never going to see him.

Okay, so take 'em take her to the murder trial!

[INTERVIEWER LAUGHS]

Oh there's.! That would be very, very positive.

[INTERVIEWER LAUGHS]

You know, I'm like

What the, what the hell?

Dahlia is like

Yeah, my dad. I went to my dad's trial.

And I didn't even know.

**

And then I'm like

So what's going on?

We're walking out one day. She's like

Yeah, he got convicted. He was found guilty.

I'm like

Oh no.

And she's like

Yeah, but he said he didn't do it.

I'm like,

Oh what did he say he didn't do.

Oh, murder someone.

And I was like,

What!

I didn't know. I'm like

Dahlia, I am so sorry.

And she's like, looking at me with a

What are you sorry for?

I'm like,

Are you okay?

She's like,

I'm fine, How are you?

And she's looking at me like,

What's wrong with you?

And I'm like

Well do you need anything?

She's like,

No,

I'm like,

Well, do you want to talk?

And she's like

About what?

I'm like

About your dad going to jail for murder.

No, I'm fine.

I'm like,

Okay, well when it, when you wake up one day, and you're not fine, could you please come and tell m when it sinks in.

I'm like are you going to a. I said something like.

You know,

not

Who's going to take care of you?

but,

If you need anything.

Oh, I just said like,

If you need anything, just let me know.

And she's like

My mom's going to take care of me.

I'm like

Oh, okay, well if you need someone to talk to

And she's like

Oh,

Like it never even occurred to her that she needed to talk about this.

And yeah, Dahlia, you know, how we talk. Do you want to talk about this? It's a big deal.

Because she missed a whole bunch of school for the trial. But I didn't know, you know, it was murder. And I don't ASK, but like if the kids miss for certain things, I don't pry. I wait for people to tell me. You know,

whatever is going on. And half the time, you know I want to know because I need to know, but I don't want to know because it is so sad.

**

You know, but she's like. She's got a great personality. She loves to like work with people and share her knowledge and learn like in a group. Like she just, she's got a lot to offer. But she just has a really, crappy, crappy homelife and the fact that she lives in the neighborhood she lives in and she's always on the street. I mean, you know, she's either going to be a leader in a gang, or she's, you know, not live very long. But I she, she can do great things. I just she's really. They're all. The age that I group, the age that I teach right now, the age group is just so. Like right now, there's a lot of things that could make or break them that could happen. And the kids that are on the street all the time in those gangs I mean they are just shaping them and its making a lot of decisions for them, just you know. She knows. Everytime I talk to her she knows.

Gangs are bad. My dad was in a gang, that's why he's in jail. My cousins are in gangs. My friend's brother's in a gang. My sister's going out with this guy who is in a gang. And blah, blah, blah.

She knows.

**

Its dangerous. You know, she knows that drinking and doing drugs is bad. But she still hangs around with those people and she still does those things. She's still out all the time. I mean she comes to school and she is soo tired and I'm just like

You know. You didn't have to be out last night.

And she's like

Well my mom wasn't home.

I'm like

I know. I know all the reasons. No one was there, helping you make the decision. Like putting you in lock down. But you know, Dahlia, you're smart enough to know, you know,

"Do I like myself? Do I want a future? Okay, I'm not going out. I'm going to stay in. I'll stay home alone."

But she hates staying home alone. She's alone all the time. You know and she tell's me. It's like

Sit home by myself. Or, go out.

Well, you know I understand that. Who wants to sit home by themselves day after day? Her mom's working. She goes to work like I think around 3:00, 3:30. And they get home, she gets home around about 3:00. And her mom's gone, you know until late. Probably midnight, 1:00, at least. So I mean, and her sister's never there. And that's it. That's the family. The dad's in jail. So, she doesn't like hanging out by herself. And I know she goes home and she'll like cleaning her laundry or whatever chores she that has to do. She's responsible that way. She contributes. But then she's out. You know, she's like

Hey, I'm not sitting here.

So

Those are my, those are the four kids that I picked to talk about. I mean I think that uhm my teaching has made a difference in their lives. I hope. We'll see.

We'll see.

Interviewer

Do you keep in touch with your students?

Addison

Nnhmm. Yeah. I'll be in contact with them all this summer.

**

Even my students like from in the beginning. All those students that I have taught. I have a lot that I keep in touch with. Students you know from five or six years ago. I was just at a graduation party for one.

**

That I taught a few years back. And I'm getting together with another one later today. I'm going to pick her up at 2:30. We're making quilts. So we're doing some quilting this afternoon. And a lot of their families you know I still get invited to stuff or just cards little like

Hi, how are? This is what is new with us. What is new with you?

[...]

[REGULAR VOICE]

But there are so many families that I still keep in touch with. I mean

[5 SECOND PAUSE]

and that I will like I. A couple years ago I had a student who wrote this really great essay about Martin Luther King. So I just kept it and then I pulled it out and read it to my current students and they're like,

Who wrote that?

I'm like,

Oh, Finley Arthur, he was my student a few years back and

How old is he when he wrote that?

He was ten.

Wow.

I'm like,

I know.

Very insightful for a ten year old and they were just so impressed with that and that I had it hanging up in the room. And I just wrote him a note

I was thinking of you. I pulled out your essay about Martin Luther King and I shared it with my class and they were very impressed and you know I hope you are doing well

And he's at [the top city public high school] now

**

And just

Want to let you know that

**

that your thoughts about Martin Luther King had an impact on my students and, you know, your essay is hanging up in my room.

[WHISPERS]

And I little like thinking of you. Hope everything is going well.

That kind of thing, you know

[REGULAR VOICE]

And I actually just his mom and sister over the weekend. So.

[4 SECOND PAUSE]

[WHISPERS]

Yeah, I keep in touch with my kids. So I just think that's important

[REGULAR VOICE]

I mean if you are going to build the strong bonds with them that you need to to be effective, then you can't just forget about them. You're automatically going to be a part of their lives. I mean I'm not going to be going to everybody's wedding or anything or high school graduation but I'm going

to part of their lives more than just that school year. For sure. And not every single student. But there are many students each year that I will just continue

**

But I will continue to keep in touch. I'll go to a stop by Anthony's dad's work this summer. I'll drop in. The mechanics shop where he works in and just be like

Hey,

He doesn't speak much English and I don't speak much Spanish but we'll get it but we'll get it figured out. See how Anthony's doing. I'm not really close with Brian's family but,

[4 SECOND PAUSE]

I will probably just drive around and find those two on the street.

**

Check up on them, this summer. They don't have a phone. And her mom has a cell phone. But her mom doesn't.

**

Her mom doesn't answer my calls.

**

So if I want to talk to Dahlia, I'll have to drive around and find her.

References

- Algren, N. (1961). *Chicago: City on the make* (3rd ed.). Oakland, Calif.: Angel Island Pub. Inc.
- Aristotle. (2000). *Nicomachean ethics*. Cambridge, U.K. ; New York: Cambridge University Press.
- Benner, P. E., Hooper-Kyriakidis, P. L., & Stannard, D. (1999). *Clinical wisdom and interventions in critical care: A thinking-in-action approach*. Philadelphia: Saunders.
- Benner, P. E., Tanner, C. A., & Chelsea, C. (1996). *Expertise in nursing practice: Caring, clinical judgment, and ethics*. New York: Springer Publishing Company.
- Charness, N., Krampe, R., & Mayr, U. (1996). The role of practice and coaching in entrepreneurial skill domains: An international comparison of life-span chess skill acquisition. In A. K. Ericsson (Ed.), *The road to excellence: The acquisition of expert performance in the arts and sciences, sports and games*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Collins, M. (1991). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. New York: Routledge.
- Durkheim, E. (1995). *The elementary forms of religious life* (K. E. Fields, Trans.). New York: Free Press.
- Entwistle, D., Alexander, K. L., & Olsen, L. S. (1997). *Children, schools and inequality*. Boulder, CO: Westview.
- Ericsson, K. A., Krampe, R. T., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363-406.
- Ericsson, K. A., & Lehmann, A. C. (1996). Expert and exceptional performance: Evidence of maximal adaptation to task constraints. *Annual Review of Psychology*, 47, 273-305.
- Foster, M. (1997). *Black teachers on teaching*. New York: The New Press.
- Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology*, 2(3), 300-319.
- Gadmer, H. (1975). *Truth and method* (G. B. J. Cumming, Trans.). New York: Seabury.
- Gay, G. (2000). *Culturally responsive teaching: Theory, research and practice*. New York: Teachers College Press.
- Goffman, E. (1967). *Interaction ritual: Essays on face-to-face behavior*. Garden City, N.Y.: Anchor Books.
- Herrick, M. J. (1971). *The Chicago schools: A social and political history*. Beverly Hills, California: Sage Publications.
- Irvine, J. J. (Ed.). (2002). *In search of wholeness: African American teachers and their culturally responsive practices*. New York: Palgrave.
- Irvine, J. J., & Fraser, J. W. (1998). Warm demanders. *Education Week*, May 13, p. 35.
- Kanov, J. M., Maitlis, S., Worline, M. C., Dutton, J. E., Frost, P. J., & Lilius, J. M. (2004). Compassion in organizational life. *American Behavioral Scientist*, 47,

808.

- Kintsch, W. (1998). *Comprehension: A paradigm for cognition*. Cambridge, UK: Cambridge University Press.
- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American children*. San Francisco: Jossey-Bass.
- Louden, W. (1991). *Understanding teaching: continuity and change in teacher's knowledge*. New York: Teachers College Press.
- Noddings, N. (1984). *Caring, a feminine approach to ethics and moral education*. Berkeley: University of California.
- Noddings, N. (2000). The caring teacher. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed., pp. 1278). Washington, D. C.: American Educational Research Association.
- Royko, M. (1971). *Boss : Richard J. Daley of Chicago*. New York: New American Library.
- Taylor, C. (1971). Interpretation and the science of man. *The Review of Metaphysics*, 25(1).
- Tyler, S. A. (1986). Post-modern ethnography: From document of the occult to occult document. In J. Clifford & G. E. Marcus (Eds.), *Writing culture: The poetics and politics of ethnography* (pp. 122-140). Berkeley: University of California Press.
- Ware, F. (2006). Warm demander pedagogy: Culturally responsive teaching that supports a culture of achievement for African American students. *Urban Education*, 41, 427.
- Wilson, W. J. (1987). *The truly disadvantaged: The inner city, the underclass, and public policy*. Chicago: University of Chicago Press.

Chapter VIII

Information-Flow: Content, Pedagogical Content Knowledge, Language, Feedback

The benefits of the family, school, and community relationships discussed in the previous chapter do not reduce the importance of the six hours a day that teachers work in classrooms. The ability to influence events in families' homes and administrators' offices amplifies the advantages derived from skilled instruction; it does not replace them. Strong instruction is good for young people. It pushes children out of the limits of their local circumstances and helps them grow intellectually and emotionally. Making the most out of the hours in school is the heart of classroom teachers' work.

The following discussion of mathematics teaching from expert teacher Addison Ashland helps illustrate this issue. Addison was an outspoken teacher who was not trusted by her administrators. As a result, she believed she was assigned students other faculty did not want, many of whom had emotional difficulties. Addison gained these students' trust, and she advocated for them. She worked to make a difference in their lives, and believed her instruction helped her connect to these young persons. Addison reported that her students did not stare at textbooks or grind out reams of test preparation exercises. They did not spend the day looking out the window and arguing with their neighbor. They worked in groups, wrote poems, read novels, and talked about the important issues of the day. Addison regularly discussed how students were held to high standards, but also had a great deal of choice in the content they studied. The reader might imagine how good it might be for young people suffering from serious challenges to walk into Addison's classroom and lose themselves in academic work:

My math scores are always really high and my principal's like
Maybe you should be a math teacher.

And I'm like

Maybe I should. Since, you know, it's really, really, really important. You know.

And she said

Well, your kids do so well with math.

And I'm like

Yeah, you know what, they do well in every subject matter area, pretty much.

You know, but she's like, doesn't look at math and think it's any big deal. But the math scores on the ITBS [standardized test] are always really high. But it is like, you know, I'm not making them do like all this skill and drill at all.

**

Not at all. I'm not like that. I don't hand out worksheets and

Here do these hundred problems, talk to me, later. Sit and work independently.

It's not like that. But

Interviewer

What do you do?

Addison

With math?

**

Lots of hands on and partner work and small group work. And we do a lot of like puzzles where we have to where we are practically crying because we are using our brains and it hurts so much and we can't figure it out.

**

A lot of that stuff.

**

Brain teaser type stuff. A problem. A magic square that we never even figured out. I never figured it out. I was like

Man, this killer, oh boy.

And then I got, I got it almost. I came real close, but no one, it was like three magic squares.

**

And the first one was easy. We got the second one. And there was the outside one we didn't every figure out all the way. But we came close.

**

But it was mostly me doing it. But the kids, you should, could see the pain on their face. But, like, that kind of stuff. I mean they are actually thinking.

**

And they're, and they're totally 100% absorbed and going home and working on it.

**

And that wasn't on an assignment.

**

That's the kind of stuff I do.

[Addison Ashland R1 Q4]

In Addison's classroom, learning fascinated. Her lessons grabbed children's attention and pulled them into a new sense of self. Strong instruction became a form of caring.

One of the fundamental problems in the field education is that most teachers do not know how to orchestrate time in school in this manner. Their work falls substantially below the ideal, and they are less successful at helping students achieve at their highest potential (e. g. Hanushek, Kain, O'Brian, & Rivkin, 2005; Nye, Konstantopoulos, & Hedges, 2004; Rowan, Correnti, & Miller, 2002). If there is a major flaw in the Expertise in Urban Teaching Project's research design, it is that data collection and analysis did not include the stories of experienced teachers who lacked the motivation and, perhaps, the opportunity, to improve their practice to the same level as the NBPTS-NTL teachers. There is little mention within these chapters of the work of ordinary educators who are strong in some subjects, weak in others, and perhaps less emotionally connected to their students. As a result, to readers unfamiliar with educational research, the study might leave the false impression that expert practice is a routine accomplishment of CPS's systems of evaluation and professional development when, in fact, only a few hundred of the system's thousands of classroom teachers were NBPTS certified during the 2003-2004 school year.

I focused on the expert teachers' work for two major reasons. First, there is no shortage of works that discuss the efforts of experienced, but not expert, teachers in urban schools, and I had no interest in adding to that list (e. g. Cohen, 1990; Elmore, 2000;

Goodlad, 1984; Roehrig, Pressley, & Talotta, 2002; Rowan, Camburn, & Correnti, 2004). The intimacy of narrative interviews made collecting the stories of teachers of average skill and ability problematic. Gaining the trust of professionals doing difficult jobs in order to compare their efforts to other professionals who more skilled and motivated than they were, was not a task I wished to engage. I felt the fresh eyes of the beginners would make their stories a more worthwhile contrast. The first year teachers' narratives allow me to highlight the skill of the experts without attacking research participants' sense of personal worth. The beginners are protected from blame by their newness and, for lack of a better word, innocence. The first year teachers did the best they could given the problems they faced and the tools they had available. If their actions do not meet the standards of best practice, the fault lies in the administrators who put them in their positions and not the beginning educators who struggled to meet those ideals.

In my opinion, the Expertise in Urban Teaching Project's more limited research design focuses attention where it deserves. The NBPTS-NTL teachers stories are worthy of extended attention precisely because they are not typical. The expert's stories speak to one of the critical educational issues of our time: What would happen if the reformers got it right, and expertise became commonplace in urban classrooms. The narratives I have published cannot answer that question, but they may help researchers, policy makers, teachers, and public imagine what might be.

a) Expert Teachers Belmont Barry and California Calumet

The analysis that follows pulls different representations of classroom life together to create a description of skilled teaching practice that is open to interpretation. Rather than making specific claims about expertise, it attempts to point directions for future work by sharing two accomplished teacher's discussions of some of their best moments during the 2003-2004 school. These writings describe how the expert teachers use routines, relationships, language, and different types of feedback to orchestrate classroom life to support children's growth. Elements of practice based on different forms of knowledge join together to choreograph beneficial classroom spaces. Science and emotion; knowledge and caring; pragmatism and optimism combine.

These writings are based in the third major dimension of expertise that I discussed

in my first chapter: information-flow. As I emphasized there, classrooms process information (Yinger & Hendricks-Lee, 1993). They move content and skills from teachers to students, from to students to teachers, from students to students, and from books and other instructional materials to students. Excellent teachers understand how to guide and shape this flow of information. They understand the content they teach (e. g. Ball, Lubienski, & Mewborn, 2001; Leinhardt, 1988; Shulman, 1987), such as the mathematics concepts that underlie instruction in fractions or the biology content that underlies the teaching of ecological succession. They understand what parts of this content are easy for children to understand. They understand what aspects are difficult. Expert know how to assess students understanding of this content and alter the flow of their lessons in response to children's needs (Black & Dylan, 1998; Lampert & Ball, 1998; Shepard, 2000). This understanding is transformed in the system of language that moves through their classrooms (e. g. Huttenlocher, Vasilyeva, Cymerman, & Levine, 2002; Justice, Mashburn, Hamre, & Pianta, 2008; Klibanoff, Levine, Huttenlocher, Vasilyeva, & Hedges, 2006; Massey, Pence, Justice, & Bowles, 2008). Teachers speak about content, assign readings, ask questions, recast students' statements, and guide discussions. Child read, write, ask their neighbors for assistance, and think hard about the things they learn. All of these interactions shape the flow of information in particular classroom space. All of them are potentially influenced by teachers work. All maybe tuned and shaped by teachers' planning and decision-making.

Expert teacher Belmont Barry describes how her relational and instructional practices weave together into a stream of talk about mathematics in the following passage. The expert teacher had just finished discussing her language arts instruction when I asked her to describe other subjects. Belmont paused, and then discussed her efforts to work with two popular students who were successful in other content, but hated math. The primary subject of this passage is Belmont's efforts to help teach her students not only to enjoy this content, but to feel comfortable enough to explain their work to the class. Belmont's ability to orchestrate instruction is so deeply learned, most of the classroom moves and routines that support this work are glossed over. Unlike the highly skilled classroom choreography that supports Belmont's instruction, scaffolding students' thinking about mathematics was perceived as difficult. The expert teacher's efforts to

teach her students how to explain their work became the story's major plot point.

What is evident in this passage is how different forms of knowledge combine to create this moment. Belmont knew this content matter and she understood how to teach it. She discussed how she was able to orchestrate her students' actions to teach these ideas and manage the moment-to-moment flow of her lessons. Belmont also understood her students. She knew who they were. She was skilled at helping them grow. She was committed to helping them succeed. The expert teacher constantly pressed them to improve and asked them to explain what they knew. Much of the differences between the expert and beginning teachers that show up in the quantitative tables displayed throughout these chapters are caused by experts' tendency to share many extended narratives that describe smooth, language-rich, instructional activities such as these:

Belmont

...Do you want to hear something different than writing?

Interviewer

Yeah. Tell me about another subject.

Belmont

[9 SECOND PAUSE]

Well, math. There, I do have two students a boy and a girl very strong in reading, but really struggle in math.

**

To the point where they didn't their multiplication tables. They didn't know their division facts. And you know when you are so bright in reading and your classmates know that you're a good reader. And they ask to partner up with you and read and then when it comes to math and you have such a, an imbalance you are so unbalanced with

**

those two subjects

**

It's tough for those two students because

**

they feel so strong in all the other areas but in math they just and they end up hating it.

**

Well those two students they came in hating math.

**

Oh my gosh, its math time.

[SHE FROWNS.]

While everyone else is

WOO! WOO!

They

Oh, you know, we hate it.

**

But, really trying to work with them building up their confidence.

**

Because I think that, they didn't know their facts.

**

and they weren't working on their facts at home. I had to talk to their parents and really had to send home flash cards. They weren't working on it.

**

You know and the parents weren't really helping them work on it either.

**

But really trying to work on their confidence through the year

**

You know making them not feel like

Oh, math, that's my weak subject.

**

No,

**

I mean, yes, maybe you are better in reading. But we all have weaker subjects. So, you can still work on it. Doesn't mean you should give up on it.

Because they kind of just wanted to give up on it. So really working on the confidence of these two students. You, really building them up. And you know they come to the board and they do a lot of explained to each other and they ask each other questions on the board.

**

During math time and one of my students, Carolyn. Which I, if she got called, I have these sticks and I pull out names so its not I don't call the same kids all the time

**

so its really fair. And when Carolyn would get called to board it's

[WHISPERS]

Oh, my

you know, you know

Can I pass? Can I pass? Can Denny come up and help me?

And

Yadah-Yadah.

No, you can't pass, but yes, Denny.

You know

Denny, do you want to help her?

Yeah. Yeah.

Or I'd go up and help her. But by the end of the year she would not ask for help.

**

And she'd go up there and she would still get stuck in certain ways, especially when we were doing long division and there are 5,000 steps, you know in one. But she would and

I can stay near her

You know when she was doing the problems and she'd kind of whisper to me

How do I? How do I? What do I do next?

And I'd just help her to the next. And then she'd have it all done, but she didn't know how to explain it.

**

So I would explain it to her, like very. No one knows. Everyone's working on their own thing and I am up there with her, kind of explaining like

[WHISPERS]

Remember, okay. Its 15 divided by 5. What's 15 divided by 3. That's how you got the 3. Right. You already have it, so you know you did it.

So again, building up her confidence, and going through the steps so that she can just almost repeat it. She was starting to see it,

Oh, yes, yes, yes. Okay, yeah.

Well, of course. Because she got it.

**

Then she would go to the board with the, the pointer and she would explain it to the class.

**

And she would, I mean if she got stuck she would look right at me and I would just say

Alright, the 3. Right the 3.

Oh yeah the 3.

You know, so I really tried to help her so that these other students didn't recognize that she was having as much difficulty

**

Yeah, you know, because that's a big problem in 4th grade. Especially when she's popular girl and she's good in reading and that's her weak area.

**

So I'd really help her, help her along in those ways.

Interviewer

What else did you do?

Belmont

Boy, did she stay after-school. I helped her with math,

**

you know, all the time. I gave her if we had. We do a 5 problems of review when we start math.

**

And then we usually go into whatever the new topic is.

**

The new concept and she would start what she'd start catching because it took her a long time to catch on to a certain concept that every one else was already doing; it was just review. I would always I would come over when everyone was kind of working on something and just write down the five like five of those one type of problems. Like if it was long division and she was just starting to catch up.

[TAPS TABLE ON EACH WORD]

Do these 5 problems.

**

Do 'em now!

**

You know,

No one has to know.

She'd do,

Oh, you know.

So giving her extra practice and really,

[VOICE IS LOUDER]

again, not making a big deal of it. You know, and if anybody ever said anything, you know, there's a big sense of helping each other in the classroom, so the kids never question it. So giving her problems. She stayed after-school and helped. I gave her flash cards. I talked to her mom. Tried to show her mom how to help her at home.

**

Building up her confidence when she as at the board. Because again, that was a big problem towards the beginning and the middle, but towards the end, she would still get stuck but it was sort of a, a regular. It was very normal for her to look to me. Know I was going to be there to try to help her along.

**

Because some of the other kids I would let figure it out.

**

You know, I would still give her the wait time and let her try to figure it out, but because she got so freaked out up there. It was

UUHHH!!

You know she would not sit up there and try to figure it out so knowing her in the way that I kind of just right away kinda of said

Oh, you.

You know, and helped her along when she was up there.

**

Then I had a boy that was very similar too. His was confidence, but his wasn't going to board and being embarrassed with his friends or in the class or anything like that. Just really struggled.

**

Just struggled

**

with the concepts. You know, it took if it took a week to go through it, by week five, he still just didn't get it

**

So I did similar things with him, really trying to help him after school. Having, he could, he wasn't embarrassed with his friends and in the group. Like for asking for help I would say,

Would you mind, is there someone, you know, does someone want to help Edwin?

Oh yeah,

Everyone, the kids all walk around

Can I help you? Can I help you? Can I help you?

So, if he didn't ask, I would ask. You know

Oh, Bellasante, you get it. Would you mind showing Edwin,

I'd say, you know,

He gets it. He's just having trouble with that one step. You know that one step that we were all having trouble with? He is still having trouble.

**

You know, and kind of like just making it not a big deal

**

And, you know, after a while, it's just kind doing little things like that. It didn't take as much with him as it did for Carolyn because again, he didn't have such a social issue. At that, he just started, you know, catching on and being more, he wanted to go to the board more, he wanted to explain more, and he would say

I just don't, I don't get this. I don't get this.

You know, where Carolyn was, only with me she would say

I don't get it,

You know

**

So I think it was similar problems with different kids and approached

differently and they both did much better. I mean they still had difficulty with math. They're going to con. I think that they are going to continue to have difficulty with math. I think it's just something that they struggle with the different steps and the different concepts. But, I think by the end that they felt much more comfortable with it. I never heard them say

I hate math

I never heard the

UHH HHUHH!

The sigh when it was time for math, you know.

**

So I think that, I think that made a huge difference with those two. You know, similar problems just approached differently because they are two different kids.

[Belmont Barry R1 Q1]

In this excerpt, Belmont motivated students who were weak in a particular subject to do extra work in that content even though they hated it at the beginning of the year. The stakes were high. Two popular children who dislike a particular school subject might drag down the entire class; instead, Belmont's careful labor changed the young people's attitudes and behavior. The expert teacher may have began the year listening to what she described as "the UHH HHUHH!" sigh when it was time to get ready for math, but she did not spend the year listening to that noise. There are clear limits to Belmont's skill, however. It is not clear whether the Caroline and Edwin ever joined the rest of the class and went "WOO! WOO!"

