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A GROUNDED THEORY OF TEACHER SENSEMAKING PROCESSES IN A CLIMATE OF CHANGE

By

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Dissertation

presented in partial fulfillment of the requirements for the degree of

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Education

A Grounded Theory of Teacher Sensemaking Processes in a Climate of Change

Chairperson: Dr. William P. McCaw

Teacher commitment and capacity are critical factors in school reform. However, school change models underestimate the complexity of teaching, which undermines teachers' ability to implement and sustain changes. This grounded theory of teacher sensemaking explored teachers' perceptions as they participated in school reforms targeting pedagogy.

A multi-site sample was purposefully selected and included 12 elementary school teachers from eight schools. One-on-one semi-structured interviews were conducted with each teacher and analyzed using inductive analysis. The three analytical coding procedures were (a) open coding, (b) axial coding, and (c) selective coding. Open coding analyzed the concepts emerging from the data and pursued relationships among the concepts. Six categories emerged from the data: "individual influences," "student influences," "relational trust," "culture," "leadership," and "influences of institutional structures." Data were decontextualized and analyzed at a micro level in relation to the categories through axial coding procedures. The microanalysis revealed interrelationships among the data that were not originally evident. Finally, selective coding employed macroanalysis to provide an explanatory narrative. This narrative synthesized the relationships that had emerged from the data around a core category, labeled "Teacher Sensemaking." The narrative report detailed the study's findings and explored the interrelationships between all categories.

The first finding from this study concluded that teachers perceive themselves as the leaders in their classrooms with the right and responsibility to provide an effective and engaging classroom learning experience for each of their students by mediating the effects of the other influences. Teachers are most committed to their students and to their classroom responsibilities. The second finding was that there is an interpersonal basis for teacher commitment to the organization. Interpersonal factors include principal leadership, relational trust within the organization, and the levels of collaboration available. The third finding reveals that structural conditions influence teacher perceptions of challenge versus overload. Inadequate structural supports and insufficient resources add to teachers' burdens, creating strong feelings of being overwhelmed. Adequate supports and resources help new situations feel like positive challenges. This study concluded with a discussion of how teachers apply their sensemaking processes to create and protect a healthy classroom environment in a climate of change.

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CHAPTER I

Introduction

"When all is said and done, what matters most for students' learning are the commitments and capacities of their teachers" (Darling-Hammond, 1997, p. 293). While this insight provides those wishing to improve schools with a priority, school reformers disagree about effective means for improving teacher quality and commitment (Darling-Hammond, 1997; Glickman, Gordon, and Ross-Gordon, 1998; Sergiovanni, 1995). Some, like President Bush, envision tighter external prescriptions, focusing on standards, tests, and sanctions as solutions for improving instruction. Others, however, including Darling-Hammond, Fullan (1993, 2000, 2001a, 2001b, 2005), Glickman, Hargreaves (1994, 2001, 2003, 2004), Newman and Wehlage 1995), Sarason (1996), and Sergiovanni, synthesizing the now substantial research on school change, instructional improvement, and student learning, address the necessity of eliciting commitment to reflective pedagogical excellence from each individual teacher.

Pressured by state and federal mandates, schools and school districts may feel compelled to act expeditiously, assuming the semblance of school improvement in an attempt to avoid negative consequences. However, this approach negates substantial research into successful school improvement, which states that people will only commit to enacting changes they value (Fullan, 2001b, 2003, 2005; Hargreaves, 2003; Hargreaves et al., 2001; Hargreaves & Fink, 2006; Sarason, 1996). In other words, teachers must feel motivated by and have a personal commitment to any reform proposal. Schools are not likely to reach goals set hastily, targeting unimportant factors, and/or without teacher participation (Eisner, 2002; Fullan, 2001b; Hargreaves et al., 2001; Sarason, 1996; Sergiovanni, 1995). Unless schools understand potential ways to prioritize their actions and to reallocate limited resources to support teachers, renewal efforts will flounder. In addition, a strong culture that includes relational trust and a "culture of disciplined inquiry and action" (Fullan, 2003, p. 45), rather than a coercive atmosphere enforced by a disciplinarian, is essential for the establishment and sustainability of improved "academic productivity" (Fullan, p. 42).

A major insight to emerge from change efforts throughout the late 1980's and the 1990's is that having a wonderful plan or program does not necessarily equate to

improved student learning (Hatch, 2002). Sarason (1996) and Hargreaves et al. (2001) distinguishe between external changes, such as new schedules, different textbooks, or building improvement, and internal changes in teacher thinking and practice in the classroom. In general, the external changes are easier to implement and cause less friction within a school community (Eisner, 2002). Internal changes, in contrast, place constant responsibility on every teacher, in every situation. Gaining teacher commitment to continuous learning about improved professional practices and to acting on this knowledge year after year is a huge challenge. Some teachers feel enthusiastic, yet are bogged down by too much to do in too little time (Hargreaves & Fink, 2006). Other teachers see no point in "reinventing the wheel," believing that they perform sufficiently well. Without teacher commitment to improving professional practice, student learning will not improve (Darling-Hammond, 1997; Hargreaves et al., 2001; Sarason, 1996). Many of the school change models, such as Success For All (Slavin, 2004) or Effective Schools (March and Peters, 2002), focus on improved student learning. However, in many districts, implementation of these programs has neglected the needs of the teachers. The dismal result has been a year or two of enthusiasm, then a reversion to previous practices due to teacher exhaustion and disillusionment (Hargreaves et al., 2001; Sarason, 1996). Recent school change researchers place much greater emphasis on gaining teacher commitment as the top priority in any change effort (Barth, 2001; Fullan, 2001b; Fullan & Hargreaves, 1996; Hargreaves et al., 2001, Hargreaves & Fink, 2006).

Although many teachers choose to implement current best practices and to strive for improvement, others rely upon past practices of lectures, workbooks, and quizzes (Barth, 2001; Darling-Hammond, 1997). One challenge for successful school improvement efforts is to discover how teachers mentally construct their perceptions of their responsibilities and performance relating to student learning (Hargreaves, 2002, 2004).

A primary means of making sense of our experiences is through construction of stories, which feature ourselves as protagonists, and impose sequences and connections among our experiences and actions (Gabriel, 2000; Weick, 1995; White & Epston, 1989). Our conceptions of ourselves and of our roles and responsibilities are revealed through the stories we tell ourselves and others about our lives (Bartunek, Lacey, and Wood,

1992; Boje, 1991; Gabriel, 2000; Weick, 1995). Therefore, the stories and narratives teachers tell about their professional experiences may reveal personal cognitive schemata and individual perceptions that strongly influence the pedagogical practices of these individuals. Attempts to influence these pedagogical practices are filtered through the cognitive constructs of the individuals. As Fullan (2001) and Weick (1995) pointed out, coherence in one's life is as necessary as coherence in one's organizational experiences. Individual coherence depends on the guiding values and perceptions unique to the person (White & Epston, 1989). This pursuit of individual coherence means that people filter seemingly objective organizational situations through their own perceptions and respond in subjective ways (Weick, 1995; Schon 1987).

Just as excellent teachers adapt pedagogy to accommodate the individual perceptions of learners, school leaders should understand the individual perceptions of teachers and adapt their conceptions and practice of leadership in ways that meet teachers' needs (Sergiovanni, 1990). The flexible and changing nature of a teacher's work requires principal leadership that promotes strong professional judgment and provides opportunities for teachers to develop their own leadership capacity (Hargreaves & Fink, 2006; Sergiovanni, 1990).

Statement of the Problem

Rational change models in the latter part of the twentieth century have largely failed to gain teacher commitment to continuous reflective excellence in pedagogy (Hargreaves et al., 2001; Sergiovanni, 1992). Two major factors contribute to this failure. First, rational planning models radically underestimate the complexity of changes involving independent knowledge workers, such as teachers (Davenport, in Bennis, Spreitzer, & Cummings Eds., 2001). Teaching requires constant decisions and actions by individuals, which means that every teacher must continually choose to uphold the change model or no change will occur in the classrooms (Darling-Hammond, 1997; Sarason, 1996). Second, change initiatives tend to be conceived and implemented by politicians, administrators, and outside experts, few of whom engage teachers in conversations about what teachers think and believe (Barth, 2001; Fullan, 2001; Hargreaves et al., 2001, Hargreaves & Fink, 2006). Rather than conceptualizing teachers

as individuals, each with differing perceptions and needs, teachers tend to be lumped together and treated as groups.

Change initiatives have focused on the plans, structures, and cultures of organizations, with little attention to the needs and perceptions of the individual teachers within the organizations (Hargreaves & Fink, 2006). Although organizational structures and planning have responded to change initiatives, the pedagogy of individual classroom teachers still depends largely on their personal constructions of the role of the teacher and on their individual commitment to promoting student learning through excellence in their own practice (Barth, 2001; Fullan, 2001; Hargreaves et al., 2001; Sarason, 1996).

To discover the professional stories of individual teachers and the perceptions of these teachers as they make sense of their experiences in a climate of change, this study used a qualitative grounded theory approach. Teachers were interviewed using questions to elicit stories and narrative about their work experiences, their actions, and their beliefs. The interview data were analyzed to see what relationships might exist among teacher stories and narrative, teacher pedagogy, school culture and relationships, and teacher responsiveness to change initiatives. Follow-up questions delved deeper into the teachers' thinking and enhanced the researcher's understanding of the contexts.