Some of the activities the accomplished teacher discussed in this passage are viewed as particularly beneficial by educational researchers. Klibanoff, Levine, Huttenlocher, Vasilyeva, & Hedges (2006) show that mathematics achievement is supported by the same input processes as language development. High levels of what the researchers describe as math talk in classrooms is correlated with high levels of math achievement, and Belmont was able to organize her instructional program not only to make this type of discussion a recurring part of life in her classroom, but to have her students do most of the work. The expert had the skill necessary to draw lots and ensure that every student in her classroom went up to the chalkboard, solved difficult problems, and explained their work in a way that other members could understand. Children might

gain both from the cognitive effort required to discuss why they made a particular choice and from listening to their peers' reasoning. Belmont's successful relational and motivational work with Edwin drew other students' attention to the problems he tried to solve:

Having, he could, he wasn't embarrassed with his friends and in the group.
Like for asking for help I would say,

Would you mind, is there someone, you know, does someone
want to help Edwin?

Oh yeah,

Everyone, the kids all walk around,

Can I help you? Can I help you? Can I help you?

Belmont describes how she is able to alter the flow of her lesson to provide Edwin the information he needed to grow. The modeling, coaching, and smooth, instructional practices she discussed were rare in the beginners' narratives. None of the first year teachers described themselves capable of orchestrating classroom scenes where students could just walk around and ask, "Can I help you? Can I help you?"

Carolyn and Edwin became students of concern once the school year was underway, and Belmont realized they had difficulty with that subject matter. Belmont never shared an extended account of her whole-classroom mathematics instruction similar to her description of the opening of the school or her social studies lessons. She did not offer a deep account of how she planned her mathematics lessons nor did she discuss her views on how best to teach math. Instead, Belmont threw the reader directly into the drama of her lesson.

Expert teacher California Calumet did provide an extensive description of her whole class teaching when she discussed her efforts to use the Writer's Workshop instructional design. Her work is worth discussing because it shows the craft involved in managing routine, research-based lessons. California's narrative helps illustrate how the expert teachers' pedagogical content knowledge shapes the systems of language and instructional feedback that supported students' growth.

Writer's Workshop is a pedagogical system for teaching writing developed by researchers connected to Teachers' College Columbia (Atwell, 1998; Calkins, 1986). It

has variety of designed routines for writing including a structured brainstorming process; methods for writing a first draft; procedures for revising such as structured peer-editing and teacher-student conferences; as well as processes for creating final, publishable drafts. California Calumet told me she had put the Writer's Workshop design in place in the years before she joined the Chicago Quest Center's New Teacher's Leadership (NTL) program and began studying for NBPTS certification. However, one of the things she learned from the NBPTS-NTL process was that she had not managed Writer's Workshop well. Before taking classes at the Quest Center, California told me might have asked her students to revise their writing two or three times during a particular assignment. She also reported that she had difficulty find the time to hold the teacher-student conferences the design required. Instead of circulating through the class and helping students as problems came up, California had difficulty keeping children's writing conferences brief and on point. California said her students enjoyed her attention. Once they found themselves sitting at her desk with their writing spread out in front of them, they did not want to stop talking about their work. Long conferences with individual students, however, made it difficult to manage the progress of the class as a whole.

One of major changes California made after becoming National Board Certified was to restructure the procedures she used during Writer's Workshop to increase the amount of feedback she gave students. She organized routines within the design that allowed her to record her students' revisions and to monitor the progress of each draft. She changed how she managed student conferences. Instead of having students sit with her, she came to them. As a result, the expert teacher spent the year on her feet, moving from desk to desk, pressing her students forward. The reader might visualize how many opportunities to talk, explain, and reflect on language are discussed in the following passages and imagine how many different types of pedagogical and experiential knowledge shape the following remembered performances:

Interviewer

Great, I think we will go to the next question. Can you talk to me about, can you tell me a time during the year when you felt you learned something new about your teaching or your students?

California

[6 SECOND PAUSE]

Hmm.

[3 SECONDS]

That's a tough question.

[9 SECOND PAUSE].

I think that this whole year was a huge growing process for me

**

just because last year was my National Board Certification. And I learned a lot about teaching writing last year, that, things that I hadn't done before

**

and probably the most interesting thing was that I didn't realize how much of an effect meeting with my students individually and talking with them. I mean, I used to do it before, but I did it much more this time. And I really kept asking them to read and revise and make changes and keep working at it and improving. And in the past, I might have only asked them to do it two or three times, and this time I was really a glutton, I mean they were, you know, and they didn't complain about it. You know they really liked it. Because they felt like I was genuinely interested in what they were doing and what they had to say. And I felt like that really changed the results I got, they're, they're writing improved so much more than it has in the past.

**

And I did not, another thing that really I think I, that I didn't this year, I didn't, I allowed only all their writing was their choice. I did not assign any essays. They had choice in every single assignment. That they, that I gave as to what, I mean, like I said it might be a certain genre but the topic was their, their choice and that made such a big difference,

**

and I had a lot less of

I don't know what to write about.

**

You know when you assign a topic and it doesn't, they can't relate to it, you get a lot of that.

I don't know what to do.

**

And so, this was generated totally by their interests.

**

And I was amazed. I really was amazed at the writing that I received.

[...]

And so they wrote these letters. They wrote letters to the previous principal because he had retired at the beginning of the year and we had a new principal. And thanking him for all the things that he had done. They had the Egyptian mummification, it wasn't just mummification, the Egypt topics they all wrote within that. The other essays they wrote, they wrote a persuasive essay. And they all had their own topics for that. From, better food in the lunchroom. It was all issues that was important to them. Recess, because Chicago Public Schools students don't have recess. They actually did research with those, and they, they found these experts that said that kids think better when they have, and all that. It was really funny.

**

But they got into those. And then they did, let's see, another how to paper, another expository where they explained how to do something that they knew how to do.

**

And then the fiction, they had two fictional narratives. The last one was, I think, probably the best. The first one was probably done during the middle of the year and it was for the Young Authors competition.

**

And so, they actually they made a book and they got published.

**

They sent it way to the company, and they put it in a hard binder and everything. And they worked on those really hard. So for writing that's pretty much they had, oh let's see, 1, 2, 3, 4, 5, 6 writing pieces that went into their portfolio their final portfolio. That will be passed on to the next teacher

**

Within that they had a lot of other little, smaller assignments.

**

You know, but those are the major pieces that we did throughout the year.

**

So

Interviewer

Okay, now let's see. Could you talk a little bit more about you said that you like this year like you learned new that was working with students individually and conferencing and things like that? Could you talk about that because we are actually, we're, that's a very interesting topic.

California

Okay, well let me explain first how difficult it is to do.

**

Because like I said, we have only 40 minutes or so.¹ So, in the, in the past I tried it by have the students come to my desk and sit down. But if you invite a student to come to your desk and sit down they don't want to get up and leave.

**

And you can't like manage your time,

**

So what I ended up doing was just me moving around as they were working at their desk. I could like have a mini-conference you know for like 3 or 4 minutes with one student and then move to the next one. And usually in that in that conference, when it's a small one like that, I'll just stop and say

Oh, what are you working on right now? Are you, are you having any trouble?

You know and things like that. And just kind of getting them talking and asking them questions about their writing. And then if I am able to point out like something that they might want to work on then I do that. And then since I am the one moving, I can quickly move on.

**

And so it's managed time. That's what I do most of the time.

Charlie

Would they give them, would they put them in a box of the papers or would the entire class give the papers or how would that work?

California

Only people that wanted to, you know that were ready. So I didn't collect them like that systematically.

**

So, if they were still working on something, it was, it's messy. Writing is messy. I mean you know, you've written papers before, right?

**

¹ California's 6th grade was departmentalized and she taught writing to every 6th grade class in the school.

How many drafts do you write of something, and then?

**

So everything. In the beginning you find one sheet of paper in their revising record. And at the end I think we had some papers with all the corresponding rough drafts that were like this thick

[SHE MAKES AN INCH SIGN WITH HER FINGERS]

I couldn't even staple them.

**

You know, and I asked them to keep everything.

**

You know, so back and forth. The papers back and forth. But for the mini-conferences, I circle around the room.

**

The longer conferences. On some days I would have to sit with a student, you just have to.

**

So I wouldn't meet with everyone every day, but in my grade book I would keep a checklist of who I met with that day

**

and what we talked about. Kind of like a running record on

**

Who's working on what?

That's the only way to manage that.

**

Everyone's doing something different. So you can't. It's not neat,

**

cut, and dry.

[California Calumet R1, Q3]

In this excerpt, California blended formal knowledge about how to teach writing into the personal knowledge she uses pilot herself through the school day. The work she discussed requires thought and effort. Writer's Workshop has many sub-routines that must be enacted skillfully in order for students to receive high levels of benefit from its pedagogical structures. Further, the design is not something that is done to students;

children perform much of the labor themselves. To teach effectively, California had to train and motivate her class to brainstorm; write rough drafts; work with a partner to revise; and continue to improve their draft until the piece is ready to be published, or it is time to move on to a new assignment. She needed to know how to teach her students to write a report and understand how to manage the editing process. To make her lesson work, California had to decide when it was appropriate to use peer editors and when it was best to make the corrections herself. There were four classes of 6th graders in California's large elementary school. California taught Writer's Workshop to about 120 students along with the instruction required for her homeroom. California told me she read student's pieces during her preparation periods, during her lunch breaks, and at home. She was proud of what her students accomplished, but in her words, "The workload is horrendous."

As I will discuss, the expert and the beginning educators differed strongly in the amount of writing instruction they described in their interviews. The NBPTS-NTL teachers shared more than twice as many coded writing events than did the beginners, and the experts used writing to press their students to engage in cognitively demanding work. Children had to *think hard* about their writing. They were required to plan, discuss, draft independently, puzzle over their efforts, and revise. Young people also had to learn the language that made these steps possible. They had to learn how to talk about what they planned to write during pre-writing conferences. They were required to figure out how to discuss their revisions during regular writing conferences with their teacher. They had to learn how to evaluate their classmates' work. This strong emphasis on training students to act as independent thinkers and talkers was a feature throughout the experts' narratives. The NBPTS-NTL teachers had the pedagogical content knowledge necessary to fold these activities into their daily classroom practice. In this next excerpt, note how California moved between her discussion of the recurring activities that structure her class and her discussion of particular incidents where she worked to expand critical thinking skills:

Interviewer

And so now, what do you think is really different?

California

They are getting more feedback from me

**

They're also more responsible for making the changes and it's, you know, it's not like I am correcting, editing for them. And at the beginning it starts out that way, because they just don't have the skills.

**

I have to teach them proof reading marks and things like that and I put them on their papers. But towards the end of the year I might just say,

Check your paragraphs.

**

Why is there a paragraph here? What's your reason for it?

And then I don't say,

You don't have to change that.

They make their decision. So the, the responsibility falls on them to make the revisions and they're able to figure out what's wrong. They don't need me to do it.

**

And the thing is with writing when they get to 7th and 8th grade I know for a fact that their teachers don't teach the way I do.

**

So they're going to have they're going back to

Here's your prompt.

**

And it's just going to be read one time given back to them maybe not even read one time just given as a final copy and graded.

**

So and I explain that to them. I tell them,

When you get to high school, no one is going to teach you how to write.

**

No one is going to sit down with you and say, "This is a good paragraph but you could improve it by doing this, this and this."

**

Or, "Improve your lead."

They wouldn't know what a lead was.

**

So really, I mean there aren't that many teachers that teach that way.

**

So I said,

This is, this is it. No one taught me how to write.

**

You get to high school and you are expected to do a term paper.
"What?"

I didn't know what that was.

**

So, you know, I explained to them, that's the reason why I am teaching them how to do these things that, and the responsibility is going to be theirs for them once they leave the doorway on the last day of school.

**

And so.

[California Calumet R1 Q3]

California organized instruction to teach students metacognitive skills that might improve their ability to manage school assignments across their educational careers. She explicitly taught different genres and elements of writing, and the expert showed her students how to use these textual structures in their work. California said she used the system of instructional activities produced by Writer's Workshop to teach students how to do research, write reports, and construct a story from its lead to its resolution. Young people were regularly given feedback on the quality of their writing that they had to incorporate into their efforts.

One difficulty in using narrative interviews to study practice is that the stories teachers tell about particular classroom events are not always linked together. As I discussed in the methods chapter, teachers tended to organize their stories about whole class instruction into different narratives than their discussions of their one-on-one work with children. The landscape of memories educators used to track an individual student's progress through the school year seemed to be stored separately from their discussions of particular subject matter. California was one of the three teachers who did not read the

interview questions in advance. What follows is her description of the first student she discussed in response to the first question of the interview guide. The Writers Workshop narrative I published in the previous passage was shared about 30 minutes after the NBPTS-NTL teacher spoke these words:

Okay, well one student in particular, her name was Alicia. She was, her writing was almost illegible at the beginning of the year. It was very difficult for me to read it

**

and understand anything. She didn't use punctuation.

**

It was just all strung together. And there were probably 3 or 4 assignments that she did that way.

**

And, but at the end of the year, her last paper was a narrative, a fictional narrative that she wrote. It ended, and, you know, again her writing maybe she would write a paragraph or two.

**

A traditional bed-to-bed story where she woke up in the morning, and then she did this and that. And it was just kind of a laundry list of things that she did throughout the day, and then it ended with her going back to bed at night.

**

You know, and that's typical probably primary, 3rd, 4th grade students, but again we're talking a 6th grade bilingual. So she's, you know, her language skills weren't up there.

**

So, at the, you know, her last essay that she wrote, like I said, it was a four or five page fictional narrative. She used a very good lead where the story started, you know, not in bed. It started with

**

an important event for her story and then, she had dialogue. She had descriptive details. She had thoughts and feelings of the characters.

**

It was interesting to read

**

And so, she totally developed

**

as a writer.

(California Calumet R1 Q1)

California organized a great deal of technical knowledge about writing and using classroom assessments into brief, improvised narrative. Her narrative began with a description of Alicia's strengths and weaknesses:

her writing was almost illegible at the beginning of the year. It was very difficult for me to read it

**

and understand anything. She didn't use punctuation.

**

It was just all strung together.

California then leapt forward in time, and discussed the achievement her student demonstrated at the end of the year. Intermediate descriptions of the Alicia's progress are not voiced. The reader can assume the child engaged in the daily round of Writer's Workshop instruction California describes later in her interview, but the Alicia's efforts within the design were not a major focus of her story. California discussed Alicia's progress with the same technical language she might voice at a classroom writing conference:

She had dialogue. She had descriptive details. She had thoughts and feelings of the characters.

**

It was interesting to read

This language is important because it gives children the cultural tools to understand their writing and to create and solve problems within it. This vocabulary helps youngsters learn to pull different elements of their writing apart and ask themselves, "Does this piece have thought and feelings. Is it interesting to read?" It also helps them figure out how to put the piece back together again to create a final project. Throughout the narrative, California seemed to be regularly monitoring Alicia's efforts, despite the fact that the expert teacher did not explicitly describe her grading process.

Descriptions of students "taking off" in response to the academic demands of a

classroom, particularly in response to assignments connected with writing, are a theme in both the expert and beginning teachers' narratives. The two groups of teachers believed that such enthusiasm and passion for schoolwork were good for young people. Both were proud of the projects their students engaged. As I have discussed, a major difference was that the experts described themselves as able to organize their instructional programs so that more of their students could become wrapped up in their work. They said they were able to provide this type of learning experience to a wider array of children. After she discusses Alicia, California described two students, both of whom benefited from her instruction and connected with a particular assignment. The follow excerpt discusses the progress of one of these young people:

California

...I had one student in particular Bill Bennitez who was you know an honor roll student, straight 'A' 110% if you asked for 80 he would give you 110. Always wanting to do extra credit and things like that. So I think his final paper he had about 9 different times that he turned it into me or other people and revised

**

So, you know, the finished product was something that really, probably some adults wouldn't be able to write the way he did so

Interviewer

What did he write?

California

He wrote a short story about a little boy who got lost, he went with his uncle to the store and was paying attention to this gooey foot that he had in his hand and he had this wild escapade across the country until he was reunited with his parents. So it was really a funny story and, but lots of details and humor, you know

**

so it was called Uncle Chavez' barbeque. Because that's how it starts out Uncle Chavez has to go to the store to get more meat, and he just goes along, so for the ride. But it was really quite a funny story and I had other students who were also

[California Calumet R1 Q1]

Bill Benitez found an assignment in California's classroom that strongly engaged him. California discussed how he communicated his energy and enthusiasm for this work to

the rest of the class. Students read different versions of the story as well as the final product. Not only could they learn from his writings, they could learn from his passion and enthusiasm. In California's classroom, there is no shame attached to being a boy who is a straight 'A' student.

California's efforts to construct a whole classroom setting where this work was supported were a primary focus of her narrative. The children she describes in her interview might almost be seen to float in this stream of activity. Everyone was said to join in with the instructional effort. A strong example of this theme occurred a few minutes later in California's interview where she described how she helped prepare her class to write the first draft of the fictional narrative that was their last major project of the year. The accomplished teacher used Bill Benitez' work as an example of how she performed this work:

Our last assignment a fictional narrative. What I did for that was they had already come up with their own story map, their idea of what they wanted to write about. And so they had that in front of them and I got them to choose at least four or five different entry points into their story.

**

Like you know, one story, one example was, let me think of a good example here. Okay, we'll just take the story, the Bill story, about the little boy. Okay, he could have chosen he chose to start it out where Uncle Chavez' barbequing. Okay, that's the beginning, chronologically, of the story. But I pointed out that he could start at the point where his character is in the trunk of the car traveling at night, and then have flashbacks to what has happened up unto that point.

**

So, but for them to get that concept, because that's, you know, difficult for them to understand, they understand chronological order, but for them figure out

Oh, I could start this story here and then go back to explain.

So I had to, we used an example and I gave several different, I had them list four or five different times they could start the story and then I said

Alright, choose the two that you like the best.

**

And do it. Start it. Use both beginnings.

**

Just write the various lead

**

And so, it might have been a page of writing.

And see which one works the best.

**

And so we that was their assignment for that day. And then they came back the next day

**

and they met with me again

**

I chose not to have them meet with peers that time because I thought that it was important for them to have a good starting point for their story. And sometimes peers aren't always

Oh, that's great.

And you know they get a

That's perfect just the way it is.

So I met with each student then, and I said, you know, basically I led them into making the decision by saying things

Well, which one do you think works the best?

**

Which grabs your interest? Which lead would you be more interested in reading?

And so from those questions they were able to choose. And then once they choose their lead then they started on their draft.

[California Calumet R1 Q1]

California was able to use the Writer's Workshop design to help her students learn the habits of mind that are the heart of expertise (Chase & Simon, 1979; De Groot, 1948/1965; Ericsson, Krampe, & Tesch-Romer, 1993; Scardamalia & Berieiter, 1991; Schon, 1987). Children learned how to how to plan and reflect on their work and then make decisions about how best to proceed. They broke down a larger problem into parts and used a specialized vocabulary to understand how those pieces were constructed and the different ways they were interrelated. This work was important enough that California was able to remember what she said to particular students as she engaged in this project:

Okay, we'll just take the story, the Bill story, about the little boy. Okay, he could have chosen he chose to start it out where Uncle Chavez' barbequing. Okay, that's the beginning, chronologically, of the story. But I pointed out that he could start at the point where his character is in the trunk of the car traveling at night, and then have flashbacks to what has happened up unto that point.

California's students had problems organizing their writing at this high, meta-cognitive level and, as a result, she had to guide them through the steps involved to complete this process. Grasping an academic problem that deeply, and imagining how their writing might benefit from particular types of revisions, was described as difficult for the class. The expert teacher found the time to give each child feedback. Not only did her children learn how make these types of choices, but California's pedagogy made them responsible for their decisions. The final versions of their stories didn't have two beginnings: They only had one.

As I emphasized in the first chapters, expertise is not only the ability to engage in reflective practice and respond to feedback, it is the ability to learn externally generated knowledge to improve the plans and understandings that guide a particular performance (Charness, Krampe, & Mayr, 1996; Ericsson, 2004). Expertise in teaching also requires the pedagogical expertise to use this understanding in the educator's daily labor (Lampert & Ball, 1998). California said she taught her students how to write in their individual voice, and she taught conventions and genres that are common in mainstream language use. California described how she helped children invest emotionally in their schoolwork, and she taught them punctuation, grammar, and how to write a lead. California showed young how to use planning techniques they never would have come up themselves to do better work than they could have created by themselves.

Four of the 7 experts specifically mentioned using Writer's Workshop during their interviews. The other accomplished teachers described forms of instruction that were aligned with the design's principles. As a result, some of experts' narratives about students almost seem interchangeable. Belmont Barry's description of how her student, Bellasante, became inspired to write a sequel to the Amber Brown books that I share to conclude this section, helps illustrate this beneficial standardization. Much of the work Belmont verbalized could have been discussed by the other experts in the study. What differentiates Belmont's narrative from the beginners' stories is not only the smooth

orchestration of classroom life she described, but the shared nature of the child's success. Bellesante did not work alone:

Belmont

...Can I tell something about someone different from than group

Interviewer

Yeah, yes!

Belmont

It's actually the flipside. One of my brightest, brightest, brightest, brightest students. It's another, actually, why am I talking about all girls? She was just the brightest student, you know. And just a wonderful writer,

**

she already had her creativity you know, we did something about powerful beginnings and

[SNAPS HER FINGERS]

**

the first, and she was a sponge. You know

**

She understood

**

how to take

**

I'm going

**

to tell you

**

about caterpillars

**

WHOOOO! And she's just amazing. We'd always use her,

Oh Bellesante, would you mind sharing your powerful beginning?

And people would listen to her powerful beginning. And just

Oh!

Write down. You know so it would spark these ideas so I was really able to use her as a model. Of saying,

Bellesante, would you mind sharing hers.

And I never made it like,

Everyone listen to Bellesante,

**

because Bellesante is the best writer.

**

You know just

Bellsante, would you mind sharing yours.

Just like I would share mine. She, knowing that she was a good writer, she started to get a little bored.

**

And she was really interested, this is my and trying to make the connection of reading and writing as much as possible. She was really interested in the Amber Brown series.

**

She read all the Amber Brown books

**

And she was sitting there during Writer's Workshop and, you know, she's kind of getting off task. And again she's just a really good writer and I don't know if she's just starting to get bored or she couldn't find a topic. I am don't,

**

I am not sure exactly what was happening with her. But I just kind of sat down with her and talked to her. And I said,

Well, what about the Amber Brown series

She's like,

Yeah, you know, I'm kind of thinking about making a sequel.

Okay, what do you mean a sequel?

Well, you know, the last book was

And she told me the last book.

But she was still only 10 or 11 years old

**

Okay, and so just listening and she had it all up here, but I think that she wouldn't have executed it, because it was something that she was just kind of putting around her mind. So sitting down with her and kind of making a plan. She wanted to make a sequel. She wanted Amber Brown to be 17 years old going away to college. Okay. So her ideas are there where as the other girl, Antoniaⁱ, didn't, her ideas weren't really there exactly.

**

Bellesante's were there, they just needed to really be pulled out and planned for her.

**

You know,

So why don't you. You know, just is this going to be a chapter, is this going to be a novel? It's going to have chapters

Yes, and I want to have a table of contents

**

Great!

You know with the different chapters.

And I already know the names of some of the different chapters I want.

**

So it's all up here. It's just getting it out.

**

And then once out and I was like

Well, why don't you start with your table of contents.

**

That might help you design your chapters.

She wanted 9 chapters. Okay, the first one was, it was she was going to start with a problem.

**

Amber Brown, 17,

**

you know.

**

She was going to start with a problem so that was going to be her first

chapter. And then once she had her table of contents, she just ran with it. And then within that she asked another student to help co-author it with her

**

and they are typing and she's her its her ideas the other one is doing the illustrations she helps typing like she's the brain behind the project,

**

she enlists another girl then they enlist another girl so this is a three authored, you know, book that she created and that's amazing. Because again, if I would have just left her,

**

she would have been very off task and already she's kind of like,

Walking to the computer, seeing what everyone else is doing, kind of you know starting to write notes and really kind of getting off.

And so just really sitting down with her and helping her organize what she already had in her mind.

**

Was this amazing and she produced this novel and she shared it with the class. I mean amazing. Amazing.

**

You know its in our classroom library and it's just, you know, it's amazing.

[Belmont Barry R1 Q1]

My attitude toward this particular narrative changed during the course of the analysis.

There is little doubt that it is an exemplary story of classroom practice. At a moment in her life when Bellesante's commitment to academic work weakened, Belmont pushed the child up, and motivated her to higher levels of achievement. She encouraged Bellesante to imagine life as a successful high school and college student and supported the child's attempts to take a leadership role. The NBPTS-NTL teacher showed the child how to visualize an extended project and how to produce and organize its different pieces.

Belmont engaged in all this work while immersing the child in a rich system of classroom language. The expert's many years of practice and study paid off in ways that brought both teacher and child a great deal of happiness.

As I worked through the interviews, however, the story also came to symbolize, the fragility of children's growth. Loss of voice is a particularly prevalent outcome for

girls of Bellesantes' age. It is possible to visualize scenarios where, if Belmont was not there, and the teaching was of lower quality, Bellesante might shut down and lose her commitment to learning. It is easy to imagine how Bellesante might have remembered fifth grade not as the time when she wrote her first novel, but as the time things started going wrong. There are many other things a popular girl might think about besides academic success in high school and college.

Quantifications

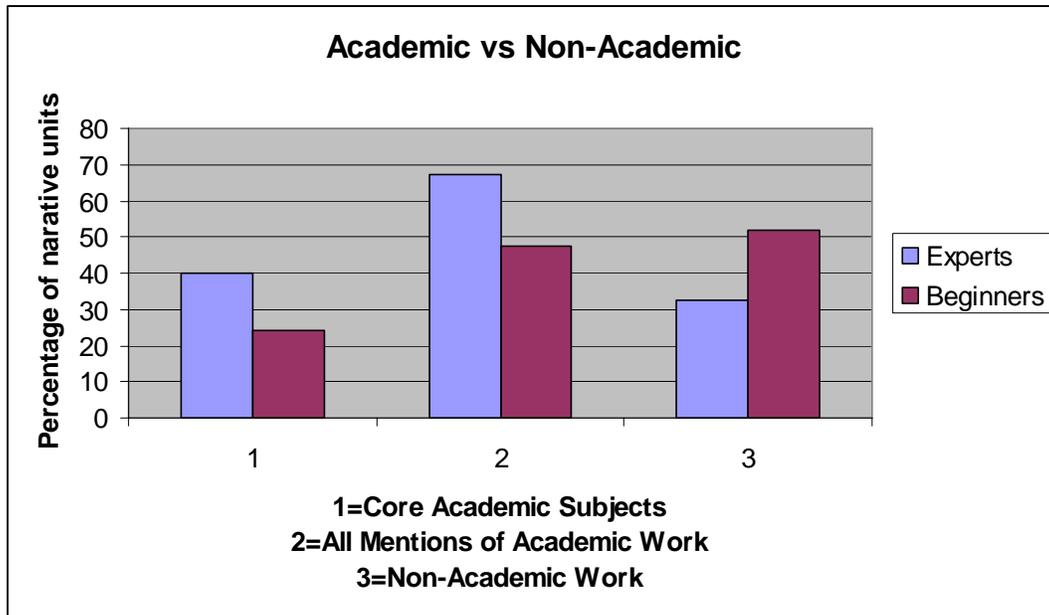
In the previous section, experts' classrooms were described as places where teachers choreographed a variety of systems to benefit the children they served. Experts said they organized sets of routines to guide the daily flow of life in their classrooms. They described how they used the opportunities generated by these settings to construct relationships with young persons, and discussed how these bonds supported children's adjustment to school and their motivation for learning. Experts had the understanding necessary to verbalize rich rounds of daily lessons. The systems of speech produced by these interactions seemed to help children develop subject matter knowledge and improve their ability to solve problems. These activities were accomplished in classroom environments, such as that produced by Writer's Workshop, that produce multiple opportunities for feedback. Experts said they were able to track students' progress while sharing information that helped youngsters improve. In their accounts, learning required effort, but was also fun.

The charts that follow help show how the expert and the beginning teachers differed on some major dimensions of this work. The analysis supports and extends the perspective I have just sketched out, but it is not perfect. As I will discuss, the inferential nature of the narrative interviews I collected made it difficult to get a strong estimate of their use of assessment. The expert teachers pulled together a great deal of information about their students, and they seemed to inquire into their teaching regularly, but it was not always clear how the 7 educators I interviewed gathered the information they used. Experts mentioned using information much more frequently than they discussed collecting and analyzing it.

Table 8.1 adds more details about differences between the experts and beginners' focus of attention. As I discussed in Chapter 7, the NBPTS-NTL teachers' narratives

were alive with stories about engaging classroom instruction and student learning. The beginners described themselves as less capable of producing beneficial, whole class instruction and focused large portions of their narratives on classroom management issues. Table 8.1 shows how these differences played out across the entire interview.

Table 8.1 Academic and Non-Academic Work



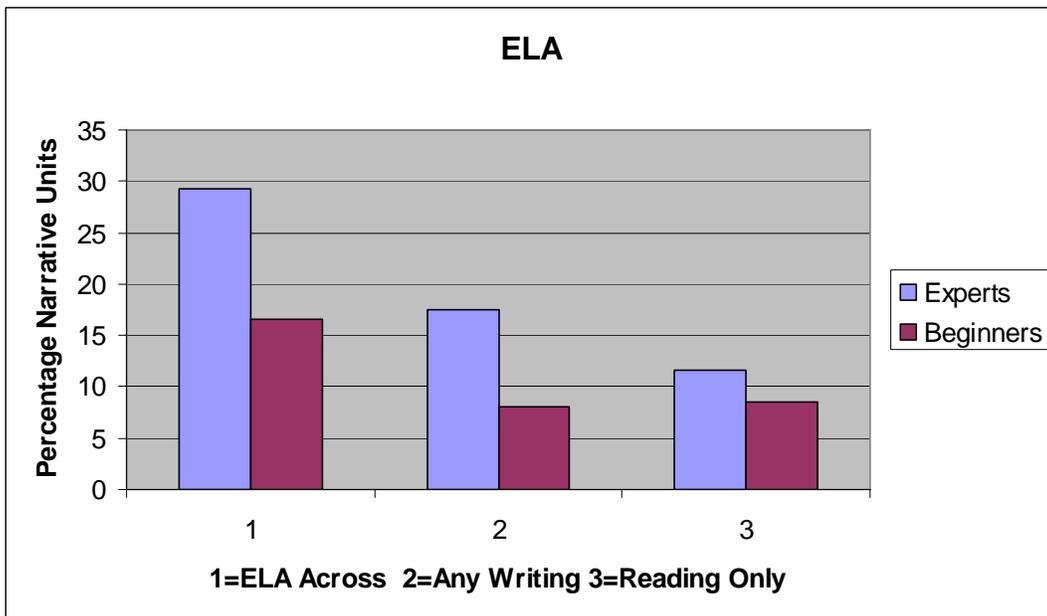
Comparison	1	2	3
Analytic Code Displayed	Core Academic Subjects	Any Mention of Academic Work	Non-Academic Work
Experts	39.95%	67.47%	32.62%
Beginners	24.03%	47.49%	52.52%

Comparison 1 shows that the experts share about 60% more mentions of specific academic subjects such as reading, writing, social studies, mathematics, and science than beginners. When the focus of the analysis is broadened to include weaker mentions of academic work, such as discussions of motivating students, professional development, and the school's standardized testing system, these differences are maintained, but they do not grow any larger. The experts' advantage was carried primarily in their strong focus on core academic subject matter. Comparison 3 shows that more than half of the

incidents in the beginners' stories were focused on non-academic issues such as student discipline problems or the CPS bureaucracy.

In order to deepen my analysis, I coded all mentions of language arts practice spoken in reference to morning literacy periods or any content area the teachers taught during the rest of the day. Table 8.2 shows that the NBPTS-NTL teachers shared close to twice as many mentions of reading and writing than the beginning teachers: 29% standardized units versus 17%.

Table 8.2 ELA Across the Curriculum



Comparison	1	2	3
Analytic Codes Displayed	ELA across the curriculum: Both reading and writing	All ELA units where writing was mentioned	All ELA units where only reading was mentioned
Experts	29.25%	17.57%	11.67%
Beginners	16.60%	8.11%	8.49%

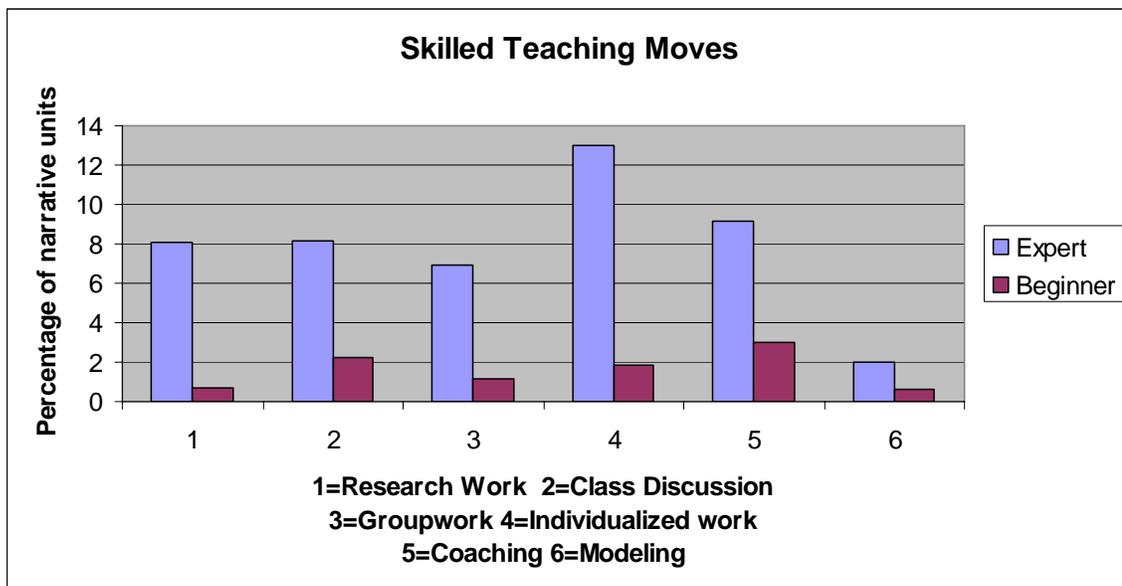
Comparisons 2 and 3 show that much of the expert teachers' ELA advantage came from academic work that used writing. The accomplished teachers voiced an average of twice as many standardized stories about writing instruction than

the beginners: 18% versus 8%. The stories of California, Belmont, Dorchester, and Prairie excerpted in the previous sections exemplify this work. These incidents were rich with instructional ideas and content. They described a thick landscape of pedagogical moves.

Table 8.2 might be interpreted as indicating that one of the primary hallmarks of teacher expertise is the ability to intensify individual lessons across the school day with ELA content. The NBPTS-NTL teachers reported that they pushed their students to read and to write a wide variety of materials from different content areas. They said children wrote during their literacy blocks. They read novels during social studies units. They wrote reports during science. The beginners' stories lacked this same intensification, particularly in writing.

Table 8.3 helps show how the two groups of teachers' instruction differed. The table describes a set of teaching activities I started coding while I was doing the analysis. I did not specifically predict that these differences would appear when I started coding, but instead, I noticed them as I worked through the data. The table shows there was a wide range of activities experts said they were able to perform that the beginners said they rarely managed.

Table 8.3 Skilled Teaching Moves



Comparison	1	2	3	4	5	6
Analytic Code Displayed ²	Research work	Class discussion	Group work	Individualized work	Coaching	Modeling
Experts	8.07%	8.15%	6.89%	12.99%	9.16%	1.96%
Beginners	0.69%	2.21%	1.18%	1.88%	3.02%	0.61%

Taken together, most the incidents categorized in Comparisons 1-6, can be described as different classroom moves the expert teachers used to structure their classrooms to enhance the flow of language. In the experts' accounts, children wrote reports, they discussed important issues, and they worked together in small groups. The experts discussed how they individualized students' assignments and coached youngsters through different types of academic content. All of these activities required spoken and written communication that was somewhat authentic in nature. The experts described how streams of ideas moved from the research sources students looked up; to teacher student conferences; to drafts and revisions; to presentation and discussions. Comparison 1 totals all stories the teachers' shared about doing research and writing reports across the school day. The incidents coded include discussions of social studies reports on Egypt and Afghanistan, as well as science projects on coral reefs and moldy meat. Expert teachers had almost eight times as many standardized mentions of this type of writing than the beginners: 8% versus 1%. These reports were rarely simple projects. Many of the incidents totaled in this table were shared in extended discussions of lessons that require students to find information, evaluate its quality, and organize what they find into their own words.

Comparisons 2-6 in Table 8.3 should be seen as somewhat exploratory. The concepts analyzed in these comparisons were not as easily labeled as an act of teaching social studies or an incident of student misbehavior. There were more chances for false negatives—incidents I should have coded but did not—or disagreements about the use of particular contextual clues to label a particular incident. However, the differences between the two groups were quite large. The expert teachers, as Comparison 2 shows,

² The codes in Table 9.3, as opposed to those displayed in Tables 9.1 and 9.2 are not unique. A specific incident might be coded as an example both of 'Research Work' and of 'Group Work'.

reported more frequent classroom discussions than the beginners. These discussions were incidents where speech was shared in ways that went beyond one-on-one conversations or asking students questions the teacher already knew. Instead, the events totaled in Comparison 2 describe incidents where discussion was more free form and less predictable. Children might move their desks into a large rectangle and use Socratic Seminar techniques to discuss an important social studies topic. They might hold a classroom meeting where discipline issues were discussed and collectively work to solve an important problem. They might talk about the novel their teacher read to them.

Comparisons 3 and 4 show that the experts shared many more mentions of group work and individualized instruction in their interviews than the beginners. Experts said they were able to give students the opportunity to discuss and explain subject matter during individualized tutorials and to receive feedback from their efforts. The beginners said they found both forms of instruction difficult to manage. Children in first year teachers' classes who received group assignments tended to goof off rather than focus on the matter at hand. Individualizing instruction during the regular school day was described as difficult because beginners found that classroom discipline problems made it hard to focus on specific students. Many of the beginners said they wished they could engage in this type of instruction, but did not know how.

Coaching and modeling are ways for teachers to provide in the moment examples of important ideas and concepts. I labeled incidents as examples of coaching when teachers discussed their one on one work with students where they helped youngsters actively plan and engage in learning. The differences between the two groups were large: 13% of the standardized incidents the NBPTS-NTL teachers discussed can be coded as examples of coaching versus 2 % of the standardized incidents shared by the beginners. The NBPTS-NTL teachers frequently discussed their efforts to "get into their students' heads" and help them improve the way they understood a problem and attempted to solve it. Modeling describes teachers' efforts to demonstrate particular skills. The definition I used was fairly narrow. The brief flashes of life caught in the narrative interviews were not as transparent as classroom scenes caught on video tape. It was difficult to differentiate ordinary classroom demonstrations or similar moves from modeling and, as a result, the number of explicit attempts to demonstrate a particular skill was fairly low.

Neither group discussed this type of instruction extensively.

Expert teacher Prairie Paulina described how many of these classroom moves came together in the description of her science teaching in the following passage. Her discussion was focused on whole classroom instruction, and so there were few specific incidents of coaching or modeling, but it should not be difficult for the reader to imagine how Prairie might choreograph these types of interactions within broad outline she described. Similar to California Calumet's discussion of her writing practice, the passage provides a strong example of how accomplished teachers blend externally based knowledge into the system of understandings that guides their daily labor. It describes how pedagogical content knowledge organizes teachers' daily labor. Prairie learned science methods when she was an undergraduate at a major Midwest research university and she was proud of her work. Throughout her narrative, the reader should note how the expert teacher said she created frequent opportunities to learn language related to the content and methods of science:

Interviewer

Okay. Anything else they said that they really liked [when your students wrote their end of the year evaluations]?

Prairie

They also really liked, a lot of them really liked the Science Fair. 5th grade is the first year that they're really responsible for their own project.

**

And I feel. I have some pretty strong feelings about Science Fair in two different directions. One, I think it's kind of inappropriate for 5th graders

[SHE CHUCKLES]

because the amount of work that they're required to do is insane.

**

They end up with like a ten-page and this huge project and a display board, and that's a lot of work

**

if you're ten. Especially when they've never done it before.

**

And I also feel very strongly that science is not about following directions,

**

so I will not let them do anything out of a book.

**

A lot of the kids will just find a book on science experiments and do one,

**

and they won't understand the science. They won't care about it,

**

and they didn't learn anything.

**

So I structure my, that unit in a pretty particular way. We brainstorm things about science that we think are cool,

**

so we do a list of topics. I mean this takes forever.

**

It's the entire month of October and November.

**

[SHE CHUCKLES]

It occupies like all the science time. Then from those topics, they brainstorm questions,

**

and they have to be "how" or "why" questions,

**

just things that they want to know.

**

So then based on the list of questions, I compile them, and then they can choose one.

**

And so then they go and they do research to find out about that topic,

**

just so they know some stuff about it. And then they have to come back to design their own experiment.

**

So I work with them on,

Well, how can we test this? What can we do with this?

We talk about graphing. So I really try to walk them through a really like it's an inquiry science experience for them,

**

because I tell them,

Science is about questions. It's about finding out why things work. It's really cool, you think it's fascinating.

**

Because the kids do, they love science.

**

But I also have to have them complete all the parts that are requirements. Which is just a daunting task.

**

But once they've

**

Once they've finished that, they are so proud of themselves.

(Prairie Paulina R1 Q2)

In this passage, Prairie shared samples of the 'narrative-schema' she uses to teach to her fall science lessons (Connelly & Clandinin, 1999; Ericsson & Kintsch, 1995; Kintsch, 1998). She described how children had the opportunity to learn the language of science and the habits of mind connected to inquiry. The experts' discussion *indexed* many of the activities she said she used to produce that schoolwork. Prairie's students brainstormed, they discussed, and they did research. Prairie described how all of these activities were verbalized and discussed in class. Prairie said she taught her students some of the problem solving skills they will need in their adult lives during class-time that, in less accomplished classrooms, might be spent managing discipline problems, lining up to go to lunch, or moving from one set of textbook driven lessons to the next. Her students were happy and even a little joyful as they performed this labor. The passage continues:

Interviewer

What were the projects?

Prairie

One of the little girls had grown plants, and she fed them. I think water, milk,

and juice.

**

And like there was like a huge difference between what she fed the plants.

**

She was just like,

Can you believe this? It's incredible!

**

And another one had done something similar with plants and a light, and also had some really striking results.

**

Two years ago I had kids that did this really fantastic project about friction,

**

and they had like a little car, they had a ramp, and they had all sorts of different materials to put on the ramp to show like what caused the most friction. It was really interesting.

**

I was like,

Wow, this is fascinating.

[INTERVIEWER AND TEACHER LAUGH]

A bunch of kids this year did experiments on mold,

**

so they thought mold was the coolest thing.

**

So they brought in like

Interviewer

Oh, God.

Prairie

all manner of disgusting things. One of them brought in molding meat.

**

We literally had to leave it on the window

**

outside of the classroom closed because it smelled so bad.

[SHE LAUGHS]

But they were like,

Yeah! The teacher let us bring in moldy meat!

**

So that was

[2 SECOND PAUSE]

I think they learned a lot about what science really is

**

doing that, and I think just going through that whole process will make it a lot easier for them in 6th and 7th and 8th grade.

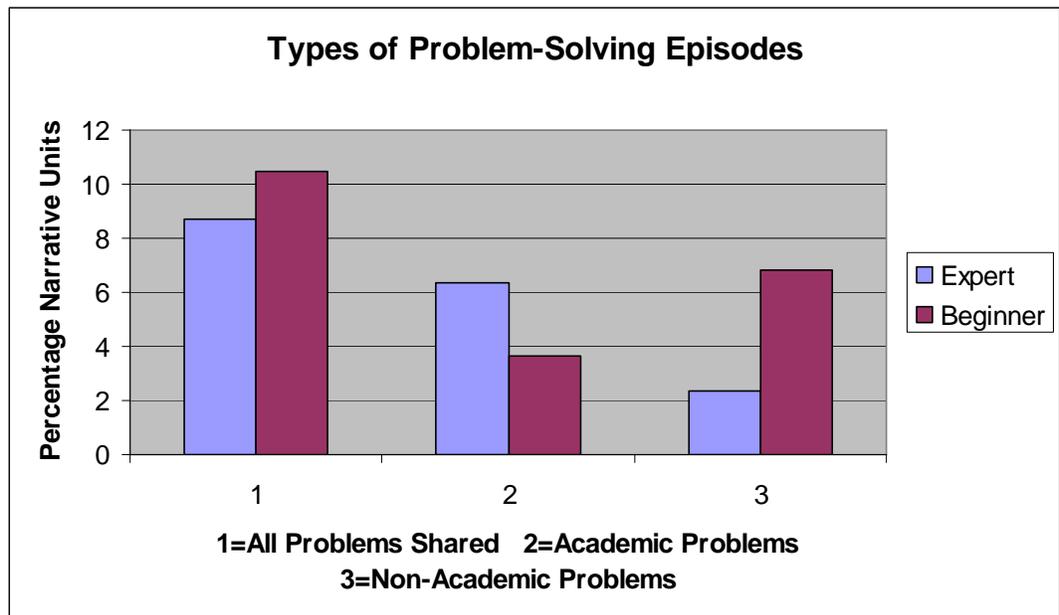
[Prairie Pauline R1 Q2]

Prairie did not spend interview time complaining her students do not know how to engage in complex academic tasks. Instead, she said she was able to teach her children the skills they need to do this work well.

My attempts to use my coding system to investigate classroom feedback and assessment use were my least successful analytic efforts. My records show I spent a great deal of time on this project and tried a variety of different coding systems, but, as I will discuss, I found only one major comparison worth reporting. I believe that part of my difficulties were the result of my instrument design. When I wrote the original interview, I considered adding a separate question about assessment, but I decided not to do that for two reasons. The first was that I was concerned that such a question would overwhelm the teachers' stories and make their accounts less personal. My experience asking educators for descriptions of standardized assessments for the Study of Instructional Improvement made me aware of the enormous amount of testing that occurs in urban schools (Barnes, Massell, & Vanover, Under review). I was worried that if I raised the matter directly I might generate an additional 20 minutes of description that would either push the interview over its time limit or cut into the time teachers spent describing their students and lessons. Given that IRB issues made it impossible for me to collect samples of student work or even to examine the teacher's grade books or their standardized score reports, it seemed best to avoid the issue. I hoped, instead, to pick up descriptions of testing and assessment indirectly, similar to the way I picked up stories about families I discussed in the previous chapter.

This did not happen. Much of the grading and other forms of formal and informal assessment engaged by the experts seemed highly automatized. The experts shared rich descriptions of their students' progress that seemed based on knowledge gained from a variety of assessments, but the process the experts used to create those judgments was not always discussed. Prairie Paulina's narrative about her science teaching is a good example of this issue: One can infer the expert used a variety of assessments to guide her instruction, but except for the final presentation these tools were not described.

Table 8.4 shows a solution to this dilemma. In it I coded each mention of problem solving. Thus every time a teacher described herself as attempting to figure something out and find the answer to something she did not know, I labeled that incident.



Comparison	1	2	3
Analytic Code Displayed	All Problems	Academic Problems	Non-Academic Problems
NBPTS-NTL Teachers	8.73%	6.35%	2.38%
Beginners	10.47%	3.66%	6.82%

The results emphasize the amount of thought and effort expert teachers said they put into instruction and show how the beginners' attention was pulled away from other issues. These findings also support the conception of routine work I discussed in my interviews.

The expert teachers choreographed instruction mindfully. They described how they thought hard about their work and regularly pushed themselves to make it better.

What the preceding discussions shows most strongly, in my opinion, is the importance of going out in the field and getting into classrooms during the next phase of the Expertise in Urban Teaching Project. If a year of schoolwork is viewed as a large problem composed out of many, many smaller ones, it might be worthwhile to trace the development of the year's dilemmas and the actions teachers' took in response to those problems from the opening of school to the year's end. Interviews, ethnography, and quantitative methods might be used to describe how teachers' attempted to organize their classrooms, how they solved problems within the classroom structures they constructed, and the impact of their choices on their students' growth. Narrative interviews raise important issues and develop worthwhile perspectives, but they also increase one's desire to be there and examine the raw, classroom history that produces teachers' stories.

a) Beginner Keeler Kirkpatrick

Throughout these chapters, I have worked to create a strongly pedagogically focused account of expertise. I have emphasized the benefits of the expert teachers' years of study and have highlighted the narratives they shared of their happiest moments. I would like to end this section with a set of narratives from beginning teacher Keeler Kirkpatrick that both support this perspective and challenges it.

New teacher Keeler Kirkpatrick attended an elite college, received high marks, and was strongly committed to teaching for two years as part of her pledge to Teach for America. Keeler had a difficult time working in the Chicago Public Schools, but she was also very determined. No other beginning teacher besides Belmont mentioned more conflict, but Keeler also frequently focused her storytelling on academic work. Some of her totals for academic subjects exceed that of the experts.

In a sense, Keeler was able to 'teach into' the conflict generated by her lack of expertise. Instead of orchestrating a peaceful, working classroom, Keeler said she confronted her students and pushed them to achieve. She demanded that her kids change their attitudes and, in her account, spent hours disputing motivation and discipline issues. Keeler's transcript shows that the first year teacher used a high vocabulary when she

argued with students about whether they were allowed to go to the bathroom. The differences between Keeler and her students' values and background that seemed to cause some of these difficulties also were said to produce meaningful benefits. Keeler spent long portions of her narrative discussing relationships with female students that allowed the beginning educator to share what she had learned in her life experience. During these interactions, Keeler said she would attempt to press her higher levels of vocabulary into her conversations and push her kids see the world in a new way. Managing these relationships in classroom filled with conflict, however, was difficult. Keeler said she learned to tone down her vocabulary during whole class instruction because she did not want to spend hours arguing about what it meant to, for instance, "peruse the newspaper."

In the following passage, Keeler described both the difficulties she faced managing her classroom and the deep connections she created with some of the young people in her classroom. Both conflict and caring and deeply intertwined in her narrative and readers might imagine the rollercoaster ride produced by her daily practice. Keeler's school was not always administrated effectively, and Keeler said she was not able to influence some of the major routines it used to operate. Much of the content she used in her lessons was said to have come from textbooks Keeler xeroxed and test preparation materials designed by the State of Illinois for what she believed were rural, rather than urban, students. There were times when Keeler was able to go beyond these materials, and inspire the students she served, but the work was difficult. One of the major sources of the differences between expert and beginning teachers that shows up in the charts used throughout this thesis is the beginners tendencies to describe chaotic scenes such as these:

Interviewer

So when would you do writing during the day?