The theoretical perspective of this study is a grounded theory approach using personal interviews with volunteers. Grounded theory allows exploration of a phenomenon and its component parts to occur without any particular preconceptions about the important variables and influences involved (Strauss & Corbin, 1998. The specific elements of grounded theory followed in this study are those detailed by Strauss and Corbin (1998). In addition, ideas about the transcription and analysis of stories and narrative are contributed by Clandinin and Connelly (2000) from their work with narrative inquiry. Chapter Three details the analytic processes employed in this study.

Purpose of the Study

The purpose of this study is to develop a grounded theory of educational leadership during change that considers the cognitive constructs developed by individual teachers to make sense of their experiences and actions. Through a qualitative analysis of the stories and narrative of individual teachers, this study investigates the sensemaking processes of individual teachers, as revealed through work-related stories and narrative

responses to questions. By understanding the ways in which teachers make sense of their experiences, school leaders can better understand how to adapt change initiatives to support teachers as individuals. Clandinin and Connelly (2000) argued that "Experience happens narratively. Narrative inquiry is a form of narrative experience. Therefore, educational experience should be studied narratively" (p. 19). This study does not use their model of narrative inquiry, but does rely upon story and narrative for insight into teachers' experiences. Narrative provided information about the human interactions and institutional structures that teachers experienced.

One important way to think about the human interactions in a school is by considering the levels of relational trust. Relational trust has emerged as a critical component of improved academic achievement in a school (Bryk & Schneider, 2002). Bryk and Schneider (2002) pointed out that deep listening is one way in which principals demonstrate personal regard and respect for teachers. Therefore, listening to the personally important stories and informal narratives of teachers, rather relying on than impersonal means such as surveys, should help the leader to promote higher relational trust by demonstrating respect and personal regard for others. The leader demonstrates a personal commitment to genuinely understanding the perceptions and experiences of each teacher when he or she listens to the teacher's experiences and insights. In human society, telling and listening to stories has always been a way to share insights, teach lessons, and establish community (Campbell, 1972). Furthermore, a leader can understand the trust relationships teachers have with others in the school community through the way these relationships are related in stories and narratives. The leader can gain insight into the relational trust levels of the organization as a whole (Bryk & Schneider, 2002).

A preponderance of existing change studies have examined organizational dynamics, the role of leaders, and the behavior of teachers as groups. If, however, the individual sensemaking constructs of teachers affect their ability and/or willingness to reflect on their own practice, to continually pursue excellence in pedagogy, and to engage in change efforts, then the conclusions of past studies based on organizational traits and conceptions of teachers as groups with similar needs may be incomplete. Recent studies by Andy Hargreaves and his colleagues explored the perceptions of individual teachers through teacher interviews. This grounded theory takes a similar approach and

investigates whether attending to the constructed interpretations of personal experiences by teachers, as revealed in stories and narrative, can give a leader insight into an individual's commitment to pedagogical excellence, ability to self-reflect, and willingness to engage in change initiatives.

Research Questions

Strauss and Corbin (1998), referring to grounded theory studies, stated that "The research question in a qualitative study is a statement that identifies the phenomenon to be studied. It tells the readers what the researcher specifically wants to know about this subject" (p. 40). They recommended asking a central question that begins broadly and "becomes progressively narrowed and more focused during the research process as concepts and their relationships are discovered" (p. 41). One broad central question developed through the course of this study:

Central Question

How do teachers make sense of the complex personal and organizational influences affecting their individual classroom practice, especially when implementing reforms targeting student learning?

The intent of the central question is to explore teacher sensemaking processes in the context of pedagogical reform. The focus of the central question allowed saturation of the relevant categories and helped focus the research process on predominant aspects of teachers' professional lives. Those aspects that were repeatedly brought up by teachers as critical considerations in their thinking and actions, which are the building blocks of sensemaking, were included in the scope of the question.

In addition, because the literature on school change suggests important areas to attend to when considering teacher sensemaking, this study also includes three subquestions. Each subquestion provides structure to the analysis in this study, so that any insights into these areas are explicitly explored. The subquestions examine the subjective judgments of teachers regarding the quality of their professional lives, teachers' integration of artistic and rational elements in their professional practice, and elements of relational trust found in the teachers' experiences and school cultures. The source material for each question is noted here and explicated in Chapter 3 under the subquestion rationale.

Subquestions

- What aspects of their professional lives in the context of change initiatives do
 individual teachers experience as the greatest supports and hindrances to reflectively
 adjusting their classroom practice and pedagogy to promote student learning?
 (Hargreaves et al., 2001; Hargreaves & Fink, 2006; Hargreaves, 2004)
- 2. What do teachers reveal about their engagement in Schon's (1987) elements of professional practice, including the "art of problem framing," the "art of implementation," the "art of improvisation," (p. 13) and the mediation these artistic elements provide to teacher use of applied science and technique?
- 3. What levels and dimensions of relational trust, defined by Bryk and Schneider (2002) as being a "dynamic interplay among four considerations: respect, competence, personal regard for others, and integrity" (p. 23), are apparent in each teacher's relationships with the principal, other teachers, students, and parents? (Hargreaves, 2002)

Definition of Terms

The following definitions clarify how this study uses each term. Origins of definitions from the foundational literature are discussed and limitations set on the use(s) appropriate to this context.

Attribute (v.). "To ascribe; to impute; to consider as belonging to or as due to a person or thing; to assign; to credit; to assume to be caused by, or created by, a person or thing" (New Webster's Dictionary, 1981, p. 65).

Attribution (n.) "The act of attributing; that which is ascribed" (New Webster's Dictionary, 1981, p. 65).

Change initiatives. Purposeful processes employed by schools to implement changes in school practice, culture, and structure. These initiatives may originate nationally, at the state level, locally, or within a particular school. They may be forced upon teachers by those in authority, or they may originate with the teachers, or they may have some combination of the two. In this study, only schools participating in change initiatives focused on improved teacher pedagogy and assessment will be included.

Commitment. "The act of committing, pledging, obligating, or engaging oneself" (New Webster's Dictionary, 1981, p. 203); The state of being bound emotionally or

intellectually to a course of action or to another person or persons (American Heritage Dictionary). These two definitions offer insight into the meaning given to "commitment." Commitment, as used in this study, entails obligating and engaging oneself emotionally, intellectually, and practically to excellence in one's own professional performance in the classroom and in the larger school environment.

Construct (n.) "The result of intellectual perception and consideration of things and ideas received through the senses" (New Webster's Dictionary, 1981, p. 218). In this study "constructs" include the poetic tropes and other intellectual entities created by thinkers, stories created by teachers, and categories applied to these stories during research. All of these elements spring from the application of the intellect to experiences and ideas received through the senses.

Construct (v.t.). "To form by putting together parts; build; frame; devise" (New Webster's Dictionary, 1981, p. 218). Stories, leadership concepts, literary concepts, and research categories all are framed or devised through the putting together of parts into a unified idea.

Context. "The surrounding environment, circumstances, or facts which help give a total picture of something" (New Webster's Dictionary, 1981, p. 220). This definition applies to the daily world the teachers inhabit and to the contextual conditions influencing the phenomena in the axial coding phase.

Narrative. In this study, narrative is distinguished from story by structure rather than by content. Narrative, within this study, refers to aspects of teachers' experiences and thoughts that they relate to the researcher as part of an interactive questioning and discussion. It is grounded in the teachers' experiences and perceptions; it includes temporal, emotional, and psychological influences, as do stories, but it lacks the sequential structure, artistic rendering, and finite boundaries inherent in a story.

Pedagogy. "The function, work, or art of a teacher; the profession or science of teaching" (New Webster's Dictionary, 1981, p. 698). For the purposes of this study, pedagogy includes the instructional and assessment practices of teachers. Newmann and Associates (1996) include instruction and assessment in their standards for authentic pedagogy. This study does not address the authenticity of pedagogy, but will make use of their categorizations of activities within the parameters of the term "pedagogy."

Professional learning communities: "Organized professional study opportunities for teachers, within the context of the school, and shared with other teachers in the school" (Newmann and Wehlage, 1995). These opportunities may focus on individual teacher choice in the learning process, or may carry a greater community emphasis as the focus of the learning opportunities.

Reflection. "Attentive or continued consideration, contemplation, or meditation; the conclusion or thought resulting from such meditating . . ." (New Webster's Dictionary, 1981, p. 805). In this study, reflection will refer to a teacher's thoughtfulness regarding her professional life and pedagogy.

Reflective. "Resulting from reflection; given to extended contemplation" (New Webster's Dictionary, 1981, p. 805). A reflective practitioner is one who uses reflection and extended contemplation as part of her professional thinking.

Relationships. The connections between people, between people and their organizations, and between organizations are all important to this study. These connections can be formal, informal, emotional, psychological, physical, or theoretical. All potential connections should be included in this definition, even if they are not explicitly stated here. Unforeseen connections may surface during the study pertaining to relationship.