Keeler

I usually did it at, well, this is one of the things that goes a real strain and struggle for me at the school. I was technically the science teacher

**

and I would have my students for one hour in the morning for reading

**

then I would go through three rotations of the other middle school classes and then I would get my students back after lunch at 12:20.

**

And I would do science until one o'clock. And then from one o'clock to 1:40 whenever we had, or from 1:40 to 2:20 depending on the prep-schedule I would do writing.

**

Or I would try to, but often it would get displaced by something happening at the school or what not. But we didn't actually rotate most days.

**

I would be told we were going to rotate so I would plan to rotate

Interviewer

Oh my gosh.

Keeler

And then at 9:45 or 10:00 o'clock when we are supposed to start rotating the department chair would come down and say

We are not rotating today.

And I would have two seconds to think up an entire lesson plan for the entire day. No

Interviewer

Tell me about that. That is really interesting.

Keeler

It was awful. So inconsistent that we actually only supposed to rotate Tuesday and Wednesday and Thursday.

**

Mondays and Fridays we are supposed to focus on the things your kids needed the most work on, basically test prep.

**

and we all we would not rotate if there was a substitute in one of the classes. We would not rotate if say it was around grades time like either progress reports or report cards.

**

The other teacher's said

No, we can't rotate today. I need to do my grades.

Because they would rather just give their kids a bunch of bookwork

**

and then sit at their desks and calculate grades all day, instead of actually

teach things.

**

Or if they just didn't feel like it, we wouldn't rotate. Or, if there was something going on in the school. I mean there is a visitor coming to the school we wouldn't rotate. And I wouldn't find out until as the kids were coming in the door

**

at 9 o'clock or after 9 o'clock, sometime before 10 o'clock.

**

And it was really difficult the first few months I was there because I was planning, I needed to plan everything

**

to be able to get through my day

**

and because I find that you're not going to be using that plan have to come up something on the top of your head without any resources really to do that with. So it was really difficult. But eventually I kind of. I had things that I would start falling back on

Okay, if we are not going to rotate, we are going to do this.

**

and I almost had two lesson plans for everyday

**

Because I knew that it was a very strong possibility that we would not rotate. And I think that writing often lost out in that because I would be so flustered that

**

everything I had planned would go out the window

**

because then I would be sent lesson plans by the other teachers of

Here, you need to have the kids do this

But, I was like

But I have no idea how to teach this.

**

Because one of the teachers would send down like

Teach the kids what the object of a preposition is

I don't know what the object of a preposition is. Welllll,

[BOTH LAUGH]

to teach it. I don't have a teacher's manual for it.

[INTERVIEWER LAUGHS]

The kids have books, but I don't have books. I don't have answers. And so basically I would just be like,

Okay, do page 429. 1 through 15.

It was difficult. It was very difficult. I was very happy when we finally just said

No, we are not going to rotate anymore.

Because we needed to prepare for the state tests.

**

We would just do test prep all day long. And at that point it was basically I was only allowed to teach reading, math, and writing but focus on reading and math. The only writing I was allowed to was connected to the reading. because the state tests. We did writing a bit, also

Interviewer

Was that a curriculum? Or

Keeler

No.

Interviewer

How did you? What were you doing when you were teaching the state test?

Keeler

Well we did have a test prep series

**

and we did have reading, writing and math. The writing one was awful. It was difficult to follow. The their writing prompts were not anything my kids could relate to because the people who write these books down in Springfield do not have the same experiences as do students who come from the Eastside of Chicago. In a very, you know, poverty stricken area, and so my kids could write a beautiful narrative about you know a crack dealer and his girl friend, but then, you know, some prostitute down the street. But they could not write a narrative story about a family trip to Disney world which is what all the writing prompts asked them to do.

Write about, write me an expository essay about feeding birds.

Or

Write me a persuasive essay persuading me about why we should go to Cancun instead of Disney world.

My kids were like,

Where is Cancun?

I mean they Chicago was a state and Illinois was a country! They thought Europe was a country and France was a continent. So I mean, I had, so I couldn't focus, I couldn't use that book. Because my kids didn't there was so many things my kids didn't know, I couldn't

**

use it

**

So I sometimes I pulled the writing prompts I liked out of it.

**

And we used them but more often I would make up my own

**

The previous school I was at where I started the year, I started in 6th grade³ and they gave me a power writing book and it had some writing topics in it for 6th grade level, but that was more the writing level of my students.

**

And so I would problems from their I would make them up or my literature series actually it would have like science connections, math connections, social studies connections, writing connections so based on the story we were reading I would use those writing topics and

Tell me write an essay on this.

**

Or yeah like that type of thing or in science book it had literature and writing connections, I'd say

Write me an essay on that.

I mean so that's where I would pull my topics from.

**

³ Keeler was displaced from her first school because there were not enough students in her grade level. Her school closed her classroom, sent her students to other rooms in the school, and told Keeler to find another position.

But then I used the reading and math test prep book.

**

To help them with that section of the test. But I was really scattered this year. It took me a long time to get used to everything. Because the inconsistency in the rotation made the behavior just horrendous

**

it was just terrible.

[VERY FAST]

I when we were rotating the other classes that would come into me that weren't my homeroom. They didn't see me more than maybe once or twice a week we rarely I don't maybe one or two weeks out of the entire time we were rotating did we actually do the full rotation everyday, and so their behavior with me is awful.

**

Because they didn't know me and they didn't know my style

**

I had no, like I couldn't say

Well, that's what we do tomorrow. When we see you tomorrow you better have this.

Because I might not see them tomorrow. And I couldn't be like

Well, for the rest of the week you are going to be doing this

Because I might not have them the rest of the week,

**

and so any consequence besides just writing them up, reporting their name with a check on the board but that's not going to do anything when they are going to be with me for 40 minutes.

**

You know, what do they care? So, they're still going to throw their books across the room and break my things. And so it was I would be I would spend between 20 and 25 minutes of my 40 minute period just trying to get them to quiet down and get out paper.

**

and open their books.

**

And so that was it was just horrible. I don't, so, I don't, we don't know if we are rotating next year and I so hope we don't. Yeah, so it was very difficult to

fit that in being the science teacher. I was trying to do experiments

**

When you don't know if you going to have the kids you can't real. I, you know, it was difficult to prepare for experiments and then

**

the kids didn't get to do them

**

because I'd get them back we'd have to, but I couldn't do really experiments because the time I'd get the students back we'd need to move on. So I could get to the next

**

to the next chapter the next information. So that was my biggest frustration this year was the rotation because it caused huge behavior problems. I would wind up crying in the hallway or in the assistant principal's office almost everyday that we rotated.

**

Interviewer

[IN A QUIET VOICE]

Oh really.

Keeler

Yeah, I would almost break in school every single day that we rotated. Then I'd go home and I'd call my mom and I would cry on the phone with her for an hour, and she is a teacher too, but she teaches elementary school out in Silicon Valley where you know every school is sponsored by a computer company and they. I mean she just does not understand

**

the same problems I have.

**

and the also way we rotate. When we didn't rotate I couldn't do math with my kids because we only had fifteen mathbooks in the 8th grade. So the other class would use the mathbooks.

**

and they did not have enough. So we either had to run down to that class and then photocopy that mathbook for the kids

**

or we'd just, I wouldn't have anything. I would just have to write problems on the board. And it got really frustrated because the kids would want to look

back at previous pages of the mathbook, but they couldn't. They didn't have a math book.

**

And, as far I know, we don't have plans to buy any new ones. We don't have any money. And so it just those were my biggest frustrations this year was that I couldn't teach my kids math because I didn't have a math book.

**

I had a teachers edition, but I unless I, I didn't have a working overhead. I had a chalkboard and I would have to write everything and erase everything and keep writing and have my back to the class the entire time which caused behavior problems.

**

And so it was just really hard I was amazed that my kids improved in math because for most of the year they didn't have, they didn't have math books. But when they did rotate the other math teacher they would use the other math books in class only. They can't take them home

**

We only have 15 books and three of the books I think that three of them actually have covers on them

**

12 of them to be without covers on them. The kids couldn't take them home. They couldn't study from them.

**

So it was really difficult.

[Keeler Kirkpatrick R1 Q1]

Keeler's 8th grade classroom generated so much student misbehavior she regularly asked school security to pull problem students out of her room. The students she served had chased their previous teacher into retirement, and it took almost everything she had to make through the day. She said that the way she survived her first months on the job was by working evenings and weekends to plan everything she did down to five-minute intervals.

The reader should note, however that throughout the passage I just quoted, Keeler never stopped attempting to press instruction into her classroom. She never gave up on her students or decided to slack off. She refused to quit despite the punishing nature of her administration's incompetence. Instead, the first year teacher grabbed whatever

instructional materials she could find, adapted them to the needs of her classroom, and used them as best she could. She was determined to give her students the opportunity to succeed.

This determination eventually paid off. Teachers' aides and school security seemed to like her. The school administration regularly came to her aid. Eventually some of the girls in the beginning teacher's class started hanging out with her as Keeler worked to put the desk back in order and grade papers at the end of the day. Keeler gave these young persons books to read. She helped them with their homework. She talked to the girls about their hopes and problems. She was not much older than they were, and she said she enjoyed befriending them. Keeler believed these one-on-one discussions strongly benefited the children she served:

Keeler

I had another student named Elisha. Elisha her mom is very involved in the school.

**

Her mom had a hard time in school. Had to repeat 8th grade.

**

I think she graduated from high school, but I am not 100% certain, but I know she was at least pregnant when she graduated from high school.

**

Because Elisha is 14 and her mom is 30, her mom's 32. So that means her mom had her when she was 17 or I mean if her mom graduated high school her mom was pregnant when she did.

**

So her mom had this horrible fear that Elisha would wind up the same way and didn't want that to happen, but at the same time it gave her a low expectation of what to expect from her daughter.

**

Elisha is one of my brightest students. And she also liked to read and she would hang out with me after school a lot because her younger sister was in the after school program and so she would stay until the afterschool program was over

**

to walk her sister home

Interviewer

Did you teach in the after school program.

Keeler

No I didn't. The other 8th grade teacher who was the veteran teacher did. I, I couldn't. I needed time off.

Interviewer

That's totally fine.

Keeler

So she would, she would hang out with me.

Interviewer

Did you have students that were hanging out with you?

Keeler

I had two, Felicia and Elisha. Both of them had great parents. I talked to their mothers all the time.

**

Both of their mother's got remarried on Valentine's day and I definitely saw a change in behavior in both of them

**

after that happened. More so in Felicia. But Elisha, she loved to read and both liked to read, but Elisha would come and talk to me about the book she was reading and I would

**

with her as well as suggest other books and discuss what she was reading. And she would be like

Oh, Ms. Kirkpatrick, I don't know if you would like this book. It has some you know some like sexual stuff in it.

And I was like,

You know, it's fine if you take it in the context that you are reading it in. Like I don't want you showing your friends the funny passages or whatever.

**

But you know I would *prefer* if you are reading *these* books but I am happy you are reading.

So we were discussing this and she would ask me questions about other things and we'd discuss things besides just what she was reading.

**

Things going on in the world or things going on in the school and different topics and through our conversations we. I think she, because I tend to use a, what I am talking about is my friends I tend to use a much larger vocabulary than when I am talking to my students.

**

That was another thing I had to change when I became a teacher. I had to learn,

My student's don't know what that means. I can't tell my students to go peruse the newspaper because they don't know what that means.

**

But by talking with her after school she would I used some of those bigger words and she would pick up on them and ask me what they meant and she increased her vocabulary vastly throughout the year.

**

And also increased, her writing became much better. I worked with her individually on that as well. And she when I got her test scores back and they asked us to compare them from last year to this year.

**

Percentile wise she went to being in the 67th percentile

[TAPS TABLE]

to being in the 91st percentile.

**

Grade level wise she went from being at the 7th grade reading level to the 12th grade reading level. And I mean part of that, maybe lucky guessing is part of IT. You can't lucky guess your way 5 grade levels though.

**

So I know that she improved a lot.

Interviewer

So then she was just reading all time

Keeler

And then the discussions that we had

**

where because if you don't talk to someone older than her who might bring up different things that she might not have thought of

**

And so she ended the year with probably the highest she ended the year with the highest reading score in the school.

**

Interviewer

Oh my gosh.

Keeler

And she definitely learned a lot in the year. And I was really proud of her when she actually went into the high school she had sign up for. She had gotten into the, of the high schools my students are going to she's going to the best one of that group

**

and when she went to apply to sign up for her classes they wanted to put her in all these honors classes and she was kind of worried about it. And I was like

No, take the honor's classes.

**

You will do well in the honor's classes.

And her mom was kind of worried about it too and I talked to her mom and I was like

Look, Elisha can handle it. She can do it.

And , her mom was so excited when I told her the readings scores because her mom had failed 8th grade and was horribly afraid that her daughter would do the same.

**

And so, I, I was very excited with Elisha's progress with regard to that. And she also progressed in math, a large amount as well. Also something like 22 percentile points. And I think a lot of it was just from the extra help I would not necessarily help but the content of discussions that we would have afterschool, so.

[Keeler Kirkpatrick R1 Q5]

When Keeler met with students after school, the first year teacher was able turn something that caused her difficulty during the school day into a source of strength.

Keeler's high vocabulary became an asset when she did not stand in front of her

chalkboard and speak in a language her students could not understand. Keeler described how she suggested books for Elisha to read and discussed them with the young woman. The conversations were reported to increase the youngster's vocabulary and help her create coherent structures of thought. Keeler believed that, as a result, Elisha made big gains on her high stakes tests. Keeler also reported that she had the confidence to look both mother and daughter in the eye and tell them Elisha was the equal to any student in the Chicago system.

Keeler also told me she was unable to create a motivating academic relationship with any of her male students and had no idea how to adjust her instruction to meet her special education students' needs. She spoke about three students whom she failed to build strong relationships, including a child whose father had been murdered a couple days before Keeler took over the class. On the day Keeler's students took the exams that helped determine their high school placement, the girl whose father died acted out so severely she was suspended. While Elisha took the exam that gave her a seat in the city's leading African American high school, the other girl sat at home.

Keeler's narrative shows that rich language use and strong relationships can in some ways compensate for poor pedagogy. Connections and perseverance can sometimes press learning into classrooms where there is a great deal of conflict. Given the extended time required to develop expertise and the costs that might be required to routinely keep excellent teachers in schools with high concentrations of vulnerable students, the narrative raises a different pathway for school improvement than highly pedagogically based concept I have described. Keeler's story also emphasizes some of the difficulties involved. The high levels of conflict in the beginning teacher's interview are troubling. It is easy to imagine how vulnerable students might not benefit emotionally from the system of interactions that structured her classroom. However, at Elisha's school, the choice was not between Keeler and a National Board Certified teacher, the choice was between Keeler and what might have easily been a parade of substitutes.

Keeler's story also emphasizes the limits of the narrative methods used in my study. Keeler's description of her whole class teaching and her discussion of Elisha's growth seem convincing and trustworthy accounts, but I cannot prove they happened. Keeler's narrative raises worthwhile questions about the role of different forms of

knowledge in teaching, but it does not provide answers.

Conclusion

In this chapter, I have attempted to bring to life the systems of ideas, content, skills, and other forms of information that flow through teachers' classrooms. My narrative methods allowed me to evoke different dimensions of the interactions that occur in social structures ranging from whole classroom lessons, to group discussions, to teacher-student conferences. The writings, charts, and interview excerpts I have shared illustrate the shape of the two groups' classroom knowledge and describe how their stories of students and lessons varied.

Experts' classrooms seemed to be buoyed by the systems of routines and relationships that organized their classroom settings (Brophy, 1996; Doyle, 1986; Furrer & Skinner, 2003; Rimm-Kaufman, La Paro, Downer, & Pianta, 2005). The NBPTS-NTL teachers' pedagogical content knowledge gave them the means to discuss how they built off these social structures to choreograph rich rounds of instruction. They reported that the daily flow of their school gave them the means to press language deeply into their interactions with young people. The experts spoke confidently about their ability to manage the dilemmas produced this academic labor. Years of learning and practice paid off in extended accounts of successful lessons and deep connections with young people.

The beginners' efforts to organize academic instruction never seemed to take flight. They reported their classrooms were filled with conflict, and frequently described how their lessons did not meet their goals. Mistakes created problems that caused further dilemmas (Lampert & Ball, 1998; Leinhardt, Weidman, & Hammond, 1987). The beginners' schoolwork fell into a disordered rhythm that was difficult for them to modify. Frequently, beginners said they relied on random collection of found instructional materials, textbooks, and test preparation exercises to structure their lessons. Working within the social structures these materials brought to life was often described as frustrating and exhausting. However, the beginners were able to work with their students despite these difficulties. They discussed many moments when they connected to young people and many times in school where they were proud. In particular, when the beginners discussed teaching, they described their efforts positively. Unfortunately, such positive accounts were not sustained across their transcripts. Whenever the beginners

began to discuss their lessons, other memories tended to draw their eye.

Throughout this chapter, in many different ways, I have argued narrative methods allowed me collect rich evocations of classroom life that highlight importance of teachers' knowledge and skill, and that this data raises as many questions as it answers. There is much more that I would like to know. There are many aspects of the teachers' work I would like to study more deeply. The fragments of classroom life I collected do not allow me to investigate the flow of information through teachers' classrooms as deeply as I would like. They do not provide a firm guide to understanding the assessments educators used to measure the progress of their work. They only provide a brief sketch the development of young people's progress over time. My narrative methods allow me to imagine how the two groups of teachers constructed classroom systems that supported two very different forms of life. However, these same stories continually remind me that my findings are incomplete.

References

- Atwell, N. (1998). *In the middle: New understandings about writing, reading, and learning*. Portsmouth, NH: Heinemann.
- Ball, D. L., Lubienski, S. T., & Mewborn, D. S. (2001). Research on teaching mathematics: The unsolved problem of teachers' mathematical knowledge. In V. Richardsen (Ed.), *Handbook of Research on Teaching* (4th ed.). Washington, D. C.: American Educational Research Association.
- Barnes, C., Massell, D., & Vanover, C. (Under review). Building district capacity: Taking instructional improvement to scale. *American Educational Research Journal*.
- Black, P., & Dylan, W. (1998). Assessment and classroom learning. *Assessment in Education, March 1998*, 7-74.
- Brophy, J. (1996). *Teaching problem students*. New York: Guilford.
- Calkins, L. M. (1986). *The art of teaching writing*. Portsmouth, NH: Heinemann.
- Charness, N., Krampe, R., & Mayr, U. (1996). The role of practice and coaching in entrepreneurial skill domains: An international comparison of life-span chess skill acquisition. In A. K. Ericsson (Ed.), *The road to excellence: The acquisition of expert performance in the arts and sciences, sports and games*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Chase, W. G., & Simon, H. A. (1979). The mind's eye in chess. In H. A. Simon (Ed.), *Models of thought* (pp. 404-427). New Haven: Yale University Press.
- Cohen, D. K. (1990). A revolution in one classroom: The case of Mrs. Oublier. *Educational Evaluation and Policy Analysis, 12*(3), 32-345.
- Connelly, F. M., & Clandinin, D. J. (Eds.). (1999). *Shaping a professional identity: Stories of educational practice*. New York: Teacher's College Press.
- De Groot, A. D. (1948/1965). *Thought and choice in chess* (G. W. Baylor, Trans.). The Hague: Mouton & Company.
- Doyle, W. (1986). Classroom organization and management. In M. C. Wittrock (Ed.), *Handbook of Research on Teaching* (3rd ed., pp. 392-431). New York: Macmillan.
- Elmore, R. F. (2000). *Building a new structure for school leadership*. Washington, DC: Albert Shanker Institute.
- Ericsson, K. A. (2004). Deliberate practice and the acquisition and maintenance of expert performance in medicine and related domains: 2003 invited address. *Academic Medicine, 79*(10/October Supplement), S70-S81.
- Ericsson, K. A., & Kintsch, W. (1995). Long term working memory. *Psychological Review, 102*(2), 211-245.
- Ericsson, K. A., Krampe, R. T., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review, 100*(3), 363-406.
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology, 2003*(1), 148-162.
- Goodlad, J. I. (1984). *A place called school*. New York: McGraw Hill.
- Hanushek, E. A., Kain, J. F., O'Brian, D. M., & Rivkin, S. G. (2005). *The market for teacher quality* (NBER WORKING PAPERS Working Paper 11154). Cambridge, MA: National Bureau of Economic Research.
- Huttenlocher, J., Vasilyeva, M., Cymerman, E., & Levine, S. (2002). Language input and

- child syntax. *Cognitive Psychology*, 45, 337-374.
- Justice, L. M., Mashburn, A. J., Hamre, B. K., & Pianta, R. C. (2008). Quality of language and literacy instruction in preschool classrooms serving at-risk pupils. *Early Childhood Research Quarterly*, 23(1), 51-68.
- Kintsch, W. (1998). *Comprehension: A paradigm for cognition*. Cambridge, UK: Cambridge University Press.
- Klibanoff, R. S., Levine, S., Huttenlocher, J., Vasilyeva, M., & Hedges, L. V. (2006). Preschool children's mathematical knowledge: The effect of teacher "math talk". *Developmental Psychology*, 42(1), 59-69.
- Lampert, M., & Ball, D. (1998). *Teaching, multimedia and mathematics: Investigations of real practice*. New York: Teachers College Press.
- Leinhardt, G. (1988). Expertise in instructional lessons: An example from fractions. In G. Cooney (Ed.), *Effective mathematics teaching* (pp. 47-66). Reston, VA: NCTM.
- Leinhardt, G., Weidman, C., & Hammond, K. M. (1987). Introduction and integration of classroom routines by expert teachers. *Curriculum Inquiry*, 17(2), 135-176.
- Massey, S. L., Pence, K. L., Justice, L. M., & Bowles, R. P. (2008). Educators' use of cognitively challenging questions in economically disadvantaged preschool classroom contexts. *Early Education & Development*, 19(2), 340-360.
- Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis*, 2004(3), 237-257.
- Rimm-Kaufman, S. E., La Paro, K. M., Downer, J. T., & Pianta, R. C. (2005). The contribution of classroom setting and quality of instruction to children's behavior in kindergarten classrooms. *The Elementary School Journal*, 105(4), 377-395.
- Roehrig, A. D., Pressley, M., & Talotta, D. A. (2002). *Stories of beginning teachers: First-year challenges and beyond*. Notre Dame, Ind.: University of Notre Dame Press.
- Rowan, B., Camburn, E., & Correnti, R. (2004). Using teacher logs to measure the enacted curriculum in large-scale surveys: Insights from the Study of Instructional Improvement. *Elementary School Journal*, 105, 75-102.
- Rowan, B., Correnti, R., & Miller, R. J. (2002). What large-scale, survey research tells us about teacher effects on student achievement: Insights from the Prospects study of elementary schools. *Teachers College Record*, 104(8), 1525-1567.
- Scardamalia, M., & Berieiter, C. (1991). Literate expertise. In K. A. Ericsson (Ed.), *Toward a general theory of expertise: prospects and limits*. New York: Cambridge University Press.
- Schon, D. A. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass.
- Shepard, L. A. (2000). The role of classroom assessment in teaching and learning. In V. Richardsen (Ed.), *Handbook of Educational Research*.
- Shulman, L. S. (1987). Knowledge and teaching: The foundations of the new reform. *Harvard Educational Review*, 57(1), 1-22.
- Yinger, R. J., & Hendricks-Lee, M. (1993). Working knowledge in teaching. In C. Day & P. Calderhead & P. Denlco (Eds.), *Research on teacher thinking: Understanding professional development*. London: Falmer.

Chapter IX

The End of School

I did not ask the teachers I interviewed to discuss their work during specific points of the school year. However, in the course of the interviews, most of them shared stories about their last days at work, and some of their accounts are worth discussing in depth. These concluding narratives provide a coda to the ethnographic section of my thesis and provide content that might be used to reflect on the Expertise in Urban Teacher Project's over-arching research question as well as the less extensive questions that were the primary focus of this work:

How does knowledge change performance?

- What is the shape of teachers' classroom knowledge?
- How does classroom knowledge vary between teachers of different skill levels?

The teachers' stories about the last days of school in June cannot answer these questions, but they can give readers material to reflect on them. Some of the teacher's stories distill months of life experience into a brief accounts. They describe moments that symbolize 'the meaning of it all.'

First year teacher Indiana Ingleside's description of her journaling practice illustrates the beginning teachers' ability to learn over the course of the year. Indiana received her teaching certificate as part of an alternative certification program run out of the Chicago Public Schools, and she spent the previous year working in one of the system's demonstration schools. Indiana told me she learned many of her ELA routines from that program and, in a year where she faced great adversity, journaling and other

writing activities were something she was proud. Indiana's description lacks the richness found in the experts teachers' narratives, but the work she described seems worthwhile. Indiana used writing to connect with her students emotionally and academically:

Indiana

...And in our writing journals everyday, every other day, I would respond to what they had written. I loved reading what they had wrote.

**

So, for instance, half, I would respond to half the journals on Monday. The other half on Tuesday. And then the other half, the first half again, on Wednesday. So every other day they were getting feedback from me. And it wasn't like. It wasn't about how they had written, it was just about their ideas.