Relational trust. Relational trust, in this study, will be defined as Bryk and Schneider (2002) conceptualize it:

At its most basic (intrapersonal) level, relational trust is rooted in a complex cognitive activity of discerning the intentions of others. These discernments occur within a set of role relations (interpersonal level) that are formed both by the institutional structure of schooling and by the particularities of an individual school community, with its own culture, history, and local understandings. . . Relational trust . . . is appropriately viewed as an organizational property in that its constitutive elements are socially defined in the reciprocal exchanges among participants in a school community, and its presence (or absence) has important consequences for the functioning of the school and its capacity to engage fundamental change. . . . we posit a dynamic interplay among four considerations: respect, competence, personal regard for others, and integrity. (pp. 22-23)

Responsible. "Accountable for discharge of duty or trust; involving responsibility; capable of making ethical and moral decisions; able to answer for one's behavior; . . . reliable, trustworthy" (New Webster's Dictionary, 1981, p. 818).

Responsibility. "[A] trust, obligation, or duty" (New Webster's Dictionary, 1981, p. 818).

School culture. Culture includes the shared values and emotional support systems within a school. According to Sergiovanni (1995) culture "includes values, symbols, beliefs, and shared meanings of parents, students, teachers, and others conceived as a group or a community." (p. 89)

Sensemaking. Weick (1995; 2001) is the source for this study's conception of sensemaking. The premise behind sensemaking is that the world is only partly knowable and partly predictable and that people must make choices and act, based on their current interpretations of reality. Sensemaking includes the development of "cognitive maps of [the] environment" (1995, p. 5); deciding which parts of a situation we will attend to and the contextual frame of reference we apply; the reconstruction of the events and meaning of past actions to fit present situations and to justify present decisions; acting on our creation of a wider reality; and reading into our situations "patterns of significant meaning" (Weick, 1995, p.14).

Story. This study relies on Gabriel (2000) for a definition of story. He defines stories:

... in the narrow sense of narratives with simple but resonant plots and characters, involving narrative skill, entailing risk, and aiming to entertain, persuade, and win over. . . . stories . . . represent facts-as-experience for both tellers and listeners make no secret of their purpose to use facts as poetic material, moulding them, twisting, them, and embellishing them for effect (pp. 22-29).

Teacher perceptions. Teachers' own views about themselves, their students, their work environment, and others with whom they work. These will be obtained through the teachers' own stories and narrative responses.

Rationale for Participant Selection

Delimitations

The purposeful selection of subjects for this study is a delimitation. Subjects were selected because they taught in a school that was targeting teacher pedagogy as a focus of reform efforts. The most important and most difficult aspect of school change is to improve the practice and commitment of the individual teachers. Therefore, this study elicited input from teachers who were addressing changes in their practice as part of school reform. Other facets of reform, such as scheduling, standardized testing, and logistics are relevant to this study as individual teachers experienced them in relation to personal pedagogical sensemaking.

A second delimitation is that the schools under consideration were elementary schools in western Montana. In order for the researcher to have access to the teachers selected, they had to be within a four hour travel radius. Western Montana schools are under the same requirements and guidelines for school reform as are schools elsewhere in Montana, and provided a sample of schools and teachers that met the purposes of this study.

A third delimitation is the longevity of the teachers involved. Teachers in their first three years of teaching were excluded. They may feel pressures associated with gaining tenure, learning the initial complexities of the job, and being relatively new to their school communities. These influences would have been difficult to differentiate from the effects of an environment of change.

Limitations

A possible limitation of the study is whether stories and narrative are sufficient means for conveying the full perceptions of the individual teachers. For example, teachers may have chosen to focus on the exceptional or the disastrous, rather than on the typical or the positive. The researcher had to exercise care not to cue particular attitudes within stories and narrative through the questions or through conversation with the subjects. One way the researcher attempted to ameliorate the impact of this limitation was by collecting multiple responses from each individual interviewed. This provided a "body of work" from each subject that delved more completely into each subject's perceptions. A second way depth was added to the responses was to ask follow-up

questions to clarify the context, thinking, and related impacts. Chapter Three delineates a series of follow-up questions that address this concern.

Significance of the Study

This research sought important insights into the individual perceptions of teachers regarding their pedagogy and their participation in school change initiatives. Because the actions of individual teachers in their classrooms determine the success of any school, understanding the perceptions underlying these actions is crucial for school leaders hoping to sustain or attain high levels of student learning. Teachers' individual perceptions shape their responses to change. An important way perceptions are communicated among people is through story and narrative. Understanding possible clues about what perceptions the individual teacher holds would help the leader formulate an appropriate individualized response to that teacher.

By asking teachers for their own stories, this study examined what teachers believe is important in their lives at school. Many theorists postulate what will motivate teachers to perform better, but as Bartunek, Lacey, and Wood (1992) pointed out, "... organizational members' implicit schemata on many topics are unlikely to be synonymous with academics' published theories ..." (p. 206). Therefore, the perceptions revealed through the teachers' own stories provide further exploration of theories about teacher commitment to reflective excellence in pedagogy and about teacher responses to change initiatives. In his analyses of teacher interviews, Hargreaves (1994, 2003) explored the influences of the postmodern condition and the knowledge society on the working lives of teachers. His conceptions of the postmodern conditions under which teachers work are similar to those of others who are researching school change (Fullan, 2001a; Sergiovanni, 1992; Weick, 1995).

The postmodern perspective holds that individual reality is a series of unpredictable, chaotic, and loosely-related actions and experiences (Weick, 1995). Schon (1987) explored ways in which individuals frame the aspects of the larger messy reality to which they attend and respond, in an attempt to create a more orderly reality for themselves. Whatever one's philosophical stance might be about the orderliness of life, each of us engages in personal sensemaking activities to help us determine what actions we should take now (Weick, 1995; Fullan, 2001b). A limitation of current leadership and

change models is that they underestimate the impact on the organization of the individual sensemaking activities of their members (Hargreaves, 1994; Sergiovanni, 1992). This study explores a relatively easy way to discover and consider the voices and perceptions of the individual teachers. Stories and narratives abound in every organization.

Emerging models of leadership emphasize the ability of an effective leader to establish distributed leadership, rooted in relational trust and in a complex understanding of the individual needs of school community members (Fullan, 2003; Hargreaves & Fink, 2006). Principals must have technical knowledge, broad and deep understanding of change processes and of sustainability factors, and the will to work toward improvement based on the realities of the situation. As Fullan (2005) pointed out, schools face many "adaptive challenges" (p. 53) to which we do not know the solutions. "Put another way, adaptive challenges require the deep participation of the people with the problem; that is why it is more complex and why it requires more sophisticated leadership" (p. 53). His premise was that "sustainability is very much a matter of changes in culture: powerful strategies that enable people to question and alter certain values and beliefs as they create new forms of learning within and between schools, and across levels of the system" (p. 60). Understanding the stories and narratives teachers relate illustrating their interpretations of their experiences in the school will help a principal better understand effective ways to work with each teacher in pursuit of a school culture dedicated to improved student learning.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

The first section of this review of related literature examines school change. Focuses include the current atmosphere, types of change initiatives, teacher commitment and the pedagogy needed to effect authentic student learning. The second section contrasts rational planning models with sensemaking actions, discussing the relationship of each to the behavior of individual teachers. The third section discusses the psychological construction of meaning and story. It also discusses why analysis of individual teachers' stories may offer insights into their unique interpretations of meaning in life, personal reflective capacity, pedagogical practice, and willingness to commit to change initiatives. The fourth and final section addresses connections with leadership, specifically the nature of effective principal leadership, coherence in principal leadership, the influences of relational trust in schools, and the recognition by leadership of the value of teacher experience.

The review of the literature for this study draws from a variety of sources. The literature in educational leadership addressing school change, particularly current pressures for change, problems with past models, and the roles of leaders and teachers in change efforts, provides the background for the problem addressed in this study. This literature points out that the pedagogy of individual teachers in their classrooms is the most important factor influencing student learning. However, this literature also illuminates the subordination of the individual teacher voice in change efforts to date. Therein lies the major problem with educational change: Teachers must practice reflective pedagogical excellence if student learning is improve, yet teachers have been treated largely as people TO whom change is done, rather than BY whom change is done (Hargreaves & Fink, 2006).

In order to elicit the authentic individual teacher voice regarding pedagogy and school change, literature from cognitive and social psychology is included in this study to augment the ideas in the leadership literature. Cognitive psychologists work with individuals to discover the cognitive patterns guiding their thinking and behavior. A primary way to access a person's thinking patterns is through listening to the stories she

or he constructs about her or his experiences. Individuals tend to store their life experiences as mental stories, complete with plots, characters, conflicts, and moral themes. Social psychologists consider the interweaving of many individuals' actions and stories as they participate in on-going sensemaking efforts in relation to one another. In social situations, people use story to communicate what sense they have made of a particular situation or incident.

Business and organizational theorists have keyed in on these conceptions of storytelling and story in two main ways. The first is using storytelling as a way for leaders and managers to influence the behavior and perceptions of subordinates. The term "subordinate" is selected here for the passive connotations it carries. This conception of storytelling dismisses the value of the stories of individuals as insights needed by the organization and instead promotes types of stories managers can tell to influence the behavior of subordinates. Some theoretical perspective and the exclusion of manipulative uses of story as a focus in this study were gained from this review of the literature. The second use of story in organizations, more similar to the use of story in this study, is listening to the stories of individuals to gain insights into organizational culture and employee perceptions of the organization (Clandinin & Connelly, 1999, 2000; Cziarnawska-Jorges, 1998; Gabriel, 2000; Weick, 1995, 2001). Researchers in this area draw heavily from the work of cognitive psychologists to frame what is meant by story and how to analyze story. This literature contributed the analytic framework for eliciting meaning from stories and narratives.