**

Like if they said, you know, wrote about a general trip to Six Flags I might say

Well what was so great about Six Flags? Or what ride was the best?

You know, just to get them to think a little bit more about what they were writing. And they love writing, that, that, give-and-take. And also writing in the journals was a way for me to communicate to them things that I didn't have time to say to them during the day

**

And they would sometimes write to me about things that were on their mind,

**

but during the day it was just too hectic to get to.

**

And it was a lot, it's always been easier for me to write my feelings than to say them.

**

So, if I had a bad day with a kid and I got to his journal that afternoon

**

then I would take the time to say like

You know, you really are brilliant, but you need to be more

serious.

Or, you know, whatever.

**

And I think that was a just another form of communication that really worked well for me.

**

And then yesterday [on the last day of school] I had a parent come up and one of her, her child had brought home the journal

[LAUGHS]

and she said,

I had never seen a teacher write back to them that much. And that really just warms my heart that you, you know, wrote to them everyday.

And that was just so wonderful. So for her to say thank you to me was like Wow.

That, that I felt really good about that. I had another parent who sent me a card just thanking me too. And teaching in a lot of ways is a thankless job. And I had a lot of kids run out of the school yesterday and not even look back at me.

[LAUGHS]

So for me to get those two

**

thanks from the parents was, was good. So those are the little small successes that

Interviewer

Big successes

Indiana

[LAUGHS]

You know, you have to like take what you can get and, you know, be thankful for that little stuff. Because it's hard.

(Indiana Ingleside R1 Q5)

In the landscape of stories (Connelly & Clandinin, 1999) Indiana used to make sense of her schoolwork, journaling was linked both to parents' approval of her efforts and to what seemed to be an anti-climatic ending to the school year:

And teaching in a lot of ways is a thankless job. And I had a lot of kids run out of the school yesterday and not even look back at me.

The beginning teacher shared both the joy of the work and her exhaustion. She told stories about students with whom she connected, and young people she could not reach. Indiana told me she spent her own money buying materials for lessons that were ruined because of discipline problems. She said she had students who were taken out of her classroom and put with other teachers because she lacked the skills to meet their needs. Indiana told me principal never observed her lessons, and few of her colleagues bothered to speak to her during her first year. Indiana she kept working. She continued showing up and reaching out to her children. The beginning teacher reported that a major turning point came late in the fall of 2003 when Indiana decided to stop yelling at her students. She told me that acting that way just didn't work, and she decided that whatever happened she would try to avoid raising her voice. The beginning teacher's goal became to "kill them with kindness" and to "to be very strict and firm and mean what you say, but not in a yelling type of way." As her narrative suggests, through it all, her ELA practice provided Indiana with a successful way to start the day. She and her students learned how to:

start in a way we got really good at. I mean there was just basic things that we did every day that I felt were really good.

[Indiana Ingleside R1 Q5]

After our first interview, Indiana told me she was going to spend the summer figuring out what she needed to do to make the rest of the day work right.¹

Halsted Hoyne ended the year with a party that was both a success and a source of guilt and regret. Halsted had forged a strong relationship with one of her most vulnerable 3rd grade students: a twelve-year-old boy who was reading at below grade level, and had chronic health issues that regularly pulled him out of school. The child also had anger management problems that made it difficult for him to participate in class. He did not

¹ Unfortunately, she did not succeed. When I talked to Indiana in the summer of 2007, she said that she had decided to leave teaching after three years in the classroom because of the discipline problems at her school. She said she cared for her students but the work was too stressful.

have special education services and had difficulty reading. The new teacher regularly advocated for the child despite his poor behavior, and her work eventually created a strong connection. Halsted asked the boy to help her plan the classroom's end of the year party. Unfortunately, the boy's high stakes assessment test scores were so low, he found out there was a strong chance he would have to go to summer school and repeat third grade. He would be thirteen years old. When the boy found this out, he began to fall apart:

I think towards the end of the year we had sort of forged a very nice relationship and, despite the fact the very last day of school he had a little anger fit, like one that I hadn't seen like that in, like that in a couple of months, but it was because, I wasn't sure about his school, his summer school status. Because he was in, you know, special ed. at that point and I wasn't sure if they were going to retain, and I just didn't know, and I kept saying to him, I go

I'm pretty sure you're not going, but I can't tell you for sure.

And he just lost it. He freaked out. So, I had to lock him out of the room and it was like, he had made all the, helped me make all the plans for the party, he had helped me plan the menu for like the last day of school party and I was like,

You didn't get any of it because I had to lock you out of the room because you sort of went sort of like out of control. You

And it was just like and, and, and you then, so like I go

But, I'll

And he did calm down and then he came back to the office the very last day of school, last Friday, and I was like. And we found out, you know, that he didn't have to go and, you know, suddenly he has this big smile on his face. He was a totally different kid, you know, it was like just really interesting he was a really very interesting kid to sort of deal with .

[Halsted Hoyne R1 Q5]

Halsted's student had flunked every grade level at least once. His asthma and immune system were so poor he regularly left school for weeks at a time. When the boy found out he might be retained, he went to pieces. Halsted could not manage the situation, and she locked him out of his classroom. If Halsted administration had found out or decided to press the matter, her actions might be cause for dismissal.

In my opinion, what is most inspiring about the story is Halsted's words:

But, I'll

Despite everything, the new teacher continued to advocate for the child. She worked to be there for him and to make his life journey less troubled. However, the beginning teacher's work was somewhat problematic. The boy was likely better off in a special education classroom than in a 3rd grade class, but given how far behind he was, it is uncertain whether keeping him out of summer school was in his best interest.

Sedgwick Sheffield was the only expert who made the end of school a major focus of her narrative. Unlike all of the other teachers I interviewed, Sedgwick kept coming back to that time throughout her account. Seven of the major narratives she shared with me came to major climaxes at that time. I have not discussed Sedgwick's story extensively in these chapters because in some ways her work does not fit. While the appendix shows that her coding totals are aligned with the other experts, Sedgwick was disappointed with her performance during the 2003-2004 school year and her unhappiness colored much of her narrative. She was unhappy because her performance was good, but not great. Sedgwick minimized many of her achievements during her interview, and instead focused on things that did not go well. For instance, she told me she had strong relationships with her female students and was able to motivate girls who regularly acted out with their previous teachers. However, Sedgwick was used to this type of success, and she did not spend much time discussing it. Much of her interview, instead, was focused on male students for whom she benefited, but whom she had not helped as much as she wished.

Sedgwick's student Al, for instance, was very bright boy who had spent the previous year arguing with his teacher and doing little work. Sedgwick recognized Al's intelligence, despite his poor behavior. She worked to build a connection with the boy's father and Al's behavior began to improve as well as the quality of his assignments. Sedgwick found Al another classroom where he could do his homework after school, and he started getting A's in mathematics. As a result, to the surprise of everyone in his school besides Sedgwick, Al won a place on the school math team. It was at this point that Sedgwick's narrative veered from the trajectory described by most other expert

teachers. Al's mother was depressed or, perhaps, an alcoholic. Sedgwick had problems working with the family, despite the fact that she regularly spoke to the father. Miscommunication caused the parents to miss their son's winning performance in the regional math contest. The family also did not show up to take Al to the regional award ceremony, and by the time Sedgwick found out they had not shown up, there was no one could drive the child to the event. Al missed the awards ceremony, but Sedgwick was able to host an event at the school were, again, the parents were not present. Al lost in the city-wide championship and, after the contest had ended, stopped spending after-school time working on his homework and went back to playing with his friends. During the last week of school, Sedgwick told me that she found out that a piece of advice she had given the family about how to support Al's intellectual growth had backfired, and she spent part of that week working with the family and her administration to patch together a solution. Many of Sedgwick's narratives about her relationships with male students flowed in the same rough manner. The expert teacher said she was able to benefit them, but she wasn't able to get them to commit to taking advantages of the opportunities they found in school.

Sedgwick's teaching was rich with different types of writing assignments, and her children read historical and multi-cultural novels throughout the year. Sedgwick said she moderated extended discussions about current events, but the year never really took off. Sedgwick told me there were aspects of her student lives that she could not understand. She said she was able to push her students to do better, but then something would go wrong, and things would not work out well. At the end of school, one of her male student's test scores dropped and when he found out he started misbehaving. The class's end of the year party got out of hand, and a different boy acted out. That same week, Sedgwick found out that despite the fact that her class had some of the highest gains in math scores in the school, she was required to turn in 30 pages of lesson plans². The last day of school, Sedgwick said left the building with a migraine and spent the next two days in bed.

² Sedgwick did not focus on her math teaching in her interview. Instead, she put most of her attention on language arts work where the gains were not as high.

The last narrative I will share shows what happens when time seems to flow right. Expert teacher Ohio Ontario was pregnant with her first child when school started in September. She was new to her building and was somewhat confused by the differences between her current class and the highly disadvantaged children she taught in the classroom where she earned NBPTS certification. Ohio's story about Donna, one of the special education students in her classroom, illustrates the stakes involved in urban teachers' schoolwork. Ohio was able to help Donna learn skills that might literally change her life, and she was able to use the end of school to make Donna aware of her growth. Mentions of end of the year conferences were quite rare in the other teachers' interviews.

Donna arrived in Ohio's 4th grade classroom reading at the first grade level. As part of CPS retention policy, she had been flunked twice by her previous school. Donna was very confrontational. She would get arguments with teachers and students and attempt to boss people around. The girl regularly refused to do her schoolwork. At the beginning of the school year, Ohio told me that the only thing that Donna was able to write in Writer's Workshop was short sentences about female basketball star B2K. As the months passed, however, Donna began to learn how to express herself:

Ohio

...So, Some more students. Who else is there? Oh, Donna. This one student, she did, ohh, she's, she's older than all the kids.

**

And she is special ed.

**

And, oh, she's older, taller. Her story is that at her old school she was retained

[TAPS TABLE]

two times and was going to be retained again

[TAPS TABLE]

**

She has cognitive delay.

**

And she was going to be retained again. She never went to 3rd grade.

**

We placed her into 4th grade.

[TAPS TABLE]

And she, she just at first, at the beginning of the year, quiet,

**

wouldn't talk to anyone, but she was pulled out for the majority of the day

**

because academically she was just 1st grade level.

**

And so, self-esteem was really low, shot.

**

And, you know, academically, wasn't there. She was in the class for writing and wouldn't talk to anyone and she would always write about [female basketball star] B2K

**

and all her stories were like

Me, me and B2K

In basketball. B2K is her wanting to be in the WNBA. And, and writing was just like 1st grade level. Writing, you know, that type of stuff and her attitude was

[TAPS TABLE]

I don't care.

[TAPS TABLE]

I'm done. Whatever. Whatever. Whatever.

**

When the first month and a half we talked about like social stuff.

How you going to meet friends?

And stuff like that. And attitude was like

I don't need to meet anybody. I don't need anything.

And then when she started meeting friends, she met friends

[TAPS TABLE]

in a negative way.

**

She was the bully of the class.

I rule this class.

**

I'm strong. I'm cool.

That type of stuff

**

And, and, you know, and she expressed all of this through her writing. Like

The kids love me, because I am the coolest girl in the class.

And stuff like that.

**

Also she was the bigger one in the class. She was like

I can beat up the boys and, you know, the boys don't know anything about me.

That type of stuff. And so, you know, so she's what? Two years older

**

or a year older than the kids in the class and she, she, she was just like, she was like

I'm going to. I'm, I'm the ruler of the class. I'll beat everyone all of the boys up. I'm, I'm going to make friends that way.

**

So, she made friends.

[Ohio Ontario R1 Q1]

Ohio immediately moved from this description of Donna to the memory of a conference she had with Donna's mother at the end of the year. The reader might imagine how unlikely it might be for any of the new teachers I interviewed to speak with similar pride and confidence:

And one of the goals was for her to make friends. Which was a good thing.
But it was a negative way, but before her, when talking to her mom, [the
mother told me that Donna] wouldn't say anything. She wouldn't do
anything. And whatever. And I was like, you know

There's a lot of things when she still doesn't do,

[TAPS TABLE]

but the special ed teacher helped her and worked with her to do these things,

**

and like academically.

But her writing. It was amazing. There was, I mean, it was like,
two sentence. Paragraphs! Three pages. That's how

**

the progress was with her.

With the special education teacher help, but it was just like, whatever. And
[Donna's writing] then had grown from B2K basketball to like

This is what I am thinking about today. Whatever, whatever.

You know, to poetry.

And it was just amazing. It was just like, you know,

Dona, this girl who bosses everyone

which did not turn to be best when she troubles

**

and she got into a lot of trouble for it in other classrooms, because that's
what she wanted to do. But, I was just like

Look at this.

I was just like

Look at this growth.

**

You know

**

and I was like

Maybe those grammas or phonics

or I mean

Conventionals aren't in there

but it was like

However. Focused. On topic. On time.

and it was just like it was amazing and that was just definitely like a blessing. I was like

Look at what she has produced!

**

And you know it was just awesome. Totally. Totally amazing. And you know, I was thinking about Bill

**

I'm going back to Bill. Bill, he would, you know, say things, you know, math, he couldn't do math. Like, he was just like

**

Whatever.

And, and by the end, he was flying through 3 digit numbers. It was like, I was just

Wow! Isn't that amazing!

There was some growth there. I don't know. Dona, just amazing. An amazing girl. So I, amazing in her writing. It was like, maybe it wasn't 4th grade writing but,

**

This.

**

You came here. This is where you were.

**

And look at this.

**

You know.

**

And you should be proud of that

[Ohio Ontario R1 Q1]

The incidents Ohio shared were not smoothly tied together. Events were linked by their emotional and pedagogical resonance as much as by the demands of an over-riding storyline. Her words read closer to a collage. It is still possible, however, to use the teacher's words to imagine how a year in Ohio's classroom changed Donna's life. The child moved from a friendless, angry, student to a young woman who could express herself. One can imagine Ohio sitting at her desk with Donna at the end of the year, opening the child's writing folder, and examining the pieces it contained:

This.

**

You came here. This is where you were.

**

And look at this.

**

You know,

**

And you should be proud of that

It is my guess that Donna walked away from that encounter feeling pretty good. With a little luck and a few other good teachers, Donna might be able to hold that moment and the dreams it inspires for the rest of her life (Ladson-Billings, 1994).

References

- Connelly, F. M., & Clandinin, D. J. (Eds.). (1999). *Shaping a professional identity: Stories of educational practice*. New York: Teacher's College Press.
- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American children*. San Francisco: Jossey-Bass.

Chapter X

Conclusion

In June and July of 2004, I asked 7 expert and 5 beginning teachers to tell the story of their year's work in the Chicago Public Schools. My goal was to investigate the remembered landscape of students, lessons, and school related events generated by a year of schoolwork (Connelly & Clandinin, 1999; Yinger, 1980). I hoped that by comparing the stories shared by expert, National Board Certified and first year teachers I would be able to examine the shape of this landscape and describe how it varied between educators of different skill levels. My interview instrument was organized around five leading questions based on Benner and colleagues (1996) work in expertise in critical care nursing. The first three questions were:

- Please tell a story about a student, or a group of students, for whom your teaching made a difference during the 03-04 school year.
- Describe a unit or a group of lessons where you made a difference in your students' lives.
- Describe moments during the year when you felt you had learned something new about your teaching or your students

During the interviews, for the most part, the teachers spoke and I listened. I affirmed the educators' stories by mumbling, "Uh-huh," or saying words such as, "Yeah," but I tried to avoid influencing the flow of their recollections. Occasionally, I would ask the teachers to expand on narratives by using Weiss' (1995) techniques and requesting they, for example, "Tell me more," about particular incidents, or "Walk me through," specific procedures. The events the expert and beginning teachers experienced were very real to them and, for most educators, it did not take much prompting to generate a rich set of

stories about their work. The stories the two groups of teachers told, however, seemed quite different. Experts tended to tell stories about academically productive and emotional supportive classroom communities. Beginners tended to tell stories about conflict. The interviews generated about 90 minutes of narration focused on students, classrooms, schools, and parents.

I transcribed the teachers' accounts verbatim using a transcription system that highlighted the dramatic quality of the narratives. I replaced all names and locations with pseudonyms and then put the transcripts in an NVIVO database. I created the coding unit by using techniques similar to Wineburg and Noice and Noice (1997) to break the teachers' stories down into more than 2100 unique incidents. Each of these short narratives described a specific school-related story or a recurring series of remembered events. I then coded these unique segments of text using a non-inferential, hermeneutically-devised coding system (Chi, 1997; Gadmer, 1975; Miles & Huberman, 1994; Moss, Girard, & Haniford, 2006). When a teacher shared a story that contained conflict, I coded that incident for conflict. When a teacher told a story about math teaching, I coded that incident for math. If I found worthwhile patterns in the data, such as the experts' tendency to discuss lessons that taught research skills, I created new codes for that construct and employed them to categorize the rest of the data.

My use of an NVIVO database allowed me to check my analytic work for bias. I could examine the different pieces of text I coded to see whether I had divided the teachers' stories into meaningful subunits. I could also check to see if the codes I used to label those units were based on the same underlying constructs. My analysis required me to read each interview more than 15 times. As a result, I was able to get to know my data (Alvesson & Skoldberg, 2000) at a deep level while generating a set of charts that illuminated my findings.

In the empirical chapters of this thesis, I worked to create what Tyler (1986) describes as an imaginative vehicle. I threaded writings about the shape of teachers' stories with charts from the analysis as well as extensive verbatim transcriptions from the interview sessions. My writings were intended to allow readers to think through the theoretical issues I discussed in my literature review. The charts were used to encourage

readers to examine the types of stories the teachers tended to tell. The interview excerpts communicated the vivid nature of the teachers' storytelling and were intended to encourage readers to enter imaginatively into the educators' worlds (Bourdieu et al., 1999; Brunner, 1986; Denzin, 2001; Grele & Terkel, 1985; Thompson, 1988). The five empirical chapters were designed to allow readers to feel the weight of the teachers' lives at school while providing material to help them imagine the character of the two groups' professional knowledge landscapes (Connelly & Clandinin, 1999).

The beginners' stories were shaped by their struggles to create order in their classroom and build relationships with students in a space structured by conflict. Students were regularly reported to break rules and argue in their classrooms. The first year teachers described themselves as overwhelmed by the work required to build effective classroom routines to manage student activities. All the first year teachers I interviewed discussed lessons they were proud of and students they cared for deeply, but this work took place in chaotic classroom environments.

In contrast, experts shared stories of organizing academically productive activities that allowed them to construct supportive classroom settings. Instead of spending their time telling students what to do and arguing with children when they refused to follow their commands, experts' school days were reported to be orchestrated by routines that shaped young people's choices as the class moved from reading to writing to social studies to mathematics to science. Flexible professional practice routines (Dutton, Worline, Frost, & Lilius, 2006; Feldman & Pentland, 2003; Leinhardt & Greeno, 1986; Rimm-Kaufman, La Paro, Downer, & Pianta, 2005; Taylor, Person, Clark, & Walpole, 2000) supported veteran's efforts to reach out and connect to the children they served; these structures focused students' attention on learning.

When experts discussed their teaching, these stories were frequently threaded with words that communicated positive emotion. The experts felt "really good," about their schoolwork and frequently talked about how students' progress made them feel "great," or "wonderful." These discussions were a prominent part of their narratives. Not only did the experts say they had high expectations for their students, they frequently verbalized incidents where vulnerable young persons succeeded at school. The NBPTS-

NTL teachers told stories about lessons that helped students grow academically. They talked about units that taught moral lessons which changed the way children behaved. Experts frequently discussed constructing caring relationships that improved children's academic engagement. These bonds motivated young people to undertake extended projects of personal growth. Similar to the findings of Ladson-Billings' (1994), the experience of living and working in the experts' classrooms and growing academically and emotionally in these settings seemed to give children a new sense of self. In one of the most hyper-segregated cities in the nation (Wilson, 1996), working in a school system that has always had many problems (Herrick, 1971), experts told stories of how children of color read novels they enjoyed, wrote stories they were proud of, solved math problems that "hurt their heads," made new friends, and enjoyed themselves.

Both groups of teachers reported that one of the most demanding aspects of their practice was the work required to pull vulnerable students into the circle of activity produced by the class as a whole. It was difficult to inspire young people who had fallen behind or who had withdrawn from school to engage in school. Both groups of teachers described the Chicago Public Schools as a place that did not reliably benefit all children. Both groups described family and neighborhood problems that influenced their students learning. Many of the teachers I interviewed reported teaching students who might be more than two years below grade level. Many of these vulnerable young persons were described as suffering from emotional problems caused by their families, neighborhoods, and previous classroom placements. Building strong relationships with children under these circumstances was perceived as complex and thought-provoking labor. The experts described themselves as capable of managing misbehavior; they believed they were skilled at preventing children from acting out. Moving beyond compliance and helping vulnerable students join with their classmates, however, took time and effort. Months might go in a state of low-level conflict as experts pushed children placed at risk to open themselves to learning and commit to positive change. The experience of living and learning in the experts' classrooms seemed to support children's positive development. Academics became a form of therapy. Stable routines and engaging lessons helped children who had suffered a great deal of adversity feel safe and participate.

There was no guarantee, however, that the experts could build strong, personal relationships with every child. They reported that some of the bonds between them and their students were not as powerful as they wished. Less connected children might benefit from the experts' instruction, but the experts believed that they had failed to motivate these students to reach their highest potential. Experts also discussed problems that they could mitigate, but not fully resolve. Family issues might impact children's life at school and increase the difficulty experts faced as they attempted to build classroom-relationships. Special education services might pull youngsters away without providing children with treatments that supported their growth.

In Chapter 8, I discussed how expert teachers moved content and skills through the systems that organized their classrooms. Experts had the pedagogical content knowledge (Atwell & Newkirk, 1987; Ball, Lubienski, & Mewborn, 2001; Hill, Rowan, & Ball, 2005; Wilson, Shulman, & Richert, 1987) necessary to discuss how they organized their classrooms into research proven designs such as Writers' Workshop. The NBPTS-NTL teachers also narrated their efforts to work within these structures and create a daily round of instruction that benefited their students. They seemed to understand the content and skills that underlay their lessons, and they described fluid pedagogical moves that allowed them to teach it well. Experts seemed to press more writing instruction into their work across the school day. They frequently discussed how they had students write reports during social studies lessons and create projects during science. Language flowed through their classrooms. Experts were more likely to discuss how they created whole classroom discussions and cooperative learning groups. Teaching was such a strong and central focus of their narratives, experts shared more descriptions of lessons that made them feel good and more incidents where the veterans slowed down and worked to solve the problems and dilemmas generated by their instructional programs.

Research-based knowledge changed the shape of the experts' narratives. The formal knowledge of teaching (Shulman, 1987) threaded through the NBPTS-NTL teachers' descriptions of their lessons and their relationships with students. Research was not separated from the experts' experience and walled off from everyday life (Benner,

Hooper-Kyriakidis, & Stannard, 1999; Benner et al., 1996; Van Manen, 1994). The plans the experts made, the actions they reported, and the reflections they constructed out of the life of their classrooms sparked with content and methods gained from years of study. The experts told stories about imagining academically demanding lessons they had the skill to carry out well. They discussed how children in their classrooms grew by reading, speaking, listening, and writing. Teaching made the experts feel happy and proud.

a) Alternate readings and limitations

The major limitation of this study is that it is based on performers' accounts with no data that triangulates (Mathison, 1988) their narratives. The teachers' stories allow readers enter into the teachers memories and imagine some of the critical incidents generated by a year in school, but I was not able to measure the classrooms systems they describe or to interview and assess the students whom the teachers said benefited from their practice. While I have discussed a variety of reasons why I believe that the stories the educators' shared were credible accounts, I cannot prove this claim.

The interviews were conducted, the audio-tapes transcribed, the transcripts analyzed, and the findings written up by the same researcher. I asked expert and beginning teachers in the Chicago Public Schools to tell stories about their work and then I organized their transcripts into a story about their stories. While my presence and my follow up questions clearly shaped the teachers' discussions of their work, it is also the case that, as I hope the excerpts show, that the impression made by a year of schoolwork in a Chicago classroom was very strong. I did not have to do as many follow up questions to trigger a long stream of vivid incidents.

I found the differences between the stories I collected were so large it made sense to use fairly simple analytic techniques to surface critical features of the educators' narratives. The charts allow readers to see the thoughts the teachers tended to think. They describe the channels the teachers memories tended to flow. It is my hope that the excerpts from the interviews support my analysis and help readers understand what it means to make a difference in an urban classroom. The charts describe the stories as a

whole. They allow readers to determine if the transcripts I shared were representative of the content of the interviews. My commentary attempts to bridge the two forms of evidence.

Throughout the analysis, I took teachers at their word (Biklen, 1995). I made little attempt to produce alternative readings of the educators' narratives or to go against the grain of their storytelling. I regularly discussed how individual teachers' narratives fit or worked against the meanings I was communicating through the texts I wrote. I frequently discussed how some of the narratives challenged my views. However, I did not attempt to complicate the meanings of the individual narratives. My coding scheme and my use of verbatim transcriptions illustrate what teachers said happened; they do not go beyond educators' accounts.

I made this decision because I believed it was important to discuss the evidence I collected, rather than to speculate about issues that I could not investigate without extensive changes to my research design. The research on professional knowledge and performance I discussed in my literature review and weaved throughout my findings' section took the place of alternative sources of evidence. These research studies were intended to open up my findings to alternative perspectives and approaches. They allow readers to visualize the ways that the social forces described in the teachers' narratives influenced the work of professionals in other schools.