The final body of literature consulted was literary theory, including post-modern and reader-response theorists. Michel Foucault and Jacques Derrida, post-modern critics, were referenced by many of those who wanted to elicit meaning from individuals' stories. The postmodern theorists examined the possible and potential meanings of language, as well as the impossibility of two people having identical meanings. Reader-response theorist Louise Rosenblatt (1978) regarded every story as a construct which exists abstractly between the text produced by the narrator and the meaning received by the listener. These literary theorists laid theoretical groundwork for evaluating stories as interactive constructs through which meaning is made and communicated by individuals.

School Change and Teachers

Aspects of Change Initiatives that Influence Teacher Commitment

Schools today confront pressures for change, ranging from national accountability and testing policies, to state school improvement laws, to local community desires. Ignoring these pressures is not an option. However, not all demands made on schools are likely to lead to real improvement in student learning, leaving schools in a difficult position as they attempt to discern what will improve student learning in their unique situation. Each school must find effective and efficient ways to utilize limited human and technical resources to accomplish meaningful change while meeting external requirements.

Change theorists and school renewal researchers have studied decades of school change, illuminating factors schools must take into consideration as they approach the change process. The big picture is becoming clearer all the time. Less clear is which specific factors are perceived by those undertaking change efforts as the primary influences on their commitment to making the effort to change. Schools need insight into both aspects of change: they must understand the complexities of the big picture, while focusing initial efforts on eliciting self-reflective commitment from the members of the school community (Fullan, 1992, 2001, 2005; Newmann & Associates, 1996). Of this community, it is most crucial to gain commitment from the teachers, because they create the academic and affective environments within which students learn (Darling-Hammond, 1997; Newmann & Associates, 1996).

A pitfall to avoid is the hyper-rationalization of the change process into a series of steps designed for use by all schools (Fullan, 2001a). Given the complexity of school systems and the variations of individuals within and between systems, no one approach can serve in all situations. Even in large scale reform efforts, such as England has undertaken since 1997, in which similar expectations have been placed on all schools, the sustainability of the reform depends upon balancing accountability with professional autonomy (Fullan et al., 2001). No one approach is likely to succeed with all individual teachers in a single school, because their individual experiences temper their understanding and decisions (Schon, 1987). However, professional learning communities, collaborative opportunities, and attention to supporting teachers during their learning

processes are flexible strategies that address needs specific to the teacher and the school (Fullan, 2003; Hargreaves, 2003). These strategies respond to individual needs and provide autonomy within the school context (Fullan, 2003). Teacher autonomy is proving to be a critical factor in securing teacher commitment to change efforts.

Change efforts must prioritize ways to secure teacher commitment to the change processes. Teachers must believe that the change will benefit themselves and their students before they will agree to invest time and energy (Hargreaves et al, 2001). Barth (2001) pointed out that teachers face a "crucial choice" (p. 116) between limiting their efforts to their own classrooms or expanding them into the larger school community. He examined the benefits of each choice:

Teachers who choose to confine their work as educators to the classroom *win*. They have more time and energy to devote to their teaching, to each of their students, and to their responsibilities outside of school. They are less susceptible to interpersonal conflicts with other teachers and with the principal. . . .

Other teachers . . . choose to expand their contribution to the school by assuming responsibility . . . for some of the issues integral to the health and character of the entire school. By participating in the larger arena, these teachers *lose* what the larger group wins: time, energy, freedom from interpersonal hassle, and immunity from public criticism for efforts that might fail. And they probably

lose, as well, a measure of sanity in their days at school and at home. (p. 116-117)

We can see that the detractors for working on behalf of the larger school community are significant barriers to gaining teacher commitment to change efforts. Teachers tend to feel overloaded and pulled in too many directions.

However, adult motivation and commitment spring from factors that can work on behalf of change initiatives targeting student learning. As Darling-Hammond (1997) pointed out:

... businesses and schools that are becoming learning organizations are operating from the same principles about human performance and motivation that psychologists have affirmed for decades: that most people are motivated much more by the opportunity to make a difference and the satisfaction of doing well than by extrinsic rewards and sanctions, that

information about performance and outcomes enhances learning, that a sense of efficacy grows when people are able to control and influence their work, and that collaboration improves performance. (p. 151)

This perspective brings hope to efforts to engage teachers in improving their performance, because teachers will experience added expertise, collaboration, and decision-making as intrinsic motivators (Cohen, 2002).

Fullan (2001a) emphasized the importance of finding intrinsic motivators as the primary means for securing teacher commitment. He used the term "strange attractors" to describe "experiences or forces that attract the energies and commitment of employees. . . Think of a strange attractor as a series of experiences that will galvanize (attract) the deep energies and commitment of the organization members to make desirable things happen" (p. 115). Sustained efforts require internal "deep energies and commitment" (p. 115). External pressure can force compliance, perhaps even cause followers to join a charismatic leader (Fullan, 2001a), but does not become part of the fabric of the people involved, as does internal commitment.

Teacher motivation cannot be coerced from above, nor foisted on teachers by others:

... teachers' commitment to any particular change, and not just change in general, is at the core of successful implementation. A common administrative and legislative delusion and conceit is that reform can be imposed, even forced, on teachers, without any regard for their values or inclusion of their voice. Historically, this pattern of forced implementation has enjoyed little or no success. Reviewing the impact of numerous innovations in education over many decades, McLaughlin (1990) concludes that "you cannot mandate what matters to effective practice" (Fullan, 2001a, p. 128).

Clearly this sort of mandate will exacerbate fragmentation and may instigate what Sarason (1996) called "covert behavior," in which "teachers who disagree with decisions complain in private and ignore the decisions in practice" (p. 352). Rather, teachers must decide individually and together "what matters" and place this at the core of their change efforts.

School Culture and Its Influences on Teacher Commitment

All of us respond in powerful ways to the culture surrounding us. As Fullan and others made clear, teachers are no exception. Cohen (2002) made a strong case for school culture as an essential component in creating the internal commitment to excellence teachers need to perform well:

Any teacher who has spent more than a decade in the profession has already intuited what school reformers haven't gleaned in a century of tinkering: lasting and meaningful change doesn't come from fiats, whether external or internal. It doesn't have anything to do with long blocks or short blocks, cooperative learning or direct instruction. It has to do with how an individual teacher feels about his or her work and how the school perceives that teacher. If the teacher is perceived as a hero, the school will flourish. If the teacher is perceived as a pain in the ass, the school is going downhill – long blocks, cooperative learning, and all. For a school to be an intellectual center, for it to have the ethos, the sense of community, and the "spirit" that so many parents and administrators seek, it must celebrate the work of its teachers in a way that is rarely seen in public schools. It must attend to the needs of the teachers, it must accommodate their sensibilities, and it must treat teachers' contributions with as much concern as it does those of any other constituency – maybe more. (pp. 532-533)

Cohen (2002) pointed out that when schools value teacher professional performance and attend to teachers' needs, schools "flourish." Obtaining high levels of performance from any person requires that the individual feel valued for her contributions and supported in her attempts to make the contributions.

Schools communicate their values and beliefs about teacher professional performance through such factors as the organizational stories shared, supervisory practices, professional development programs, and the content of memos, handbooks, and meetings. Relationships among administrators and teachers also influence the perceptions teachers have of whether they are valued as contributing professionals, trusted by others to make sound professional decisions (Cohen, 2002; Eisner, 2002; Fullan, 2001b). Bryk and Schneider (2002) have researched the degree to which relational trust in schools influences the effectiveness of attempted reforms. They have

found that schools in Chicago with strong positive trust levels showed more improvement in reading and mathematics than those with weaker trust reports. Schools with consistently weak trust reports were unlikely to show any improvement over the course of their study.

Bryk and Schneider (2002) theorized four main reasons why relational trust contributes substantially to positive results in student academic performance. First, teachers feel less vulnerable in the environment of uncertainty. Second, adults in the organization work together more effectively to frame and solve problems. Third, teachers are influenced by organizational norms that promote a strong work ethic, while still feeling mutual support for and autonomy in their individual efforts. Finally, people feel a stronger personal attachment to the organization and are more committed to accomplishing the mission; they "are more willing to give extra effort even when the work is hard" (pp. 116-117). Environments of higher trust are more likely to develop professional learning communities, an important factor in school capacity (Fullan et al., 2001; Newmann, King, & Youngs, 2000).

Teachers who feel empowered to make crucial decisions regarding their jobs are more likely to feel committed to holding themselves to a high standard of professional performance (Glickman, 1998; Hargreaves et al., 2001; Hargreaves, 2003). Fullan et al. (2001) found that sustainable change depends partly on how valued professionals feel in the context of change efforts. When reform becomes a situation in which teachers experience pressure, but lack technical and personal support, they are likely to withdraw. High teacher turnover, teachers leaving the field, and early retirements have been consequences of directive reform models that rely heavily on accountability measures. Fullan et.al. (2001) cautioned that ". . . accountability must be balanced by professional autonomy" (p. 10). The challenge schools face is how to support teacher autonomy, within a "schoolwide professional community" while gaining "program coherence" that provides "organizational integration" (Newmann, King, & Youngs, 2000, p. 3).

Rational Planning Models versus Sensemaking Actions

Problems with Rational Planning Models

In *Educating the Reflective Practitioner*, Schon (1987) directly addressed the conflicts professionals face when attempting to solve the "messy, indeterminate

situations" (p. 4) inherent in "real-world practice" (p. 4). The idea of employing technical knowledge to resolve problems is persuasive, and underlies many of our society's attempts to reform schools. According to Schon, "Technical rationality holds that practitioners are instrumental problem solvers who select technical means best suited to particular purposes. Rigorous professional practitioners solve well-formed instrumental problems by applying theory and technique derived from systematic, preferably scientific knowledge" (pp. 3-4). This mindset is apparent in direct instruction models and in federal directives regarding school reform.

However, the "swampy" (Schon, 1987, p. 3) nature of reality undermines attempts to apply clean technical solutions. As Schon pointed out, the professional first has to determine what the problem is that must be solved. During problem construction, the practitioner

chooses and names the things he will notice . . . Through complementary acts of naming and framing, the practitioner selects things for attention and organizes them, guided by an appreciation of the situation that gives coherence and sets a direction for action. (p. 4)

Problem construction, then, is a personal activity. Its efficacy depends upon the insights and abilities of the individual practitioner, not on the abstract body of technical knowledge that can be employed once the problem is delineated. Individuals can join together to collaboratively address a problem, but the scale has to be local and particular. Attempts to define problems nationally lose efficacy because they attend to broad commonalities rather than to specific attributes in a particular situation.

A further difficulty with the use of "technical rationality" as a guiding mindset is that many problems defined by practitioners have elements unique to the situation. Schon (1987) elaborated on the sensemaking process an individual must employ to address the unique case:

Because the unique case falls outside the categories of existing theory and technique, the practitioner cannot treat it as an instrumental problem to be solved by applying one of the rules in her store of professional knowledge. The case is not "in the book." If she is to deal with it competently, she must do so by a kind

of improvisation, inventing and testing in the situation strategies of her own devising. (p. 5)

The principle behind Schon's analysis of the demands on the individual practitioner also holds true for the demands on schools in this era of reform. Schools must recognize, in any reform efforts, the necessity for daily improvisation and adaptation by teachers as they confront the complexities of student learning. In addition, state and federal policies must recognize the need for individual schools to improvise and adapt as necessary to confront their unique circumstances.

Obviously, schools should not reject the body of technical knowledge available to them. Solutions should make rational sense for the problems as defined by those in the school. However, the tendency to treat all schools as having identical problems, demanding identical solutions, undermines effective reform (Fullan, 2001a). An illusion of action and reform replaces genuine attention to actual specific problems experienced by particular schools when state and federal policies are grounded in the application of rational planning models to the exclusion of school and teacher autonomy.

Rather than being static identical entities, schools have been conceptualized as "living systems" (Fullan, 2001a, p.108). This concept of organizations as living systems identifies equilibrium as a dangerous state for a living system, because it responds less quickly to changes. The lack of response places it at risk. However, a living system responds to serious threats or opportunities through experimentation, opening new possibilities. This response can't be directed in a particular direction, because the experimentation is unpredictable. However, from the edge of chaos, the living system self-organizes and new repertoires of action emerge (Fullan, 2001a).

Conceptualizing schools as responsive, yet unpredictable, systems of individual living beings illuminates why schools are such complex organizations. They have identity as a whole entity, but within the larger entity thrive people, who are the components of the school system. These people behave in unpredictable ways when threatened or attracted in new directions, and their actions move closer to chaos. Some individuals may wish to retain equilibrium, while others may enjoy extreme risk (Fullan, 2001a). However, this is also the strength of a living organization, because experimentation leads to new forms of organization created by the members of the

system. Due to its internal diversity, the path this living system takes cannot be predicted or directed; one must consider known aspects of the living system and attempt to disturb it in ways that may potentially lead to desired outcomes (Fullan, 2001a).

Because of the complexity inherent in schools, change in school systems requires complex understandings by change agents. Many reform efforts underestimate the difficulties inherent in change, operating from a rational systems model that imposes regulations and criteria, assuming that people will behave and participate in ways expected by the plans (Fullan, 2001; Hargreaves, 1994, 2003; Hargreaves et al., 2001; Hargreaves & Fink, 2006; Sergiovanni, 1992; Schon, 1987). Bernhart (2001) included important priorities in her model for "The Big Picture of Continuous School Improvement" yet assumed that staff commitment to change can be readily obtained. Commitment was her second step, upon which everything depends, and yet the materials she provided for creating commitment were framed in the perspective of one and two day staff sessions. Fullan (2001a), in contrast, created a complex web of conditions necessary for obtaining commitment, which he framed as a desirable, yet elusive, quest. Individuals have differing perceptions and needs, which cannot be adequately addressed in a two day session that merely introduces the reforms in which people are required to participate (Hargreaves & Fink, 2003; Newmann, King, & Youngs, 2000). Commitment is not a verbal agreement to cooperate with someone else's ideas. Rather, it is the intrinsic desire of those involved to effect changes they perceive as crucial (Bryk & Schneider, 2002; Darling-Hammond, 1997; Sergiovanni, 1992). Creating opportunities for individuals to contribute to setting the problem and its solutions and addressing these needs through the creation of professional learning communities takes longer and is more complicated (Fullan, 2001a; Hargreaves et al., 2002). However, the probability of sustainable change is improved. Improvement of conditions for teachers responsible for implementing the changes is also a critical element neglected in many packaged reform models (Fullan, 2003).

One of the most important conditions under which teachers work is the conceptualization of time. Hargreaves (1994) in his studies of time in schools, noted that elementary school teachers overwhelmingly operate from what he called a "polychronic" (p.104) time frame, in which many demands must be attended to at once. It includes

"high sensitivity to unpredictabilities and particularities of context, to the importance of interpersonal relationships, and to the successful completion of the tasks-in-hand" (p.104). An important facet of polychronic time orientation is emphasis on the quality with which a task is accomplished. For a teacher, attending to quality completion of a multitude of tasks on a daily basis, in an environment of complex interpersonal relationships, polychronic time orientation is inherent within the work environment.

In contrast, school administrators often operate from a "monochronic" (Hargreaves, 1994, p.102) time frame, which assumes "linear progression through a set of discrete stages" (p.102). In this perception of time, "It is the schedule and its successful completion that have priority . . . the completion of tasks, schedules, and procedures predominates over the cultivation of relationships with people (p. 102). He equated this with a tendency to rigidly push through change without regard for context and relationships. The emphasis is on the appearance of change proceeding as planned rather than on the quality and character of the change. Hargreaves noted that the more technical-rational monochronic time frame is found more often among men than women. Furthermore, it is privileged in leadership literature as the real way in which time works. In schools, the concept of monochronic time is a critical element in administrative control of teachers' work and of curriculum implementation (Hargreaves, 1994).

One can see that some of the time pressure teachers experience may originate in the differing conceptualizations of how time works. Other pressures originate within the technical-rational model of time, in terms of the scheduling of time. Overwhelmingly, teacher time is scheduled as student contact time (Hargreaves, 1994). Making scheduled time available outside the classroom for collaboration, curriculum development, and preparations would help teachers. Hargreaves also pointed out, however, that sometimes the time made available is contextually difficult for teachers to use in the designated way, given other influences in their complex day. Rather than simplifying the teacher's day, it becomes one more thing to fit into an already full schedule. He called this process "intensification" and defined it as "a bureaucratically driven escalation of pressures, expectations and controls concerning what teachers do and how much they should do within the school day" (p.108).

In an attempt to streamline change efforts, those at top levels of bureaucracy may attempt to create "clarity at the top" (Fullan, 1996, p. 2), perceiving this as a way to create predictable systemic change. However, what seems manageable from the perspective of a planner may in fact have adverse impacts on teachers expected to implement the changes:

Finally and ironically, innovations as solutions exacerbate the overload problem.

As if adding insult to injury, fragmented solutions, faddism, and other bandwagon shifts, massive multi-faceted, unwieldy reform all drive the teacher downward.

The solution becomes the problem. Innovations are not making the teacher's job more manageable. They are making it worse. (Fullan & Hargreaves, 1996, p. 34)

As Sarason (1996) explained, teachers cope with overload and fragmentation by paying lip service to superiors, then going into their rooms, shutting their doors, and doing what they want to. Donahoe (1993) summarized the dilemma:

The traditional school organization minimizes collective, collegial behavior on the part of teachers. It maximizes two conflicting behaviors. It leads to bureaucratic, rule-prone direction from the top, since the school is not set up to determine its own direction and rules, but then it creates autonomous teachers who, behind their classroom doors, can readily ignore much of the top-down direction. (p. 2)

Rational planning models, in general, seem to have undermined the desires and abilities of individual teachers to work toward reflective excellence in pedagogy. These models have underestimated the power of chaos in organizations, the divergence of individual needs and values, and the unpredictability of the consequences of our actions.