As I constructed the empirical chapters, I followed Benner and colleagues' lead (Benner et al., 1999; Benner et al., 1996) and took an agentic perspective on teachers' classroom performance. The teachers described themselves as professionals whose choices mattered, and I constructed texts that enhanced this view. The forms of social life (Sandelands, 1998) that grew up in the teachers' classrooms were portrayed as products of the educators' daily labor. While I regularly used words such as, "discussed," and, "reported," to describe the educators' work, the vividness of the teachers' accounts supported the credibility of their storytelling, and made the case that what they experienced was real. My decision to arrange my findings into an extended narrative account that began with the opening of the school year in September of 2003 and moved through fall and winter to school's end further reinforced this perspective. The charts,

interview experts, and writings were arranged to allow readers to imagine how classroom life developed over time and to highlight the value of the expert teachers' knowledge and skill.

Such a presentation was the intent of my research design, and I found no strong reason during data collection or analysis to change my perspective. The two groups' interviews were shaped so differently, I could find almost no meaningful comparisons where the beginners, as a whole, shared stories with more positive qualities than the experts. The two groups seemed to live in different worlds. Because the teachers' stories were mostly congruent with themes from the research literature, the writings were constructed to act as a meditation on the nature of expertise. Data collection, analysis, and text production served to bring to life the abstract, research-based concepts from my literature review and thread this content into vivid portrayals of practice.

Given my resources and research design, if there is a major weakness in my approach, it lies in my theories and my commentary. There is always more to learn. There are always better ways to say it. My thesis represents an attempt to communicate how classroom knowledge varied between two groups of urban schoolteachers. It is not the final word.

Towards a meta-theory of expert knowledge in classroom teaching

In this next section, I lay out a few propositions that sketch out the beginnings of a meta-theory of teachers' knowledge and performance. Their purpose is to clarify the theoretical perspective I have laid out in this study, and to set a broad research agenda. Readers should understand my perspective on teachers' knowledge evolved as I analyzed the teachers' stories and wrote the texts that make up this dissertation. Not only did my views change as I engaged in this work, but the research-base I studied continued to develop and advance. Little of the quantitative research on teacher-student relationships that I cite through out this thesis, for instance, had been published when I turned in my initial prospectus. There was strong evidence of the importance of relationships from qualitative research on teaching (e. g. Connelly & Clandinin, 1999; Elbaz, 1992; Ladson-Billings, 1994) and a number of worthwhile quantitative studies (e. g. Brophy, 1996;

Ladd, 1990). However, much of the evidence that underlies, for instance, the structural equation models that support Hughes and colleagues' (Hughes, Cavell, & Willson, 2001; Hughes, Lou, Kwok, & Loyd, 2008) investigations and the growth models that support Pianta and colleagues (2001; 2005; 2008) work were still being gathered. As the research-base on education and human performance changes, so, I assume, will the theory of theories researchers use to study teachers' work. However, I have been studying the subject long enough and hard enough that it does not seem wrong to venture a preliminary set of propositions.

Proposition 1: Research in teachers' knowledge and performance must be grounded in explicit theories of cognition.

Throughout these chapters, I have explicitly drawn on a set of theoretically linked studies on human cognition (e. g. Anderson, 2007; Damasio, 1994; De Groot, 1948/1965; Ericsson, Krampe, & Tesch-Romer, 1993; Ericsson & Lehmann, 1996; Huttenlocher, Vasilyeva, Cymerman, & Levine, 2002; Kintsch, 1998). These studies do not cover the full range of psychological phenomena connected to teachers' work, nor do they always put forth a unified perspective on the nature of cognition. However, these researches do allow me to view the emotionally laden, scenario-based reasoning process that is the central topic of this thesis as a fairly typical adaptation to a particular environment—the classroom—rather than a unique feature of teachers' work. One of the major reasons I took the time to attempt to understand cognitive theory was that it seemed closer to the real world than much of research I read. It made sense to me that the main reason teachers tended to organize their classroom knowledge into an embodied landscape of students, lessons, and school related events and then used scenarios constructed from this landscape to plan their schoolwork instead of, for instance, calculating their choices based on abstract scientific principles, was that was how the mind tended to work. Quite differently from Dreyfus (1992), I found that cognitive science emphasized performers' humanness.

The cognitive scientists I studied had no major stake in the math or reading wars (e. g. Connor, Morrison, & Katch, 2004) that consumed the field of education's attention during the first part of my graduate studies. Snow and colleagues' (2005) monograph,

which I cite favorably throughout this work, is an excellent review of important reading research, but, as I discovered, the authors' theory of teachers' knowledge makes little sense from a cognitive perspective. Given that one can reasonably assume that pre-service teachers are able to walk and talk before they begin coursework in education, it is hard to argue that their knowledge for the teaching of reading is mostly the declarative knowledge that has been learned in their teacher education coursework: the authors' argue this point explicitly on page 208-210. Given the importance of teachers' use of language (e. g. Huttenlocher et al., 2002; Justice, Mashburn, Hamre, & Pianta, 2008), and the measurable benefits of emotional connections for students placed at risk (e. g. Furrer & Skinner, 2003; Hamre & Pianta, 2005; Hughes et al., 2008; Silver, Measelle, Armstrong, & Essex, 2005), Snow and colleagues perspective seems overly narrow, even from a pragmatic, 'effects-driven,' perspective. Feelings, emotions, vocabulary that grows up in a teacher's family, all seem to have a measurable influence on student achievement trajectories. It is puzzling to imagine a science of reading that does not recognize the importance of observable teacher performances.

In contrast, Clandinin & Connelly's contention that teachers' classroom knowledge is organized around narratives that are worlds away from the field of education's formal knowledge-base seems to push the issue too far the other way. As the research reported in this thesis, as well as the work of researchers that range from Van Manen (1994) to Lampert Ball (1998) emphasize, when teachers use research in their classroom, it becomes real to them. The formal knowledge of teaching can help practitioners learn to teach better than their own teachers taught and change the landscape they used to plan their lessons and manage their relationships.

One of the major problems I found when I worked through this research literature was the vast size of psychology's research-base. I was told during the courses I took at Michigan, that it is impossible for insiders to keep up with all the advances of the different branches of the field. Given that I was a researcher in education administration, my approach was to limit my focus to what I felt were the major problems in teacher cognition and the central researchers who discussed these issues. As I emphasized in my methods section, such an approach does not guarantee that my understanding will be

correct, but it does allow my errors to be both transparent and easily correctible. Extending the range of research I have discussed in this thesis to discuss current approaches to emotion, planning, habit, and developmental psychology is a worthwhile next step. While there are publications in education that focus on all these issues, most of them either do not work within a general theory of cognition or they speak to more limited and specialized audiences than I have aimed my writings. The idea of creating a unified theory of teacher cognition' that might speak to current generations of educational researchers and practitioners similar to the way that Simon and colleagues (March & Simon, 1958; Simon, 1976, 1996) work appeals to organizational researchers has, in my view, much to recommend it. Not only would education researchers receive regular updates on advances in the study of cognition, but cognitive researchers might benefit from the practical problems such an endeavor might pose (Stokes, 1997) and the wealth of contextual data available to researchers in education. At a time in education research when all roads lead to instructional improvement (Raudenbush, 2005), I believe my effort to bring out current issues in the research literature by using vivid evocations of teachers' work is a worthwhile strategy.

Proposition 2: Expertise in classroom teaching is produced by the mind's ability to combine research-based and experiential forms of knowledge.

In Chapter 1, I made the claim that teachers' classroom knowledge could be viewed as similar to physicians' clinical knowledge (e. g. Rikers, Schmidt, & Moulaert, 2005; Schmidt & Boshuizen, 1993; Van de Weil, Boshuizen, & Schmidt, 2000). I argued that the landscapes of people and events that come to skilled classroom teachers' minds when they plan their lessons and reflect on their work with children is linked to the research-based knowledge they gain through professional development. The findings of my empirical chapters support this perspective, but they do not prove it. Classrooms are not physicians' examining rooms; there are many ways that schools differ from the environments produced by modern medicine. Expanding the perspective I have sketched out in this thesis to investigate how the distributed (Ball & Cohen, 1996; Hutchins, 1995; Spillane, Halverson, & Diamond, 2004; Yinger & Hendricks-Lee, 1993) forms of knowledge produced by interactions with assessments, instructional materials, students,

and leaders influence teachers' thinking processes are important next steps. As I have emphasized throughout this work, while there are many advantages to using educators' stories to study teaching there are also clear limits. Teachers' stories about children are not the same as children's stories about teachers. Charting the impression made by a year of schoolwork is not the same as observing the history of that year.

Studies that use verbal protocols and observations to describe how research-based knowledge is both learned and incorporated into teachers' thinking might be particularly beneficial forms of 'basic research' in education. Such researches might support the rigorous development of what might be described as 'professional development content knowledge' and allow researchers to trace how externally generated knowledge influences teachers' professional knowledge landscapes over time. Another area of clear interest would be studies that chart the daily round of moves and counter moves that influence teachers' emotional and relational practice. The routines that support a positive classroom setting clearly support teachers' ability to connect with their students (e. g. Hamre & Pianta, 2005; La Paro, Pianta, & Stuhlman, 2004), but I believe there is more to learn.

Proposition 3: The major dimensions of expert teachers' knowledge will reflect the major dimensions of classroom quality.

One of the primary claims of expertise research is that professionals in stable task environments learn to understand their field of play in ways that improve their ability to act within these contexts (Anderson & Schooler, 1991; Ericsson & Simon, 1993; Ericsson & Smith, 1991). Expert's understandings of the worlds they act within must make enough sense to produce the performances they engage. If classrooms vary on dimensions such as the routines teachers use, the relationships educators form, and the information that flows through these social structures it is not unreasonable to propose that educators' professional knowledge landscapes will reflect those systems. The key question is how automatized teachers' performances are, and to what extent educators can verbalize these aspects of their schoolwork.

Throughout this thesis, I have taken the perspective with Benner (1996) and Feldman and Pentland (2003) that routine forms of professional labor are performed

mindfully. In this perspective, while professionals may not remark on every aspect of their work experience, they are capable of ‘seeing what’s happening.’ They can adjust to moment-to-moment flows in the action. For experts, most of these moves are guided comprehension processes (Kintsch, 1998) that allow them to act in familiar environments by drawing heavily on their prior learning.

In this perspective, the systems measured by theories of classroom quality (e. g. Pianta et al., 2008; Rowan, Camburn, & Correnti, 2004) are produced by the active effort of the individual educator. While the work required to enact a given performance may not be verbalized, it is assumed that experts are knowledgeable enough to see what is going on and able to reflect on what just happened well enough to improve their future endeavors. Expert teacher Ohio Ontario’s description of how she talked her student Bill out of his tantrums is worth repeating here. There are clearly aspects of this performance that do not show up in her account—one can imagine that Ohio’s work was rich with gesture and multi-sensory communications that go beyond her words—but the description is vivid enough that readers can imagine the work she performs:

Interviewer

So what you specifically what would you have him do?

Ohio

When, when he goes into his tantrums

**

Okay, first of all I I see if he can handle it in the classroom

**

or if he needs to be removed. And. And so for example if he needs to be removed, I say,

You know, Bill. You’re

I don’t say tantrum.

[TAPS TABLE]

I say

Bill, we’re having a conflict. You know do you want to step outside and me

And he might be like

No, no.

I give him a choice. I say

Step outside and talk about this.

**

Or, or other consequences need to be taken.

**

Because we can't interrupt every everyone's learning.

You know I was like, you know

[VERY FAST]

What do you think about other people?

But first of all I don't attack him in front of everyone. I would actually go up to him and sit next to him and talk to him about it and

**

and it would take him some time to settle down and make the right choice.

But, he makes

[TAPS TABLE]

the right choice.

**

And then in the hallway I asked him you know to explain what happened. His side of the story. Because if, if you talk to him and you say

Well I saw you do A and B

No, I didn't do it!

That type of stuff, but if you say

Okay, what happened?

**

The first thing that he will say is

No one ever listens to me. To the

And I'm like,

Okay, Bill. Calm. I'm listening. What happened? What happened?

And he'll go back to the,

so I can be angry

and I was like

No, No, what happened?

And he'll say what happened. And I was like

So what should you have done?

You know, always go back to

What should you have done?

I should have told the teacher, but

And I was like

[OHIO SHAKES HER HEAD]

MMMPPHHH!!

And then I would try to stop him there.

Tell the teacher. If you told the teacher, what do you think might have had happened?

**

And he was like. And you know, basically what I am doing with that is calming him down and having him think about you know his actions and what what he did

**

And so. It usually works. It calms him down

**

and we'll go back. We'll go back in the classroom, but he needs to understand. The biggest thing that he understand, which is the hardest thing is

You told the truth. But there is still

[TAPS TABLE]

a consequence for it.

**

And at the beginning that was the hardest thing for him.

I told you the truth! I did it.

But I was just like

You know what Bill, but you know there is a consequence for it.

And then, you know, after doing that for awhile. Talk to him.

[Ohio Ontario R1 Q1]

Ohio Ontario reported that she knew what she was doing, even though she did not describe everything that she understood was going on. It is my guess that if videotapes and other measurements of the key incident in this passage existed, one might discover an enormously complex range of adult-child interactions. Readers might imagine all the different forms of knowledge that might produce the events Ohio describes:

But first of all I don't attack him in front of everyone. I would actually go up to him and sit next to him and talk to him about it and

**

and it would take him some time to settle down and make the right choice.

But, he makes

[TAPS TABLE]

the right choice.

This passage also illustrates how the work required to create a peaceful working classroom shows up in a teachers' account despite the fact that many aspects of those performances might be automatized. The expert's classroom knowledge thus reflects dimensions discussed in theories of classroom quality, even though I make no claim that the landscape evoked to by Ohio's storytelling directly corresponds to her classroom environment.

This perspective suggests a range of studies that might examine more tacit dimensions of teachers' knowledge. These studies might use quantitative measures to recruit teachers who regularly produce different types of classroom outcomes, and then use narrative data, classroom observations, and other forms of measurement to capture the schoolwork that produces those acts. Teachers who consistently teach black students more effectively than white students, boys more skillfully than girls, or low SES students more effectively than high (e. g. Hanushek, Kain, O'Brian, & Rivkin, 2005; Nye, Konstantopoulos, & Hedges, 2004; Rowan, Correnti, & Miller, 2002) might be studied to determine the forms of knowledge and skilled practices that underlie those performances. Studies that examine such consistent variation among National Board Certified teachers,

or between educators who use the same type of instructional design, might be particularly worthwhile.

.

References

- Alvesson, M., & Skoldberg, K. (2000). *Reflexive methodology: New vistas for qualitative research*. London: Sage.
- Anderson, J. R. (2007). *How can the human mind occur in the physical universe?* New York: Oxford University Press.
- Anderson, J. R., & Schooler, L. J. (1991). Reflections of the environment in memory. *Psychological Science*, 2, 396-408.
- Atwell, N., & Newkirk, T. (Eds.). (1987). *Understanding writing*. Heinemann.
- Ball, D. L., & Cohen, D. K. (1996). Reform by the book: What is--or might be--the role of curriculum materials in teacher learning and instructional reform. *Educational Researcher*, 25(9), 6-8.
- Ball, D. L., Lubienski, S. T., & Mewborn, D. S. (2001). Research on teaching mathematics: The unsolved problem of teachers' mathematical knowledge. In V. Richardsen (Ed.), *Handbook of Research on Teaching* (4th ed.). Washington, D. C.: American Educational Research Association.
- Benner, P. E., Hooper-Kyriakidis, P. L., & Stannard, D. (1999). *Clinical wisdom and interventions in critical care: A thinking-in-action approach*. Philadelphia: Saunders.
- Benner, P. E., Tanner, C. A., & Chelsea, C. (1996). *Expertise in nursing practice: Caring, clinical judgment, and ethics*. New York: Springer Publishing Company.
- Biklen, S. K. (1995). *School Work: Gender and the cultural construction of teaching*. New York: Teacher's College Press.
- Bourdieu, P., Accardo, A., Balazs, G., Beaud, S., Bonvin, F., Bourdieu, E., Bourgois, P., Broccolichi, S., Champagne, P., Chrsitin, R., Faguer, J.-P., Garcia, S., Lenoir, R., OEuvrard, F., Pialoux, M., Pinto, L., Podalydes, D., Sayad, A., Soulie, C., & Wacquant, L. J. D. (1999). *The weight of the world: Social suffering in contemporary society* (S. E. Pricilla Parhurst Ferguson, Joe Johnson and Shaggy T. Waryn, Trans.). Stanford, CA: Stanford University Press.
- Brophy, J. (1996). *Teaching problem students*. New York: Guilford.
- Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.
- Chi, M. T. H. (1997). Quantifying qualitative analyses of verbal data: a practical guide. *Journal of the learning sciences*, 6(3), 271-315.
- Connelly, F. M., & Clandinin, D. J. (Eds.). (1999). *Shaping a professional identity: Stories of educational practice*. New York: Teacher's College Press.
- Connor, C. M., Morrison, F. J., & Katch, L. E. (2004). Beyond the reading wars: Exploring the effect of child-instruction interactions on growth in early reading. *Scientific Studies of Reading*, 8(4), 305-336.
- Damasio, A. R. (1994). *Descartes' error: Emotion, reason and the human brain*. New York: Gosset /Putnam.
- De Groot, A. D. (1948/1965). *Thought and choice in chess* (G. W. Baylor, Trans.). The Hague: Mouton & Company.
- Denzin, N. (2001). The reflexive interview and a performative social science. *Qualitative Research*, 1(1), 23-46.

- Dreyfus, H. L. (1992). *What computers still can't do: A critique of artificial reason*. Cambridge, Mass.: MIT Press.
- Dutton, J., Worline, M., Frost, P., & Lilius, J. (2006). Explaining compassion organizing. *Administrative Science Quarterly*, 51(2006), 59-96.
- Elbaz, F. (1992). Hope, attentiveness, and caring for difference: The moral voice in teaching. *Teaching and Teacher Education*, 8(5/6), 421-432.
- Ericsson, K. A., Krampe, R. T., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363-406.
- Ericsson, K. A., & Lehmann, A. C. (1996). Expert and exceptional performance: Evidence of maximal adaptation to task constraints. *Annual Review of Psychology*, 47, 273-305.
- Ericsson, K. A., & Simon, H. A. (1993). *Protocol Analysis* (Revised Edition ed.). Cambridge, Massachusetts: The MIT Press.
- Ericsson, K. A., & Smith, J. (1991). Prospects and limits in the empirical study of expertise: An introduction. In K. A. Ericsson & J. Smith (Eds.), *Toward a general theory of expertise: prospects and limits*. Cambridge, England: Cambridge University Press.
- Feldman, M. S., & Pentland, B. T. (2003). Reconceptualizing organizational routines as a source of flexibility and change. *Administrative Science Quarterly*, 48(1), 94-118.
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 2003(1), 148-162.
- Gadmer, H. (1975). *Truth and method* (G. B. J. Cumming, Trans.). New York: Seabury.
- Grele, R. J., & Terkel, S. (1985). *Envelopes of sound: The art of oral history* (2nd , rev. and enl. ed.). Chicago, Ill.: Precedent Pub. : Distributed by Transaction Books.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625-638.
- Hamre, B. K., & Pianta, R. C. (2005). Can instructional and emotional support in the first grade classroom make a difference for children at risk of school failure? *Child Development*, 76(5), 949-967.
- Hanushek, E. A., Kain, J. F., O'Brian, D. M., & Rivkin, S. G. (2005). *The market for teacher quality* (NBER WORKING PAPERS Working Paper 11154). Cambridge, MA: National Bureau of Economic Research.
- Herrick, M. J. (1971). *The Chicago schools: A social and political history*. Beverly Hills, California: Sage Publications.
- Hill, H. C., Rowan, B., & Ball, D. L. (2005). Effects of teachers' mathematical knowledge for teaching on student achievement. *American Educational Research Journal*, 42(2), 371-406.
- Hughes, J. N., Cavell, T. A., & Willson, V. (2001). Further support for the developmental significance of the quality of the student-teacher relationship. *Journal of School Psychology*, 30(4), 289-301.
- Hughes, J. N., Lou, W., Kwok, O., & Loyd, L. K. (2008). Teacher-student support, effortful engagement, and achievement: A 3-year longitudinal study. *Journal of*

- Educational Psychology*, 2008(1), 1-14.
- Hutchins, E. (1995). *Cognition in the wild*. Cambridge, MA: The MIT Press.
- Huttenlocher, J., Vasilyeva, M., Cymerman, E., & Levine, S. (2002). Language input and child syntax. *Cognitive Psychology*, 45, 337-374.
- Justice, L. M., Mashburn, A. J., Hamre, B. K., & Pianta, R. C. (2008). Quality of language and literacy instruction in preschool classrooms serving at-risk pupils. *Early Childhood Research Quarterly*, 23(1), 51-68.
- Kintsch, W. (1998). *Comprehension: A paradigm for cognition*. Cambridge, UK: Cambridge University Press.
- La Paro, K. M., Pianta, R. C., & Stuhlman, M. W. (2004). The Classroom Assessment Scoring System: Findings from the pre-kindergarten year. *The Elementary School Journal*, 104(5), 409-427.
- Ladd, G. W. (1990). Having friends, keeping friends, making friends, and being liked by peers in the classroom: Predictors of children's early school adjustment? *Child Development*, 61, 1081-1100.
- Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American children*. San Francisco: Jossey-Bass.
- Lampert, M., & Ball, D. (1998). *Teaching, multimedia and mathematics: Investigations of real practice*. New York: Teachers College Press.
- Leinhardt, G., & Greeno, J. G. (1986). The cognitive skill of teaching. *Journal of Educational Psychology*, 78(2), 75-95.
- March, J. G., & Simon, H. A. (1958). *Organizations*. New York: Wiley.
- Mathison, S. (1988). Why triangulate? *Educational Researcher*, 17(2), 13-17.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks: Sage.
- Moss, P., Girard, B. J., & Haniford, L. C. (2006). Validity in educational assessment. *Review of Research in Education*, 30, 109-165.
- Noice, T., & Noice, H. (1997). *The nature of expertise in professional acting: A cognitive view*. Mahwah, New Jersey: Lawrence Erlbaum.
- Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis*, 2004(3), 237-257.
- Pianta, R. C., Belsky, J., Vandergrift, N., Houts, R., & Morrison, F. J. (2008). Classroom effects on children's achievement trajectories in elementary school. *American Educational Research Journal*, 45(2), 365-397.
- Raudenbush, S. W. (2005). Learning from attempts to improve schooling: The contribution of methodological diversity. *Educational Researcher*, June/July, 25-31.
- Rikers, R. J. P., Schmidt, H. G., & Moulart, V. (2005). Biomedical knowledge: Encapsulated or two worlds apart? *Applied Cognitive Psychology*, 19(2), 223-231.
- Rimm-Kaufman, S. E., La Paro, K. M., Downer, J. T., & Pianta, R. C. (2005). The contribution of classroom setting and quality of instruction to children's behavior in kindergarten classrooms. *The Elementary School Journal*, 105(4), 377-395.
- Rowan, B., Camburn, E., & Correnti, R. (2004). Using teacher logs to measure the enacted curriculum in large-scale surveys: Insights from the Study of Instructional Improvement. *Elementary School Journal*, 105, 75-102.

- Rowan, B., Correnti, R., & Miller, R. J. (2002). What large-scale, survey research tells us about teacher effects on student achievement: Insights from the Prospects study of elementary schools. *Teachers College Record*, 104(8), 1525-1567.
- Sandelands, L. (1998). *Feeling and form in social life*. Lanham, Maryland: Fowman & Littlefield.
- Schmidt, H. G., & Boshuizen, H. P. A. (1993). On the origin of intermediate effects in clinical case recall. *Memory & Cognition*, 21(3), 338-351.
- Shulman, L. S. (1987). Knowledge and teaching: The foundations of the new reform. *Harvard Educational Review*, 57(1), 1-22.
- Silver, R., Measelle, J., Armstrong, J., & Essex, M. (2005). Trajectories of classroom externalizing behavior: Contributions of child characteristics, family characteristics, and the teacher-child relationship during the school transition. *Journal of School Psychology*, 43, 39-60.
- Simon, H. A. (1976). *Administrative behavior: A study of the decision making process in decision making organization*. Unpublished manuscript, New York.
- Simon, H. A. (1996). *The sciences of the artificial* (3rd ed.). Cambridge, Massachusetts: The MIT Press.
- Snow, C. E., Griffin, P., & Burns, M. S. (Eds.). (2005). *Knowledge to support the teaching of reading: Preparing teachers for a changing world*. San Francisco: Jossey-Bass.
- Spillane, J., Halverson, R., & Diamond, J. (2004). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies*, 36(1), 3-34.
- Stokes, D. E. (1997). *Pasteur's quadrant: Basic science and technological innovation*. Washington, DC: Brookings Institution Press.
- Taylor, B. M., Person, D. P., Clark, K., & Walpole, S. (2000). Effective schools and accomplished teachers: Lessons about primary-grade reading instruction in low income schools. *The Elementary School Journal*, 101(2), 121-165.
- Thompson, P. R. (1988). *The voice of the past: Oral history* (2nd ed.). Oxford ; New York: Oxford University Press.
- Tyler, S. A. (1986). Post-modern ethnography: From document of the occult to occult document. In J. Clifford & G. E. Marcus (Eds.), *Writing culture: The poetics and politics of ethnography* (pp. 122-140). Berkeley: University of California Press.
- Van de Weil, M. W. J., Boshuizen, H. P. A., & Schmidt, H. G. (2000). Knowledge restructuring in expertise development: Evidence from pathophysiological representations of clinical cases by students and physicians. *European Journal of Cognitive Psychology*, 12(3), 323-355.
- Van Manen, M. (1994). Pedagogy, virtue and narrative identity in teaching. *Curriculum Inquiry*, 4(2), 135-175.
- Weiss, R. S. (1995). *Learning from strangers: The art and method of qualitative interview studies* (1st Free Press pbk. ed.). New York: Free Press.
- Wilson, S., Shulman, L., & Richert, A. E. (1987). '150 different ways' of knowing: Representations of knowledge in teaching. In J. Calderhead (Ed.), *Exploring teachers' thinking*. London: Cassell.
- Wilson, W. J. (1996). *When work disappears: The world of the new urban poor*. New York: Knopf : Distributed by Random House Inc.