Sensemaking Actions as an Alternative Perspective

In contrast to the orderly universe assumed by rational planning models, Weick (2001, in Bennis, Spreitzer, & Cummings, Eds.) applied the concept of sensemaking to . . . a world that is partly unknowable and unpredictable. It is a world into which people have been thrown. By thrown, I mean that people can't avoid acting, can't step back and reflect on their actions, can't predict the effects of their actions, have no choice but to deal with interpretations whose correctness cannot be settled once and for all, and they can't remain silent. Anything they say shapes both events and themselves. These are the givens that shape sensemaking. (p. 92)

The contrast with rational planning is clear. Rational planning assumes that actions are based on deliberation of foreseeable consequences. It ignores the possibility that actions may have unexpected influences on events and people.

Weick (1995) explored the conceptual development of the construct of sensemaking from ideas present in ethnographic methodology and cognitive dissonance theory (p. 12). He detailed the sources from which he had drawn his conception of sensemaking, some of whom are presented here. One use of the term, by Starbuck, Milliken, Westley, and Louis, focused "on the placement of stimuli into frameworks" (as cited in Weick, 1995, p. 5). Most, however, view sensemaking as a complex interaction of individuals' cognitive structures with events and actions. Thomas, Clark, and Gioia "describe sensemaking as 'the reciprocal interaction of information seeking, meaning ascription, and action" (as cited in Weick, p. 5). Sensemaking, according to Ring and Rands (1989, as cited in Weick, 1995), also included the process "in which individuals develop cognitive maps of their environment' (p. 342)" (p. 5). An interesting aspect of sensemaking, pointed out by Louis and discussed by Weick, is that we apply it retroactively to experiences discrepant from our preconceptions. We reflect on the surprise and assign meaning to it after the fact (Weick, 1995, p. 4). These diverse sources are included here to help readers of this research understand the origins of Weick's thinking.

While sensemaking includes interpretation, as in the above examples, it goes beyond interpretation of experience and addresses our individual "authoring" of situations. Schon (1987) explained this concept in the context of a professional practitioner. "Through complementary acts of naming and framing, the practitioner selects things for attention and organizes them, guided by an appreciation of the situation that gives it coherence and sets a direction for action" (p.4). Schon's example illustrates the creative authoring process through which we decide the nature of the reality with which we choose to work. Some aspects of objective reality are included, others are not.

Weick's (1995) view of sensemaking also drew on work Garfinkel did in the 1960's with jurors. Garfinkel discovered that jurors arrived at their decision first, then went back and assigned a "legitimate history" of events to justify the decision (pp. 10-11). Cognitive dissonance theory also emphasizes the idea that "outcomes develop prior

definitions of the situation" (p. 11). If a decision has negative consequences, such as the loss of one set of benefits while gaining a different set of benefits,

... people may feel anxious and agitated (dissonance). To reduce dissonance, people 'spread' the alternatives by enhancing the positive features of the chosen alternative and the negative features of the unchosen alternatives. These operations retrospectively alter the meaning of the decision, the nature of the alternatives, and the "history" of the decision in a manner reminiscent of Garfinkel's jurors. (p. 11)

People reconstruct the events and meanings of past actions to fit their present situations and to justify present decisions. This reconstructive process influences the individuals within an organization differently, depending on their relationships to various situations. Perhaps the organizational culture also reconstructs the past to be more consonant with the present.

The examples clarify the active nature of sensemaking as a process through which we author our versions of reality. The concrete world exists separately from this internal reality. However, for individuals, meaning and truth spring from the active processes through which they read patterns of significant meaning into their reality (Sergiovanni, 1992; Weick, 1995). Thus, their perceptions of the wider reality are filtered through the patterns of meaning that define their own relationships to the wider reality (Weick, 1995). Although people seek "rationality" through their sensemaking processes, these processes are inevitably subjective. People engage in this process for two main reasons: first, so others will think they act competently and have good reasons for their actions, and second, to reduce internal dissonance between personal perceptions and actual events (Schon, 1987; Weick, 1995; White & Epston, 1989).

Sensemaking is the daily guide to human behavior in an unpredictable and chaotic world. Educational leaders confront schools filled with hundreds of individuals, each of whom perceives and experiences the current reality differently. In addition, each of these individuals will construe subsequent events in a manner that brings these events into coherence with their personal current and past actions. Rational planning models posit an objective, shared reality that will function in predictable ways. Sensemaking reveals to us, however, that each person constructs reality and acts upon this construction, not upon

someone else's imagined structure. If we wish to gain insights into why a school or a teacher functions in a particular way, we need to understand the sensemaking activities of the individuals within the organization.

Bartunek, Lacey, and Wood (1992) examined how change initiatives interact with the sensemaking processes of individuals and organizations. From a social cognition perspective, individual sensemaking "will include both construal and social categorization processes. Construal processes (e.g., Griffin and Ross, 1991; Ross, 1990) are individuals' subjective interpretations of events. Griffin and Ross (1991) demonstrated that "different individuals (and groups) construe 'objectively' similar stimuli quite differently" (p. 207). This upholds Weick's assertion that interpretation of events is part of sensemaking.

In addition, Bartunek, Lacey, and Wood (1992) lent insight into social categorization processes used as a basis for personal interpretation and how change initiatives interacted with these processes:

People categorize new events by means of exemplars or prototypes or both (e.g., Schneider, 1991; Smith and Zarate, 1990). That is, they hold abstract concepts of particular categories based on multiple experiences with category members (prototypes) to which they compare some new event, and/or they store in memory individual examples (exemplars) of a category to which they compare the new event. When a new schema is being introduced in an organization, organizational members are likely to construe the schema in some particular way, develop some prototype for the schema along with exemplars for it, and assess change agents' activities to determine if they correspond with these prototypes and exemplars.

These cognitive processes affect responses to the attempted change. (p. 207) This explanation illustrates why individuals have differing perceptions of new situations. Every individual has his or her own patterns of prototypes and exemplars, into which the new situation must be fitted in order for the individual to make sense of it (Schon, 1987). What makes sense to the change agent, therefore, may not make sense to other members of the organization.

According to Bartunek, Lacey, and Wood (1992), change agents have their own cognitive tendencies. They tend to have an imaginary script that they think will guide the change efforts:

... they are likely to imagine a series of actions they will take, likely responses to these actions, and then particular outcomes of this sequence of actions and responses. Change agents typically imagine that despite initial resistance to their initiatives, the long-term result of the actions they take will be positive and consistent with their aspirations. They typically are overly optimistic in their predictions about the success of change processes they initiate, in part because they overestimate how much others will agree with their schema. (p. 207)

The imaginary script described here can be likened to a strategic rational plan created by a change agent. Both assume a version of reality that posits the predictability of others' actions, and the probability that the outcome of their efforts will be as they imagine.

The fallacy of this perspective has been demonstrated over and over in school reform efforts (Fullan, 2001a, 2003). Rather than continuing to make new plans without understanding the individuals who are expected to implement the plans, change agents and school leaders must seek new ways to understand and empower those individuals. Schemata, the organizing cognitive frameworks guiding our perceptions of events, are resistant to change (Bartunek & Moch, 1987). Change agents, therefore, "need to understand the role of schemata in particular change projects" (p. 485), so they can help organizational members reflect on their own schemata. If organizational members become cognizant of their own schemata and the strengths and weaknesses of their perspective in the new situation, then they can choose to change these schemata as they see fit. Bartunek and Moch (1987) call this empowerment of organizational members to interactively fit change initiatives to their schemata and their schemata to change initiatives "third order change" (p. 486).

An important challenge for organizational leaders, then, is to find a way to understand the schemata of individuals. The next section explores the relationships among language, narrative, story, and cognitive structures.

The Construction of Meaning through Language Language and Cognitive Structures

In *The Order of Things*, Michel Foucault used a passage from Jorge Luis Borges to illustrate how our customary patterns of thinking limit our conceptions of what might be. Language itself has symbols for some things, yet not for others. Borges used language for things we understand, but challenged the cognitive categorization within which we store this language:

This passage quotes a "certain Chinese encyclopaedia" in which it is written that "animals are divided into: (a) belonging to the Emperor, (b) embalmed, (c) tame, (d) sucking pigs, (e) sirens, (f) fabulous, (g) stray dogs, (h) included in the present classification, (i) frenzied, (j) innumerable, (k) drawn with a very fine camelhair brush, (l) *et cetera*, (m) having just broken the water pitcher, (n) that from a long way off look like flies." In the wonderment of this taxonomy, the thing we apprehend in one great leap, the thing that, by means of the fable, is demonstrated as the exotic charm of another system of thought, is the limitation of our own, the stark impossibility of thinking *that*. (p. 378, Part Five, Chapter 7, in Rivkin and Ryan, Eds., 1998)

According to Foucault, ordering and categorizing are fundamental to human thought, yet leave epistemological spaces unaccounted for. This Borges passage falls into such a space. What possible concrete reality could include an animal "drawn with a very fine camelhair brush" and a "fabulous" animal and "sucking pigs," all as part of the same frame of reference?

Weick (1995) also addressed the concept that words miss parts of possible reality. He discussed how people use words from vocabularies associated with various social and internal structures humans have created. We then use various systems of thought for organizing these words conceptually. Vocabularies of society, organizations, occupations, predecessors, and sequence and experience are sources for words. Ideology, third-order controls, theories of action, tradition, and narrative are all conceptual guidelines for organizing the various vocabularies (Weick, 1995). All of us have a variety of vocabularies and organizational concepts that we use situationally. Weick's (1995) point,

however, was that despite the vast array of language and concepts available to us, we can never completely represent our thoughts and experiences:

But all of these words that matter invariably come up short. They impose discrete labels on subject matter that is continuous. There is always slippage between words and what they refer to. Words approximate the territory; they never map it perfectly. That is why sensemaking never stops. (p. 107)

Experience is seamless, integrated, and continually changing. Language always has gaps and spaces.

The language of story makes no pretense of being a factual representation of experience. In contrast, those who claim to have given objective portrayals of events are asserting the universality and completeness of their representation. These representations, however, as Foucault (Rivkin & Ryan, Eds., 1998) and Weick (1995) pointed out, remain subject to the effects of the gaps and spaces in language. The epistemological spaces referred to by Foucault remain unaccounted for even in the most "factual" accounts of experience. As we consider the many versions of truth discussed regarding schools, we must remain cognizant that all of these versions are subject to the system of thought employed by the speaker. These systems often remain unidentified and the possibility that others might have an alternate system is unacknowledged. Within a story or a personal narrative, an individual applies her system of thought to create a version of events illustrative of her own perceptions, though still falling short of the completeness of the experience. The story or narrative finds a unified frame of reference, but does not pretend to a universal frame of reference.

To validate the narrative mode of psychological therapy, White and Epston (1989) distinguished between the logico-scientific and narrative modes of thought, examining the language content and structures associated with each mode. In the logico-scientific mode, "reified constructs, classes of events, systems of classification and diagnoses" (p. 47) are privileged content. These facts are deemed to be true for all time and in all places, impervious to the effects of time. Linguistic practices in the logico-scientific mode "rely upon the indicative mood to reduce uncertainties and complexity" and attempt to "give speakers a sense of substance, materiality, and surety in the world they inhabit" (White & Epston, 1989, p. 48). Ambiguity is anathema in this mode, so technical language,

exclusion of multiple word meanings, and logical argument based in quantitative analysis are preferred vehicles of communication (p. 48). People are presumed to be passively acted upon by internal drives and urges and by external forces and energy transfers. These forces "shape and constitute lives" (p. 48). In an experimental situation, the observer is presumed to be objective and to have no interaction with or effect upon the phenomena. Rational planning models spring from this tradition of thought and mode of perception and communication.

The narrative mode, in contrast, "privileges the particulars of lived experience" (White & Epston, 1989, p. 47) as its focus. In this mode, time plays a critical role, because "stories exist by virtue of the plotting of the unfolding of events through time" (White & Epston, 1989, p. 47). Language, far from being used to exclude possible meanings, employs "the subjunctive mood to create a world of implicit meanings rather than explicit meanings, to broaden the field of possibilities through the 'triggering of presupposition', to install 'multiple perspective', and to engage 'readers' in unique performances of meaning" (p. 48). Multiple interpretations encourage consideration of many possible realities. The person becomes the principal actor, the protagonist in her own life. She continually participates with others in interpretive acts, recreating stories in new tellings and thereby shaping her life and relationships (p. 48). "Observer" and "subject" both become part of the story being performed, co-authoring its construction (p.48).

By distinguishing between the logico-scientific and narrative modes, White and Epston (1989) provided a construct within which we can consider stories as legitimate means for creating and transmitting meaning. Instead of justifying our thoughts within all possible vocabularies of content and structures of analysis, we can pursue the language and vocabulary of stories as a legitimate avenue for seeking insight into the thinking of individuals in schools.

Story and Cognitive Constructs

Our lives are ceaselessly intertwined with narrative, with the stories we tell and hear told, those we dream or imagine or would like to tell, all of which are reworked in the story of our own lives that we narrate to ourselves in an episodic, sometimes semi-conscious, but virtually uninterrupted monologue. We live

immersed in narrative, recounting and reassessing the meaning of our past actions, anticipating the outcome of our future projects, situating ourselves at the intersection of several stories not yet completed. (Brooks, 1984, p. 3, as cited in White & Epston, 1989, p. 46, italics in the original)

This section of the literature review examines different conceptions of story as defined by various theorists. White and Epston (1989) turned to the social sciences for their textual analogy. Social scientists sometimes construe the relationships and lives of people as texts to be written and read. In reader-response theory in literature, each new reading of the text is also a new creation of the poem (Rosenblatt, 1978). People's lives and stories change, creating continual nuances in the meanings attributable to their lives. The textual analogy helps social scientists understand how people "organize their stock of lived experience," "give it meaning," and "make sense out of their lives" (White & Epston, p. 18). They conclude that by "storying" our lives, we "determine[s] the meaning ascribed to experience" (p. 19). White and Epston used this analogy in their definition of "story or self-narrative" (p. 19):

In striving to make sense of life, persons face the task of arranging their experiences of events in sequences across time in such a way as to arrive at a coherent account of themselves and the world around them. Specific experiences of events of the past and present, and those that are predicted to occur in the future, must be connected in a lineal sequence to develop this account. . . . The success of this storying of experience provides persons with a sense of continuity and meaning in their lives, and this is relied upon for the ordering of daily lives and for the interpretation of further experiences. (p. 19)

If this explanation of story is applied to the school setting, then every individual in the school has her own on-going story. This story is influenced by the stories of all the others, and brings meaning to her experiences. Story in this sense is the same as life, because it holistically encompasses all of life's experiences and becomes the central source of meaning for each individual. These whole life stories would be very difficult to elicit in a research project, yet other approaches to story may provide glimpses into the life stories of individuals. This overarching story creates the tapestry of meaning from which discrete stories of particular experiences are chosen to share orally with others.

Weick (1995) supported the idea proposed by White and Epston (1989), that "people think narratively rather than argumentatively or paradigmatically" (Weick, 1995, p. 127). He believed people have trouble making sense of their organizational lives, because organizational models are based on argumentation and logic. Individuals' experiential narrative skills become part of the unofficial, daily organizational reality of shared relationships and continual action. However, their official contributions to the organization and the modes of functioning they are asked to adopt spring from the logicoscientific realm. A similar official emphasis on the technical rational aspects of teaching defines the current reform atmosphere in education (Hargreaves & Fink, 2006).

Weick's (1995) definition of story was similar to that used by White and Epston, and was cited from Stein and Policastro, as cited in Robinson and Hawpe (1986, p. 112): "The elements of the prototypical story include 'a protagonist, a predicament, attempts to solve the predicament, the outcome of such attempts, and the reactions of the protagonist to the situation" (p. 128). To this conception of story, Weick added the insight that stories are created retroactively, with the benefit of hindsight. Therefore, the events are given new sequence, order, and meaning in the construction. "Recall that, whereas hindsight reconstructs clear-cut sequences that lead inevitably to an observed outcome, the editing necessary to construct that tight sequence is substantial" (Weick, 1995, p. 128). Although stories are created from past experience, we use them to predict future outcomes and to guide our actions in new situations. Stories help people make sense of experience, remember important insights, relate one idea or experience to another, predict possible outcomes, store information and concepts, and transmit understandings to other people (p. 129).

Weick (2001) examined the way in which stories are important for collective mind in organizations:

[S]tories organize know-how, tacit knowledge, nuance, sequence, multiple causation, means-end relations, and consequences into a memorable plot. The ease with which a single story integrates diverse themes of heed in action foreshadows the capability of individuals to do the same. A coherent story of heed is mind writ small. And a repertoire of war stories, which grows larger through the memorable exercise of heed in novel settings, is mind writ large. (p. 269)

Without stories to guide their actions, perceptions, and anticipations, newcomers to organizations don't know what to expect from others. Stories provide the collective body of knowledge about the complex workings of the organization, and without them, the organization cannot continue to reflect upon past experiences and draw meaning from them. For schools, the implication is that we should foster time for people to relate their stories to one another and should take seriously the role of stories in sustaining quality in practice. Professional learning communities provide a focused and productive framework for exploring the important stories in an organization (Sergiovanni, 1992). High relational trust is also necessary if the leader is to have access to the layers of stories in her organization.

Another important theorist regarding the idea of story in organizations drew upon the work of those previously discussed, and added, in his work, consideration of stories from a literary perspective. Gabriel (2000) synthesized much of the research done regarding story in organizations and substantially augmented the discussion with his contributions. He focused on "stories and storytelling in the narrow sense of narratives with simple but resonant plots and characters, involving narrative skill, entailing risk, and aiming to entertain, persuade, and win over" (p. 22). This conception retains the folklorist's emphasis on the entertainment value of stories, while using the modernist view that characters and plots develop from the personal experiences of individuals, and the postmodern insight that storytelling retains meaning in lives saturated by information (p. 22). All of the elements above contribute to a story's ability to carry meaning.