- Yinger, R. J. (1980). A study of teacher planning. *The Elementary School Journal*, 80(3), 197-127.
- Yinger, R. J., & Hendricks-Lee, M. (1993). Working knowledge in teaching. In C. Day & P. Calderhead & P. Denlco (Eds.), *Research on teacher thinking: Understanding professional development*. London: Falmer.

Appendix A

Major Coding Tables

Chapter 6 Codes

Table A6.1 Classroom Management Code Definitions

Code	Component nodes	Date	Definition
Conflict		Initial node created 1/12/2007. This node disregarded and a variety of different nodes created in Summer of 2007 for focus group presentations. New node created 1/16/2008 from the union of component	All mentions of conflict. Component nodes include: in and out of class student conflict, all parent conflict, all administrator conflict, all colleague conflict, all mentions of low student motivation & confidence'; all mentions of low student participation knowledge .

	nodes, below		
	Conflict Colleagues	4/30/ 2007	All conflicts with colleagues and coaches
	Conflict Administrators	4/30/ 2007	All conflicts with administrators
	Conflict Family	4/30/ 2007	All conflicts with families
	Positive Resolution in	4/24/ 2007	Behavioral, nonacademic positively, resolved conflict that occurred in class
	Positive Resolution out	5/10/ 2007	Behavioral, nonacademic positively resolved conflict that occurred out of class
	Unresolved conflict inclass	4/24/ 2007	Behavioral, nonacademic unresolved conflict that occurred in class
	Unresolved Conflict Out	5/1/2007	Behavioral, nonacademic unresolved conflict that occurred outside of class
	Low student motivation and confidence	5/4/2007	Complaints about student who do not complete academic work because they are not motivated or lack confidence
	Low participation	5/4/2007	Complaints about students who do not know how to participate in group activities or discussions

	knowledge		
All Misbehavior	Union of nodes that describe specific types of misbehavior. First created in Summer of 2007 for focus group presentations. Current node created 1/16/2008 from the union of component nodes, below		All mentions of non-academic student misbehavior both in the classroom and outside of it, ie in school hallways or neighborhood streets. Component nodes include: Poor soc skills or Shy; Breaking rules; Arguments, Rough-housing, Threats; Lawbreaking; Neglect; Violence
	Poor Social Skills or Shy	5/5/2007	Conflicts focused on student shyness or poor social skills. i.e. student will not talk to other students about academic work.
	Breaking Rules	4/25/2007	Minor student misbehavior: i.e. coming in late, not doing homework, irritating the teacher; also includes unspecified behavior problems “he was always causing trouble”. Do not double code: Code fights with “violence”, not “breaking rules”,
	Argument or Rude	4/25/2007	Arguments and rude, aggressive behavior
	Rough-Housing or Minor Violence	5/12/2007	Violence that is not viewed as highly threatening “She’s always hitting boys.”
	Threats	4/24/2007	Direct verbal threats to teachers’ well being
	Law-Breaking	5/13/2007	Breaking laws such as drug laws

	Neglect	5/18/ 2007	Student is neglected by family. May not eat properly or go to sleep.
	Violence	4/24/ 2007	Acts of violence such as fights, shootings
All In-Class Unresolved Misbehavior	Union of specific misbehavior nodes intersected with the node for unresolved inclass conflict. First created in Summer of 2007 for focus group presentations. Current node created 1/16/2008.		All mentions of non-academic student misbehavior that occur in classrooms and are not resolved by the teacher Component nodes include unresolved, inclass mentions of: Breaking rules, Arguments, Rough-housing, Threats, Lawbreaking, & Violence
All In-Class, Repeated, Whole Class Misbehavior	Intersection of 'All In-Class Unresolved Misbehavior' with 'Repeated Whole-Class Behavior' First created in Summer of 2007 for focus group presentations. Current node created 2/8/2008.		All mentions of repeated, whole-class non-academic student misbehavior that occur in classrooms and are not resolved by the teacher Component nodes include whole class, repeated, unresolved, inclass mentions of: Breaking rules, Arguments, Rough-housing, Threats, Lawbreaking, & Violence

Table A6.2 Classroom Management Unit Totals

Teachers	All Conflict	All student related Misbehavior	All In-Class Misbehavior	In-class Unresolved Misbehavior	In-Class, Whole Class, Unresolved Misbehavior	In-class Unresolved Breaking Rules	In-class Unresolved Severe Misbehavior	In-class Unresolved Violence	Total Units Shared
Addison Ashland	131	56	13	7	5	6	0	0	271
Belmont Barry	42	3	1	0	0	0	0	0	219
California Calumet	64	22	11	3	1	3	0	0	211
Dorchester Damen	89	32	27	17	1	9	3	2	230
Ohio Ontario	75	57	31	14	3	8	6	0	197
Prairie Paulina	65	39	27	10	4	9	0	1	199
Sedgwick Sheffield	83	43	34	14	0	8	6	0	215
Total	549	252	144	65	14	43	15	3	1542
Halsted Hoyne	200	135	111	88	18	42	19	22	381
Indiana Ingleside	86	62	45	37	22	19	13	1	146
Keeler Kirkpatrick	95	62	60	53	20	18	19	11	219
Milwaukee Madison	30	18	10	6	0	3	0	0	167
Taylor Touhy	63	24	23	21	12	14	5	0	123
Total	474	301	249	205	72	96	56	34	1036

Chapter 7 Codes

Table A7.1 Emotion and Family Relationship Definitions

Code	Component nodes	Date	Definition;
JoyHapFun	All strong positive emotions		All mentions of Joy, Happiness, and Fun Union run 2/29/2008.
	Joy	8/2/2007	Strong happiness. Ecstatic. Delight
	Happiness	7/28/2007	gladness, well being, enjoyment
	Fun	7/28/2007	Playful, childlike, doing what one desires
PrideConvictSatisfaction	Moderate positive emotion The feeling of a job well done Subtracting mentions of JoyHapFun		The feeling of 'a job well done' subtracting mentions of Joy, Happiness, and Fun Difference: text coded by the node, '(6 5 8) Pride in self;', 'Succ work to self actualize', 'Satisfaction no hap', 'Conviction'; provided it has none of these properties: 'JoyHAPFun', Difference run 2/9/2008
	Pride in self	7/30/2007	Teachers feeling of pride in themselves and their work, not, necessarily their students.
	Successful work to self actualize	8/2//2007	Feelings of achieving goals and completing plans
	Satisfaction —not happiness	2/9/2008	Feelings of satisfaction, achievement, success, completing a project—Created after review of JoyHapFun and discovery of some incidents that seemed out of place

	Conviction	8/2/2007	The feeling of being right, of saying what one believes
(6 20 1 3) ConLiking	Weak positive emotion focused on relating to students Subtracting mentions of JoyHapFun & PrideConvictSatisfaction		The feeling of connection subtracting mentions of Joy, Happiness, Fun, Pride, Successful work to self-actualize, Satisfaction, & Conviction Difference: text coded by the node, 'Connection', 'Liking' ; provided it has none of these properties: 'JoyHAPFun', 'PrideConvictSatisfaction' Difference run 2/9/2008
All Positive	Union of all positive emotions including those not used in the above constructs		The feelings Joy, Happiness, Fun, Pride, Successful work to self-actualize, Satisfaction, Conviction, Connection, Liking, Surprise, Relief', Interest', Hope Union run 2/9/2008
All Negative	Union of all negative emotion		All negative emotions Anger, Disapproval', 'Dislike', 'Sarcastic', 'Disappointment', Sadness', Regret;', 'Discouragement', 'Depletion', 'Self-Doubt', 'Failure', 'Exhaustion', Anxiety', 'Avoidance', 'Embarrassment', Dread', 'Suffering', 'Shock', 'Confusion', 'Guilt', 'Failure to Self-Actualize' Union: text with any of these properties: 'AngSarDis', 'Depressive', 'Anxiety', 'Suffering', ' Shock confusion', ' Guilt fail actualize' Union run 10/31/2007
Family Relationships			
	Family conflict	4/30/2007	Mention of conflict between teacher and family member
	Family partnership	4/24/2007	Mention of interaction between teacher and family member on student's behalf
	Student Advocacy	4/24/2007	Working on students behalf beyond the regular classroom

Table A7.3 Family Relationship Totals

Teachers	Family Conflict	Family Partnership	Advocacy for Students	Total Units Shared
Addison Ashland	28	13	12	271
Belmont Barry	1	9	0	219
California Calumet	18	10	8	211
Dorchester Damen	10	2	5	230
Ohio Ontario	8	26	1	197
Prairie Paulina	3	30	12	199
Sedgwick Sheffield	11	25	15	215
Total	79	115	53	1542
Halsted Hoyne	20	30	13	381
Indiana Ingleside	7	1	0	146
Keeler Kirkpatrick	6	4	1	219
Milwaukee Madison	5	0	2	167
Taylor Touhy	1	0	1	123
Total	39	35	17	1036

Chapter 8 Codes

Table A8.1 Academic, ELA, Skilled Classroom Moves, and Problem Solving Definitions

Code	Component nodes	Date	Definition
Core Academic	Union of all mentions of Academic Subjects		Component nodes include Reading, Writing, Social Studies, Math, Science Union ran 10/30/2007
	Reading	6/18/2007	Includes all mentions of Reading, Comprehension, Concepts of Print, Fluency, Word Analysis, & Vocabulary across the curriculum Coding began on these nodes 1/16/2007. These codes were combined for focus group presentation Summer 2007.
	Writing	6/18/2007	Includes all mentions of Writing, Grammar & Spelling across the curriculum Coding began on these nodes 1/16/2007. These codes were combined for focus group presentation Summer 2007.
	Social Studies	1/17/2007	All mentions of social studies teaching
	Math	1/17/2007	All mentions of mathematics teaching
	Science	1/17/2007	All mentions of science teaching
Academic Focus	Union of all mentions of planning lessons, motivating students to engage in lessons or assessment that are NOT coded by 'Core Academic		All mentions of Planning Academics, Motivating Academics, Assessment that do not have mentions of Reading, Writing, Social Studies, Mathematics, & Science Difference ran 10/15/2007

	Subjects'		
	Planning Academics	4/25/2007	Mentions of teacher planning processes
	Motivating Academics	4/24/2007	Mentions of motivating students
	Assessment	1/19/2007	Union of Assessment Codes subdivided from Assessment 5/18/2007 Standardized Tests', Test Prep', Use of data from Tests', Taking HST', Consequences HST', Resistance to HST', School wide Assessments', 'Teacher tests', Info from Teacher assignments', Info Gen', Observations', Previous grades', Special education testing'
Academic General	General Academic incidents that are NOT 'Core Academic Subjects' or 'Academic Focus'		General Academic incidents that are not focused on Core Academic Subjects, Assessment, Planning, or Motivation. Handcoded 8/4/2007 initially for emotion intersection
Academic All	Union of All Academic units		All academic units Union run 1/28/2008
ELA Across In	Union of 'Reading' and 'Writing' and then intersection of 'In-Class'		All Inclass English Language Arts Units Union and Intersection run 1/28/2008
All ELA Writing	Writing intersect 'In-Class'		All inclass writing units. May include reading units Intersection run 1/28/2008
Only Reading	All 'Reading' as long as it is not coded for writing intersected with 'Inclass'		All reading units where no writing is taught. Intersection run 1/28/2008

Skilled Class Moves			
Research Work		1/16/2007	Any mention of planning, presenting or writing up research.
Class Discussion		3/6/2007	Any class discussion, including classroom management discussion. DO NOT CODE recitations: incidents where teachers ask questions and students answer
Group Work		2/26/2007	Small group work, DO NOT CODE Whole Class Work.
Individualized Work		2/26/2007	All mentions of individualizing goals, purposeful independent work; student choice.
Coaching		1/19/2007	Teacher efforts to coach individual students or the class as a whole. DO NOT CODE afterschool tutoring
Modeling		3/26/2007	Clear instances of modeling.
Problem Solving		4/19/2007	Mention of teachers' efforts to solve a problem
Academic Problems	Intersection of Problem Solving with Academic All		Intersection of Problem Solving with Academic All run 2/7/2008
Non-Academic Problems	Intersection of Problem Solving with Non-Academic		Intersection of Problem Solving with Non-Academic run 2/7/2008

Table A8.2 Academic and ELA Totals

Teachers	Core Instruction	Academic Focus	Academic General	Academic All	ELA across the curriculum: Both reading and writing	All ELA units where writing was mentioned	All ELA units where only reading was mentioned	Total Units Shared
Addison Ashland	62	50	43	154	42	30	12	271
Belmont Barry	143	46	20	209	83	59	24	219
California Calumet	116	16	17	149	108	80	28	211
Dorchester Damen	85	54	25	162	74	44	30	230
Ohio Ontario	50	36	9	95	40	33	7	197
Prairie Paulina	79	27	28	134	60	12	48	199
Sedgwick Sheffield	81	29	24	134	44	13	31	215
Total	616	258	166	1037	451	271	180	1542
Halsted Hoyne	49	31	45	124	36	11	25	381
Indiana Ingleside	32	11	11	54	25	22	3	146
Keeler Kirkpatrick	85	36	12	133	65	35	30	219
Milwaukee Madison	51	26	40	116	20	6	14	167
Taylor Touhy	32	22	11	65	26	10	16	123
Total	249	126	119	492	172	84	88	1036

Table A8.3 Skilled Classroom Move Totals

Teachers	Research work	Class discussion	Group work	Individualized work	Coaching	Modeling	Total Units Shared
Addison Ashland	1	18	17	19	19	1	271
Belmont Barry	53	40	31	54	47	11	219
California Calumet	14	15	9	38	23	6	211
Dorchester Damen	29	6	16	42	12	0	230
Ohio Ontario	16	7	14	22	21	1	197
Prairie Paulina	9	20	16	17	13	9	199
Sedgwick Sheffield	0	19	3	7	5	1	215
Total	122	125	106	199	140	29	1542
Halsted Hoyne	3	2	0	4	1	2	381
Indiana Ingleside	3	4	6	2	8	3	146
Keeler Kirkpatrick	0	1	0	6	9	1	219
Milwaukee Madison	1	0	3	3	2	0	167
Taylor Touhy	0	9	0	3	5	0	123
Total	7	16	9	18	25	6	1036

Table A8.4 Problem Solving Totals

Teachers	All Problems	Academic Problems	Non Academic Problems	Total Units Shared
Addison Ashland	2	2	0	271
Belmont Barry	29	28	1	219
California Calumet	4	2	2	211
Dorchester Damen	37	34	3	230
Ohio Ontario	31	12	19	197
Prairie Paulina	11	8	3	199
Sedgwick Sheffield	17	11	6	215
Total	131	97	34	1542
Halsted Hoyne	28	3	25	381
Indiana Ingleside	27	7	20	146
Keeler Kirkpatrick	12	7	5	219
Milwaukee Madison	8	5	3	167
Taylor Touhy	20	8	12	123
Total	95	30	65	1036

Appendix B:

Original Prospectus: The Voice of Experience

**The Voice of Experience:
The Chicago Public School Teachers'
Oral History Project:
A Proposal**

Submitted to Brian Rowan, Duane Alwin, and Virginia Richardsen

February 2000

Charles Vanover

Saturday, February 19, 2000

Introduction

The Chicago Public School System has never been an easy place to work. Its instructors have always faced difficult conditions as they taught their students. In the system's early decades in the 19th century (Herrick, 1971) class size ratios averaged around 100 to 1. Teachers managed these large classes using recitation and other forms of very routinized lessons. Their efforts were not always met with student approval. One of the city's teachers was beaten up by his students in 1836. His replacement kept a thick stick by his desk to keep order and ensure his personal safety. Other students responded to the boredom created by the system's early learning environments by throwing live shot gun shells into the wooden stoves of city's one-room schoolhouses.

The physical condition of the classrooms where Chicago's teachers spend their working careers has rarely been ideal. More than half the city's school-houses were built before 1930 (Vander Weele, 1994). Up until the early 1960's, many educators were required to teach in classrooms that did not have enough seats and desks (Herrick, 1971). At Calumet high school, the roof leaked for two decades until it was fixed in the early 1990's (Vander Weele, 1994). In the 1990's maintenance personnel from Board of Education responded to 1200 building emergencies a month in a system that left millions of dollars for more permanent repairs unspent. Chicago teachers have taught their students in overcoats while winter winds blew through crumbling window-sills and into their classrooms. Others have taught in rooms that were so over-heated they felt like saunas.

Many of Chicago's schools are located in high crime areas that make it dangerous for both students and teachers to come to class. In 1991 one third of the system's elementary school teacher did not feel safe driving to their buildings. (Vander Weele, 1994) The schools themselves are not buffered from their neighborhoods' problems. In the 1980's and 1990's, many high school administrations lost control of the hallways and

stairwells of their schools. Teachers worked while loitering students laughed and shouted outside their classroom doors. (Vander Weele, 1994).

Teacher's teach despite these conditions. They plan their lessons, arrive at their schools and instruct their students year in and year out. The Chicago system may move from battles over desegregation to discussions about mastery learning. Advocates may argue the effectiveness of site based management and debate the benefits of the centralized fiscal and instructional reforms of the Chicago Board of School Trustees. Teachers work as waves of reform crest and ebb. While every program has its advocates, it is the position of this paper that success for the Chicago's teachers, just as for its students, is based not on the shifting supports the Board of Education provides its employees, but on "the human ability to cope" (Newman, 1981).

This proposed study focuses on stories that experienced Chicago public high school teachers tell about their practice. All of the teachers sampled will have worked in the system for at least 7 seven years. It hoped that they will average at least 12 years of experience. The study will use peer and administrator ratings to collect these stories from a sample of expert teachers and from educators whose practice meets the needs of the students they serve, but is not outstanding. Teachers will be asked to describe a well-remembered event where their practice made a difference (Benner, Tanner, & Chelsea, 1996). They will also be asked to describe students whom they were able to care for and help in the midst of the system's chaos. Both groups of educators will also be asked to tell a story about a moment when their practice went wrong. It is hoped that these stories will describe the everyday successes and failures that shape their working careers.

This data will used to make theoretically based distinctions between the practice of experts and the efforts of other experienced teachers. One of the guiding hypothesis of the study is that the stories of these two groups of teachers will show some of the themes that are found in the narratives of critical care nurses (Benner et al., 1996). The best teachers, like the best nurses, are hypothesized to act from a disposition to do what is right (Benner et al., 1996). Their narratives, if this hypothesis is correct, will imbued with moral themes and struggle. According to this theory of expertise, in the midst of the

public system's confusion, these teachers will constantly attempt to strive towards the good.

In the second part of this study lifehistory (Perks & Thomson, 1998; Thompson, 1988) methods will be used to describe the working careers of both groups of teachers. The goal of this stage is to describe what it means to spend one's career working in the high school classrooms of what has been called the worst public school system in the United States. The stories teachers tell in the first interview will be placed in a timeline(Perks & Thomson, 1998). This document will be used as a departure point to re-interview teachers about the history of their practice.

The educators will be asked to describe how they were inducted into the system, the mentors who helped them learn its ways, and the students who touched their lives. The interviewer will probe for stories that describe the obstacles they overcame and the battles they lost. They will be asked to describe the sources of the commitment that keeps them working, and the price that they have paid to serve Chicago's weakest and most vulnerable students.

These collections of narratives will be valuable as historic documents that illustrate teachers' practice during one of the most tumultuous era's in the Chicago system's history. They will be historically important narratives of the heroism of ordinary people that can serve as important tools to teach other educators. Narratives, from this perspective, are a form of knowledge that highlights their efforts (Benner et al., 1996). They are an effective teaching tool for describing the lessons learned in a socially embedded practice. These stories will provide a map to system from the perspective of those who work inside of it.

It is important to emphasize that the narratives of the experienced, but not expert teachers, will also have value. One of the goals of the study is to attempt find key forks in the road that differentiate the careers of the two groups. Not every worker is an expert. Not every human being is a hero. In a very difficult environment, being good can be a life's achievement. These experienced teachers served their students and their city during some very difficult years. (Wilson, 1996) Their narratives will be an important resource

in the quest by the stakeholders in Chicago and other urban systems to understand the reasons why things are the way they are.

It takes work and dedication to teach Chicago's poorest students. This proposed study will attempt to delineate just what that work entails.

Purpose

There are four purposes of this study.

- To collect stories of experienced teacher's practice.
- To create life histories of groups of teachers who have worked in the Chicago public school system during some of its most tumultuous years.
- To develop a collection of sustaining narratives (Benner et al., 1996) and other descriptions of practice that can be used to teach new teachers and inspire veterans.

Theory

People's lives are shaped by their environments, but environments do not wholly determine the shape of people's lives (Bourdieu, 1977). Within the socially constructed categories (Berger, Berger, & Kellner, 1974) that create the frameworks people use to make sense of their worlds—such as race, class, progress and success—there is always some room to maneuver (Frankl, 1963). Institutions and other social systems limit, but do not fix, the lives of the people who act within them. (Weber, 1978)

The teachers in this proposed study face many obstacles that impede their practice. However, their practice is not solely determined by these barriers. Their ability to constantly negotiate, and sometimes overcome, the challenges posed by their working-environment is the subject of this proposed study.

To understand the nature of teacher's achievements, it is important to understand the nature of their work. Teachers do not work in offices. They do not have the power to arrange their schedule, take personal calls, or go to the bathroom when they wish. In

nonrestructured Chicago Public High Schools they teach five 50 minute classes a day in environments where their authority is not taken for granted (Smylie, Bay, & Tozer, 1999). They cannot count on the symbolic capital (Bourdieu, 1977) invested in their position to structure the authority relations in their work environment. Control has to be constantly negotiated (Schempp, 1993; Waller, 1932) and this is not an easy process when faced with classes that contain between 25 and 30 students who have suffered, and continue to suffer, much injustice.

This proposed study uses Goffman's micro-sociology (Goffman, 1959, 1967) to describe the interactions between teachers and students within this workplace. Like other types of employees, teachers work to perform a role for an audience. They use a wide range of technologies and routines to create a setting where they create a coherent performance. It is important to point out that success can never be taken for granted. Workers, in Goffman's theories, can never be certain they can achieve their objective and maintain the legitimacy of their role in the eyes of their clients and customers (Goffman, 1959).

Most of Chicago's Public High School students are poor. Few read at close to the national norms. (Vander Weele, 1994) Many have suffered a great deal of pain. The outbreak of nihilism and lovelessness that (West, 1993) describes create everyday obstacles that both students and teachers must overcome. One study of a Chicago low income neighborhood, (Smylie et al., 1999) found that more than 40 percent of the area's public high school students have a parent who abuses alcohol or drugs. A similar percentage have been beaten or sexually abused. Racism is an ongoing force that limits their opportunities. When these factors are combined with the lack of supplies, the dilapidated buildings, and the constant interruptions that typify many public high school environments, the difficulties teachers face gaining their students' respect and creating a positive environment for learning become evident. The educators in this study must use a variety of habits, skills and technologies to transform a meaningless situation—an adult standing in a room filled with poor teenagers—into an effective lesson.

Thinking in action

This proposed study will use teacher's narratives to make explicit the embodied practices and ways of being that guide teacher's interactions. Its theory of practiced action is based on Patricia Benner's elaboration (Benner, 1984; Benner et al., 1996) of Dreyfus and Dreyfus' (Dreyfus & Dreyfus, 1996) theory of expertise. These theories will be used to describe how teachers create coherent performances in chaotic institutional environments. According to this construct, people gain the skills they need to fly planes, play chess or practice nursing by learning new and more effective ways to perceive and act within their environments.

Beginners follow rules. They calculate the actions that are required to engage in their practice. Beginning pilots must check off the steps necessary to land their planes. Beginning chess players must think about where to place their rooks. Their actions may follow a specific formula. Novices do not see the situation as a whole and tend to miss many valuable clues.

Experts perform their required tasks almost effortlessly. They skillfully do what needs to be done based on years of experience and, if it exists, deep knowledge of the theory of their particular practice (Dreyfus & Dreyfus, 1996). Expert pilots do not calculate how to land their plane. The actions they take as they guide the throttle have, after long years of successful practice, become intuitively linked to their perceptions. Waller (1934) describes how this process functions for educators:

...a class is never a sea of faces after the first day. It is a pattern, a structure of highlights and shadows, a configuration with shifting points of tension, a changing equilibrium of ease and unease, of beauty and loveliness. The maintenance of discipline depends upon the emergence in the teacher's mind of configurations enabling him to keep the whole class in view without sacrificing any of its parts. For the beginning teacher, the class is a confusion and very likely a "big, booming, buzzing confusion." For the experienced teacher, it is an orderly patterned whole. (pp 162)

The transforming power of experience is the heart of Benner's theory (Benner et al., 1996). People learn by doing, and their actions transform who they are and how they view the world. For the expert teachers in this study, the classroom is not a black box. It

is an environment where they create a skilled performance based on acute perceptions and embodied skills they have built up through years of hard work. The expert teachers' ability to think-in-action is a form a knowledge in and of itself. They *know* what they are doing and share this knowledge by telling stories.

Experienced but not expert practitioners lack the rich perceptual awareness of experts (Rubin, 1996). They tend to see the world objectively and guide their practice according to hard and fast rules. Their perceptions lack the qualitative distinctions, subjective judgements and skilled habitual actions that guide the efforts of experts. They are present but not deeply engaged. Benner (Benner et al., 1996) believes that the difference between average and best is a matter of embodied perception.

Unit of analysis

The unit of analysis of this proposed study is the narrative of experienced teachers. Narratives have great relevance to lives of practitioners. To quote Benner (1996):

First-person narratives of practice provide texts for interpretive phenomenological studies of ethical comportment, practical moral reasoning, and ethical distinction. . . . A story allows for less linearity, more parentheses or asides, an easier flow from initial to later concerns than a clinical case study or accounts of diagnostic reasoning that leave out the agent's perceptions and concerns. Narrative accounts uncover meanings and feelings in ways that shed light on the contextual, relational, and configuration knowledge lived out by the author in the practice.
(pp246)

They are the key building block in the socially embedded systems of membership and participation that create expert practice. According to theory of expertise, people learn by telling stories. The stories of committed workers allow others to attain higher levels of practice.

Narratives do more than teach. It is hypothesized with Benner (1996) that these memories are a critical aspect of their practice. They function as sustaining narratives that help teachers carry on despite the system's constant turmoil. While teachers work alone

among school children, their practice is deeply embedded in the memory of other teachers and students they admire.

Expert teachers stories also revolve around the moral agency that is created by skilled performance. Expert teachers, like other experts, operate from a disposition towards what is right and good. The stories they tell are driven by moral concerns and distinctions. These concerns do not come out of an abstract interest in doing what is right, but out of committed drive to do better within the socially embedded norms of their practice. They do not work within an abstract and decontextualized system of values; they work in the Chicago Public Schools.

Experienced teachers whose practice is good, but not outstanding, are hypothesized to create different narratives. Their stories will lack the engagement and rich perceptions that characterize experts' narratives. Some of Rubin's (1996) informants had so little awareness of the events of their practice, they seemed to suffer from memory loss. Instead of thinking-in-action, many went through the motions.

Lifecourse

The stories that the teacher told in the first interview will be arranged in chronological order and put into a timeline (Perks & Thomson, 1998). The researcher will structure the second interview by asking the teacher to fill in the gaps of their career's history. Teachers will be asked to tell stories about how they were hired, and to describe any teachers whose practice they admired or strongly disapproved. The teachers will be asked to tell stories about their schools and the different students they were able to reach during their careers' stages.

These narrative chronologies will be analyzed for any period effects that may arise from changing conditions in the system and the city. The completed career histories will checked to see if there are specific points in teachers' careers that generate more stories than others. The early years, and perhaps periods of profound change, may be especially important eras for the creation of sustaining narratives. Throughout this

examination difference between the stories of the two groups of experienced teachers will be probed and analyzed.

It should be emphasized that while it is hypothesized that the narratives of public school teachers' practice share themes that are found in the stories of critical care nurses, the stories will not be identical. Nurses work in teams. For the most part, teachers teach in isolation. Nurses may fight to create healing environments (Benner et al., 1996), but they do not fight for control. The pain and difficulties caused by demands of student discipline are a pervasive themes in the literature of teaching (Elsbree, 1939; Schempp, 1993; Waller, 1932). Waller (1934) describes control as one of the saddest facts of the teacher's practice:

To the young teacher one of the most disillusioning discoveries that he makes about the social realities of school life is that teachers are often made to suffer for their virtues. In a common sense-world, it would seem that amiable and sympathetic teachers, teachers who try to apply the golden rule in the schoolroom, would have a high reputation in the eyes of their students. But they rarely do. . . . It is painful to see fellow teachers whom one know to be persons of unusual qualities in disrepute with students because of those qualities, painful to see them suffer because they are genial and sympathetic, painful to see the evidence of the disrespect and hatred which students give them. The young teacher casts about for reason. Part of the answer may be made by reference to the general disrespect which young persons in our culture have for a person who impresses them as "soft," and this explanation has particular weight because of the traditional patterns of social interaction in the school; the teacher's personality must be a little hard if it is to survive the strain of the hard situation in which the teacher is placed. (pp 254)

The students Waller describes are white, middle class teenagers attending high school at a time when a diploma had genuine social status. The teachers in this proposed study, who teach poor children in buildings that may not have been renovated since Waller published his book, face a much harder situation. The corrosive effects of spending one's life controlling others (Waller, 1932) should provide many themes for analysis. Contrasts between expert and non-expert narratives may be particularly striking.

Sample

The pilot study will create a sample of 9-12 teachers. They will be drawn from four general Chicago Public High Schools that are located in different neighborhoods of the city. The full study will contain between 50-65 expert and satisfactory teachers from a randomly stratified group of Chicago Public High Schools.

The sample's teachers will be chosen by asking three informants to rate (Kinderman, 1995) the practice of the experienced teachers in their schools. It is assumed that, just as for nurses, (Benner et al., 1996) people know who an excellent teacher is. They may not be able to quantify why that teacher is excellent, but they can see the difference as they work with them over time. These raters will be chosen from different role groups within the school to create a consensus sample of expert and good teachers. The informants will be the principal, the teacher-librarian, and the senior elected faculty representative to the school's site based management committee.

These informants will be asked questions about the climate and history of their schools. Among these questions they will be asked to list the five best experienced teachers. The expert sample will be chosen from those teachers who were listed as "experts" by all three role groups. The raters will also be asked to list five other experienced teachers whose practice is good, but lacks the special quality of an expert. The experienced teachers will be chosen from those teachers who were listed as "good" by at least two of the raters. This procedure will not pick up every expert within the chosen schools, (it clearly misses the system's bright young stars) but the teachers it selects will have earned their ratings within the socially embedded practice of their institutions.

Methods

The methods used in the first stage of the study come directly from Benner's work. The instrument described in Novice to Expert will be used with some modifications. (See Appendix A) The author and a committee of current and former public school teachers will modify the language to increase the questions' relevance to

public school teachers. The engagement interview instrument from Expertise in Nursing Practice will also be used with the same modifications. (See appendix B)

The interview itself will be conducted in the same style as Benner’s focus groups (Benner et al., 1996). The goal will be recreate, as much as possible, their informal and positive tone. Focus groups are not used in this study because the individualistic and private nature of the teacher’s practice. It is hoped that the more intimate nature of the interview (Grele & Terkel, 1985; Thompson, 1978) will allow teachers to talk freely. The author of this study’s eight years in the Chicago Public Schools—he worked as a high school substitute during his induction to the system—should provide the basis for rapport with the informants.

If funding permits these narratives will be transcribed verbatim by the same person. They will be coded for themes that are both predicted by Benner’s theory and themes that differ from it because of the special nature of teacher’s work. It is important to emphasize that while this study is based on theory, it is not limited by it.

Preliminary Schedule

Date	Research Goals	Process Goals
2/2000	Send proposal to Rowan Begin preliminary interviews Create first draft of revised instrument Work on High School Teacher/ Environment Literature Review Continue reading in methods/theory	Explore institutional linkages with organizations connected to the Chicago Public Schools Look for transcriber Explore small grants Submit IRB Make contact with professors in Nursing, History

3/2000-4/2000	<p>Revise Proposal</p> <p>Proposal and instrument accepted by Rowan</p> <p>Continue with preliminary interviews;</p> <p>Self-evaluate first tapes</p> <p>Complete first version of Teacher/Environment Literature Review to Miskel</p>	<p>Form 2nd year Committee</p> <p>Hold Committee Meeting</p> <p>Apply for small grants</p> <p>Continue to explore institutional linkages with organizations connected to the Chicago Public Schools</p> <p>Explore possibility of taking a class at ISR</p> <p>Attend AERA(?)</p>
5/2000-7/2000	<p>Collect first round of interviews</p> <p>Pay for transcriptions and begin analysis</p> <p>Continue lit review with emphasis on Chicago Data</p> <p>Continue readings in method and theory</p>	<p>Formalize any linkages to Chicago institutions</p> <p>Send transcripts to teachers for comment</p> <p>ISR Class?</p> <p>Explore Grants/Jobs to fund year 4 data collection in Chicago</p>
8/2000	<p>Submit first draft of 2nd year paper to Rowan</p> <p>Continue lit review with emphasis on Chicago Data</p> <p>Continue readings in method and theory</p>	<p>Apply for Grants</p> <p>AERA Proposal</p> <p>ASA</p>
9/2000-12/2000	<p>Submit Revised Paper to Rowen</p> <p>Submit Rowen approved paper to committee</p> <p>Paper Approved</p>	<p>Chose U of M classes based on project needs; Requirements</p>

1/2001-4/2001	Begin Dissertation Proposal	Complete Coursework Prelims Finalize plans for year 4 Grants Attend AERA; Present(?)
5/2001-7/2001	Submit proposal to committee Dissertation Proposal accepted Create sample for dissertation	Create Dissertation Committee Dissertation Committee Meeting R AERA Proposal Other proposals submissions Negotiate with sites
7/2001-5/2002	Collect Data Analyze data Write	Year 4 in Chicago? In Michigan? Pay for transcription. Classes audited? Grants Proposals/ Papers?
6/2002	Informal first draft of Dissertation	Back in Michigan
7/2002	First Draft Dissertation submitted to Rowen	
8/2002	Revisions Re-interviews??	
9/2002	First Draft Submitted to Committee	
10/2002-12/2002	Revisions	
1/2003-4/2003	Candidacy Defense Graduation	

Conclusion

The first systematic reform of the Chicago Public Schools began in the 1860's under Superintendent William Wells (Herrick, 1971). The reforms were popular, and may have improved practice, but they did not transform a poor and jury-rigged educational system. During these years, many of the city's poor children never went to school. Others gained almost nothing during the span of their brief attendance. Perhaps they had little to lose by avoiding school. It was possible for many of these children to move on and create meaningful lives in the city's stockyards and factories (Miller, 1996). While most of today's students are able to attend class, the safety net created by the city's once vast pool of low and semi-skilled jobs is gone (Ball & Wilson, 1996).

The injustices that limit the lives of Chicago's students were not created by their teachers. They have been handed down to these children as part of the city's (Rakove, 1979; Travis, 1987) and the nation's common heritage (Patterson, 1998; West, 1993). In the same way, the justice that teachers create by good practice is also only partially their own. Their efforts are embedded in communities of practice created by the efforts of many different teachers, administrators and researchers over time. This proposed study attempts to make this practice available to others.

The stories it proposes to collect are valuable in their own right and are important as tools to create higher levels of practice. These narratives have the potential to improve the understanding of the nature of expertise. They should do much to improve knowledge of the history and the everyday reality of the public schools of the United States' third largest city.

References:

- Ball, D. L., & Wilson, S. M. (1996). Integrity in teaching: Recognizing the fusion of the moral and intellectual. *American Educational Research Journal*, 33(1), 155-192.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Menlo Park, Calif.: Addison-Wesley Pub. Co. Nursing Division.
- Benner, P. E., Tanner, C. A., & Chelsea, C. (1996). *Expertise in nursing practice: Caring, clinical judgment, and ethics*. New York: Springer Publishing Company.
- Berger, P. L., Berger, B., & Kellner, H. (1974). *The homeless mind; modernization and consciousness*. New York,: Vintage Books.
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge ; New York: Cambridge University Press.
- Dreyfus, H. L., & Dreyfus, S. E. (1996). The relationship of theory and practice in the acquisition of skill. In P. E. Benner & C. A. Tanner & C. A. Chesla (Eds.), *Expertise in nursing practice : caring, clinical judgment, and ethics* (pp. 29-47). New York: Springer Pub. Co.
- Elsbree, W. S. (1939). *The American Teacher*. New York: American Book Company.
- Frankl, V. E. (1963). *Man's search for meaning: An introduction to logotherapy* (Newly rev. and enl. ed.). New York,: Pocket Books.
- Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, N.Y.: Doubleday.
- Goffman, E. (1967). *Interaction ritual: Essays on face-to-face behavior*. Garden City, N.Y.: Anchor Books.
- Grele, R. J., & Terkel, S. (1985). *Envelopes of sound: The art of oral history* (2nd , rev. and enl. ed.). Chicago, Ill.: Precedent Pub. : Distributed by Transaction Books.
- Herrick, M. J. (1971). *The Chicago schools: A social and political history*. Beverly Hills, California: Sage Publications.
- Kinderman, T. (1995). Distinguishing "buddies" from "bystanders": the study of children's development within natural peer contexts. In T. A. Kindermann & J. Valsiner (Eds.), *Development of person-context relations* (pp. ix, 256). Hillsdale, N.J.: L. Erlbaum Associates.
- Miller, D. L. (1996). *City of the century : the epic of Chicago and the making of America*. New York: Simon & Schuster.
- Newman, F. M. (1981). Reducing student alienation in high schools: Implications of a theory. *Harvard Educational Review*, 51(4), 546-564.
- Patterson, O. (1998). *Rituals of blood: consequences of slavery in two American centuries*. Washington D. C.: Civitas.
- Perks, R., & Thomson, A. (1998). *The oral history reader*. London ; New York: Routledge.
- Rakove, M. L. (1979). *We don't want nobody nobody sent : An oral history of the Daley years*. Bloomington: Indiana University Press.
- Rubin, J. (1996). Impediments to the development of clinical knowledge and ethical judgment in critical care nursing. In P. E. Benner & C. A. Tanner & C. A. Chesla

- (Eds.), *Expertise in nursing practice : caring, clinical judgment, and ethics* (pp. 170-192). New York: Springer Pub. Co.
- Schempp, P. G. (1993). The micropolitics of teacher induction. *American Educational Research Journal*, 30(3), 447-472.
- Smylie, M. A., Bay, M., & Tozer, S. E. (1999). Teachers as agents of change. In G. A. Griffin & M. Early (Eds.), *The education of teachers* (pp. 18-62). Chicago: NSSE : Distributed by the University of Chicago Press.
- Thompson, P. R. (1978). *The voice of the past : oral history*. Oxford [Eng.] ; New York: Oxford University Press.
- Thompson, P. R. (1988). *The voice of the past: Oral history* (2nd ed.). Oxford ; New York: Oxford University Press.
- Travis, D. (1987). *An autobiography of black politics*. Chicago, Ill.: Urban Research Press.
- Vander Weele, M. (1994). *Reclaiming our schools: The struggle for Chicago school reform*. Chicago: Loyola University Press.
- Waller, W. (1932). *The sociology of teaching*. New York,: J. Wiley & sons inc.,.
- Weber, M. (1978). *Economy and society: An outline of interpretive sociology* (G. Roth & C. Wittich, Trans.). Berkeley: University of California Press.
- West, C. (1993). *Race matters*. Boston: Beacon Press.
- Wilson, W. J. (1996). *When work disappears: The world of the new urban poor*. New York: Knopf : Distributed by Random House Inc.

Appendix C:

Original Recruitment Letter and Interview Instrument

Recruitment letter

Dear Chicago Teacher,

Thank you for agreeing to consider participating in the Knowledge of Practice. Your participation is, of course, completely voluntary and confidential.

The stories you provide in your interviews will help me understand the personal, practical knowledge teachers draw on to make the everyday decisions they use to serve their students. Teaching in the Chicago Public Schools is highly skilled work and the interviews are designed to compare the reflections and plans of beginning and experienced teachers. Attached to this letter are the following documents:

- the interview instrument that contains most of the questions we will ask during the four interviews that compromise data collection for the study,
- a copy of the informed consent form that we will ask you to complete before each interview,
- and a brief list of questions that will help me learn more about you and help me choose the final sample.

Please look them over, and if you have any questions, please do not hesitate to call or write.

I am looking for teachers who are willing to be enthusiastic participants in the study. In order to allow you to make an informed decision to participate, I have written a detailed description of *The Knowledge of Practice*.

Sample

My goal is to recruit between 4 and 8 beginning and expert teachers for a total of between 8 and 16 Chicago Teachers. I define expert teachers as educators who have:

- National Board of Professional Teaching Standards Certification in the grade level they are teaching

- At least 7, and preferably 10 or more, years of teaching experience in the Chicago Public Schools or similar urban system.

I define beginning teachers as educators who have:

- No more than two years of teaching experience in any school system, anywhere.

If more teachers agree to be part of the study than I have the capacity to interview, contributors will be selected according to the following criteria:

- Teachers in high-poverty schools will have preference over teachers who serve less at risk-populations.
- Beginning teachers who work in the same schools and/or grade levels as expert teachers will have preference over beginners who do not work in those schools or classrooms.
- The sample will be as balanced as possible, thus I would like to interview equal numbers of white and minority teachers.

The teacher information sheet that is attached to this letter contains a list of questions that I will use to select the final group.

Interview Style and Confidentiality

My interviews have been designed to allow you to talk about your teaching in your own way and in your own voice. Instead of asking you a long list of questions about your teaching, you will be asked to answer a few general questions and then expand on your answers during the interviews. In order to help you to prepare for your interviews, you will be asked to complete a homework assignment before each interview session. In the first interview, for instance, you will be asked to write a brief story—not a literary masterpiece(!)—about how your teaching made a difference to a particular student or group of students during the 2003-2004 school year.

All interviews will be recorded and transcribed verbatim in order to have an accurate record of what you say. As always, participation is completely voluntary. You will have the right to refuse to answer any question or stop the interview at any time.

In order to allow you to speak freely, I will take the following steps to assure your confidentiality. Your name, the name of your school, its location, and the names of your students as well as other people you mention in your interviews will never be made public. You, your school and the people you discuss will be assigned pseudonyms that will be entered directly into the transcripts of your interviews. These pseudonyms will be used in all oral and written discussions of the study and will always be used in any public discussion of the research project. You will receive a paper or electronic copy of each of your interviews for your records. The tapes from you session will be kept in a secure location for the duration of the study, and will not be played publicly.

Content of interviews

The Knowledge of Practice is a study of teachers' working knowledge. The questions in my interviews are designed to surface the sense one's teaching and the sense of one's

classroom that teachers draw on to make the everyday decisions that structure their work with children. The first two interviews will ask you to reflect on your teaching by telling stories about the 2003-2004 school year. The first interview will ask you to tell stories about how your teaching made a difference in your students' lives. The second will focus on your language arts' practice. You will be asked to prepare for your interviews by writing a brief story about a student or group of students that you were able to reach in the first interview, and to write a brief story about a language arts unit that you were proud in the second interview. The interview guides for these interviews and homework assignments are attached to this document.

In the final two interviews you will be asked to plan for the upcoming school year. In order to prepare for that interview, you will be given a disposable camera and will be asked to create a classroom travelogue by taking pictures of your classroom. These pictures will become part of the documentation for the study, but will not be shown publicly. They are prompts to help you tell your stories. In the last interview, you will be asked to plan for the upcoming school year. Because that interview will be held close to the beginning of school, there is no homework assignment, instead I'll ask you to bring in your lesson plan book and/or calendar.

Scheduling

I would like to schedule 4 interviews with you during the summer of 2004. The pilot interviews for the study lasted between an hour and an hour and a half, and I would like you to schedule 90 minutes of time so you do not feel rushed. These interviews will be held at the Chicago Teachers' Union Quest Center's offices at the Merchandise Mart—or a place of your own choosing--and you will be reimbursed for parking or public transportation costs. These interviews will be held at your convenience at anytime during the day or evening, whenever you have time to speak. Talking about your teaching is hard work, and so I would like to do each interview on a different day. Here is the preliminary schedule:

- Interview One: preferably the first week or two after classes end in June. However, because of vacations and conferences, I would be happy to meet you any time from the last two weeks before the end of classes until the middle of July.
- Interview Two: preferably about a week or two after your first interview, but it can be held as long as a month after that session—ie before the end of July.
- Interview Three: preferably after you begin planning for your upcoming classes in July or August.
- Interview Four: this interview must be completed before the first official day of school—ie before students walk in for their first day of class. I would like to hold this session as close to that point in time as possible, without risking the possibility that you will not be able to participate in the interview because of a scheduling conflict.

Interpretation, Analysis and Publication

The stories and information you share in your interviews and homework assignments will be used as materials for my dissertation and in publications that attempt to understand

and describe the nature of teachers' work. Your stories will be used to create a portrait of your teaching practice similar to the oral history portraits found in Studs Terkel's work with, of course, names and identifying details changed to protect confidentiality. If you wish, you will receive a paper or electronic copy of the portrait I create from our interview sessions. The interviews will also be analyzed to describe differences in the working knowledge of expert and beginning teachers, as well as to understand the nature and development of teachers' working knowledge.

Because *The Knowledge of Practice* is the beginning of what is hoped to be a long term research project into teachers' work, your interviews may be analyzed in future studies of teaching and teachers' practice. You will have the right to limit the time that your interviews are available for subsequent analysis. Your confidentiality will always be maintained, with one exception. If you wish, your tapes will be deposited at public archive to be used by historical researchers 50 years after the first portion of *The Knowledge of Practice* is completed in 2055.

Honoraria

Participating in this study is a lot work! I hope that you will be motivated to participate primarily by the opportunity it provides to engage in extended reflection on your teaching and to share with others knowledge you have gained through teaching in the Chicago Public Schools. Because you will receive copies of all of your interview transcripts, you will have the opportunity to learn more about your practice than I do, and you are free to use your transcripts in any way that you choose. I will pay all teachers an honoraria of \$25 per interview plus \$5 for parking or public transportation.

Thanks

Thanks for looking this over. If you are interested in participating please contact me by:

- Sending an email to cvanover@umich.edu
- Sending a letter to:
 - Charles Vanover
3112 School of Education
610 E University
Ann Arbor, Michigan 48109-1259
- Or calling me at 734-XXX-XXXX. I will have a cell phone number this summer when I stay in Chicago that I give you as time for study approaches.

If you wish, you can include the information I ask on the Teacher Questionnaire, but I would be happy to get this information over the phone.

Thank you for your time and consideration,

Charlie Vanover
Ph.D. Candidate, Educational Administration and Social Policy;
University of Michigan

610 E University; School of Education
48109-1259
cvanover@umich.edu

To learn more about the informed consent and your rights as a research subject go to http://www.irb.research.umich.edu/IRB_Health/consent.html Questions may be directed to the Behavioral Sciences office which is located at 1040 Fleming Administration Building, 503 Thompson Street, Ann Arbor, MI 48109-1340. Phone: (734) 936-0933. Fax: (734) 647-9084. Email: irbhsbs@umich.edu

Homework assignment before Interview 1.

Please read the question sheet for Interview 1 and prepare for the interview by reflecting about what happened in your classroom from Fall 03 to Spring 04. A few days before the interview, I'd like you to write a short story, not more than 2 or 3 pages, about a student for whom your teaching made a difference this year. You don't have to write a literary masterpiece; just try to think about a student you helped and then write down what happened. If you can, try to look over the story and the interview guide the night before the interview, so that your answers will be fresh in your mind the next day.

Interview 1: The story of your teaching

To be conducted in June or early July.

Please come to the interview ready to tell the story of your teaching this past school year, from September 03 until June 04. I am interested in learning how the year began, how it ended, and the important incidents that happened in between. I would like to know about the successes that made you proud and the mistakes you learned from. I hope you will share some of the joy of life in the classroom while not forgetting the hard work and difficult moments that are also part of life in school. You are welcome to bring notes, samples of student work and other materials that might help you narrate. As you tell your stories, I would like you to focus on the following questions:

- Please tell a story about a student, or a group of students, for whom your teaching made a difference during the 03-04 school year.
- Describe a unit or a group of lessons where you made a difference in your students' lives.
- Describe moments during the year when you felt you had learned something new about your teaching or your students.
- For experienced teachers:
 - Tell a story about a particular moment when something you learned from the your efforts to become accredited by the National Board of Professional Teaching Standards helped you become a better teacher, or instances when this knowledge made it more difficult for you to serve your students.
- For beginning teachers:
 - Tell a story about a particular moment when something you learned from your student teaching or teacher education classes helped you become a

better teacher, or instances when this knowledge made it more difficult for you to serve your students.

- Tell a story about any obstacles that got in the way of your teaching.
- Tell a story about a particular event that illustrates what you believe teaching is all about.

My goal as interviewer is to ask you to describe specific events and incidents. Throughout the session, I will ask you to expand on your stories by asking you to “Tell me more about that. ” or to “Walk me through what happened at that moment.” or to “Describe a specific incident that illustrates that idea.” In order to focus the time we have on your teaching I may also ask you questions such as “Could you tell me specifically how that event or person affected your teaching?” All of these questions are designed to help you tell your story in your own way, and in your own words.

Please don’t worry about telling your stories in the specific order that they happened. My goal is for you to feel relaxed enough to speak naturally about the work you’ve done. Feel free to move forward and backwards in time and to come back to incidents that you’ve brought up before. I hope you will feel comfortable enough to tell your story to me in the same way you would tell it to teacher you trust.

The pilot interviews for this project ran from between an hour and an hour and a half. I would like you to have 90 minutes free so that you can speak freely without feeling rushed.