Because other forms of narrative emerge in organizations, Gabriel distinguished between stories and opinions, proto-stories, and reports. Opinions are "often strongly held, often containing some factual or symbolic material, but lacking plot, characters, and action" (p. 25). Instead of specifics, they consist in generalized assertions with no linking structure. Proto-stories "are fragments of stories, similar to Boje's terse stories, sometimes highly charged emotionally and symbolically. Yet their plot is very rudimentary" (p. 26). They may have a character and a beginning, but often lack development and a proper end. A report "does have a plot and characters. Yet its attitude toward them is stubbornly 'factual', refusing to read any meaning into the events described. . . They can be seen as historical accounts in which accuracy is valued above

effect, narratives in which no poetic license is accorded to the narrator" (pp. 26-27). In distinguishing a descriptive report from a story, one must consider the narrator's intent with the facts. A descriptive report values factual accuracy above all else. A story uses facts as a foundation from which to craft valuable, meaningful, and entertaining narrative. Storytellers "use facts as poetic material, moulding them, twisting them, and embellishing them for effect (p. 29).

Because Gabriel's definition of story allows for both personal and organizational stories, it will allow the researcher insight into both the personal schemata of the storyteller and the organizational dynamics within which the storyteller exists. Gabriel viewed stories as inviting us to engage with their meanings, through the enrichment and enhancement of the storyteller's poetic crafting. The listener becomes an active participant in the storytelling experience, a responsive audience eliciting an enthusiastically told story. These stories may seek "to educate, persuade, warn, reassure, justify, explain, and console" (p. 32).

Just as White and Epston (1989) pointed out, stories do psychological work for us. We cast ourselves in certain roles and attribute motives and desires to others. How we portray ourselves in stories offers insights into how we engage with life and why we act as we do. Gabriel (2000) called the process of creating stories "story-work," which he describes as similar to Freud's "dreamwork" (p. 35):

By analogy, we shall view story-work as the process whereby a symbolically charged narrative is constructed out of an engagement of deep desires with organizational life. Story-work is the psychological counterpart of poetical work that seeks to transcend the literal truth of events by drawing out a different type of truth, one that may claim to be deeper, more powerful, or even transcendental. (p. 35)

If story-work reveals the "deep desires" of the individual teacher in the context of her organizational life, then listening to these stories may reveal her conceptions of herself as a teacher more effectively than any survey or factual interview could. It is likely that a mixture of story and narrative will emerge in the interview process, and will require a variety of analytical approaches.

Gabriel (2000) called the mechanisms by which storytellers create meaning "poetic tropes" (p. 36). He explained that people use these to imbue their stories with meaning, and that therefore they can be used analytically to infer the meanings in a story or narrative. These tropes are used by the storyteller to cast herself and others in various roles and relationships. She engages in poetic license and reveals her intentions and perceptions through the application of these tropes. The listener attempts to discern which tropes are applied by the storyteller in what fashion, and to infer from that the perceptions and intentions of the storyteller. If stories do in fact reveal psychological truths about the individuals telling and living out the stories, as the theorists cited in this review claim, then the constructs and schemata by which individuals make sense in their lives should become apparent in the stories and narratives they relate.

The poetic tropes Gabriel defined discuss the various ways in which the narrator attributes various elements of thought and action. The first of these is *attribution of motive*, which refers to whether a person in the story intended to harm or help others. Often it is used to make clear whether the protagonist deserves what is happening and helps us understand the roles of the various people in the story. How the storyteller frames her own motives and the motives of others may help the researcher discern the storyteller's intentions as a teacher and perceptions of the intentions of others. Both are relevant to discovering the storyteller's reasons for her pedagogy and her beliefs about the intentions of change agents.

The second attribution is *attribution of causal connections*. This attribution links two or more events in a narrative as cause and effect. This simplification of possible relationships among events reduces internal chaos. "Goffman (1974: 503 ff.) has noted how storytelling overestimates the 'causal fabric of experience', representing actions and events as necessary rather than accidental or conditional; establishing orderly sequences of causes and effects is a means of organizing and rationalizing remembered experience' (Gabriel, 2000, p. 37). A storyteller who rationalizes her own actions as necessary, or attributes cause to particular influences will reveal her attitudes toward herself, others, and situations. The things picked as causes of action will reveal those influences this individual attends to in the school. Locus of control for the individual may be revealed through attribution of cause.

The third attribution is important in organizational stories, because it allows the narrator to determine right and wrong and assign them to the appropriate agents (Gabriel, 2000) The *attribution of responsibility, namely, blame and credit*, tells us who is responsible for what. Gabriel notes that in organizational stories blame is often assigned to an individual unfairly claiming credit, or to an individual for a difficult situation or poor outcome. Credit can take the form of heroically saving the day or being responsible for a great innovation. Who are the bad guys and who are the good guys? Is the storyteller a victim of the intentions of others, without power in her own life? Does the storyteller take credit for actions, or blame others? Understanding whether the storyteller sees herself as a person responsible for the actions and events in her own life may help the researcher understand how this person sees her role as a teacher and professional.

The fourth attribution, the *attribution of unity*, treats an entire class of people as "an undifferentiated entity, all of them equally responsible . . ." (Gabriel, 2000, p. 38). We hear the use of "they" pervasively in organizational stories. As a common experience, we have all heard individuals telling stories in which "they" are responsible for something. In a school setting, if the teacher perceives all students as the same, all administrators as the same, all teachers as the same, etc., then she may feel little obligation to individualize her efforts on behalf of that group of people.

Attribution of fixed qualities, especially in opposition is the fifth attribution. People are characterized by a single unchanging trait or attribute. "A person who lies once can be treated as a liar on every subsequent occasion, just as a person who once performed a heroic deed is treated as incapable of cowardice at any later stage" (Gabriel, 2000, p. 38). This attribution may be most relevant in assessing a teacher's attitudes toward change initiatives. Teachers who are treated as a unified entity by rational planning models may, in turn, attribute fixed qualities to other groups of people with whom they interact. Some insight into the attribution characteristics of the individual and of the organization should emerge through analyzing the attributes of unity and of fixed qualities. A culture and system in which individuality is not valued or is subsumed by universal requirements may create an "us" versus "them" mentality. In contrast, a culture of high relational trust and collaborative interaction may reduce the storyteller's tendency to see groups or individuals in simplistic ways.

The creator of a story imbues the characters with emotions as they take action throughout the story, which is called the *attribution of emotion*.

The emotions with which the central characters are endowed crucially influence our understanding of their actions and bring into relief the behaviour of other characters. . . . Whether a person is seen as enjoying an act or doing it while being in terror or shock crucially affects the interpretation of the event and its conversion into story. (Gabriel, 2000, p. 39)

Understanding the storyteller's emotions and her perceptions of how others feel in various situations may help the researcher understand that individual's relationships with other individuals and with the organizational demands. We may also gain insight into her motives and commitment toward students and other teachers.

The seventh attribution, the *attribution of agency*:

Turns something passive or even inanimate into something active, purposeful, and conscious, something capable of being an agent. . . . In organizations, one of the most common attributions of agency is to the organization itself which is treated anthropomorphically as an independent and sovereign agent. (p. 39)

An example in a teacher's story might be the feeling that the curriculum demands too much of her time and energy, undermining the human aspects of teaching. Attribution of agency might help the researcher discern factors the teacher perceives as contributing to or inhibiting her success.

The final attribution, the attribution of providential significance,

Presents an incident as having been engineered by a superior intelligence in order to achieve a particular end . . . Providential significance may be benevolent or it may assume the form of a malignant or persecuting fate from which the protagonist cannot escape, no matter what he or she does. (Gabriel, 2000, p. 40)

While some stories including genuine references to an omnipotent being might occur, more likely attributions by a teacher would be in terms of "they're out to get me" or "I must be living right." In these statements the idea of fate or abstract agency exists, but without supernatural or religious overtones. This attribution is common in political speeches and hero stories. Public policy is linked with the will of God, opponents are satanic, and the leader is endowed with characteristics evoking the support of God. For

example, President Bush characterizes some states as belonging to an "axis of evil." Osama bin Laden calls the United States "The Great Satan." Current endeavors to include religious perspectives and practices in schools are often attributed to the will of God being manifested in the actions of the initiators.

The Leadership Connection

Principal Leadership

Principal leadership has emerged as a driving force behind school improvement that accomplishes significant improvement in students' academic achievement. As members of a particular school community, principals are uniquely positioned to participate in the discourse that occurs throughout the school. The principal is a character in stories, an audience for stories and narratives, an author and teller of stories and narratives, and a contributor to the culture from which the stories spring.

Leadership literature repeatedly emphasizes the importance of a principal's connection to what really matters to the people in the school. Advice is given on how to achieve that connection, ranging from surveys, to observations, to participation in professional learning communities. This study considers the possibility that principals should become informed consumers of and participants in the storytelling occurring in their schools. The following discussion explores the characteristics of effective principals and how attention to story and narrative may potentially contribute to a principal's attainment of these characteristics.

Coherence in Principal Leadership

Fullan has repeatedly emphasized the need for coherence in schools, in districts, and in policies guiding these institutions. His thinking has evolved to a conception of the ideal school leader as a "new theoretician," the embodiment of a "system thinker in action" (2005, p. x).

Collins (2001) discussed a corporate version of coherence he called the "hedgehog concept" through which extraordinary companies understand a "simple, crystalline concept that guide[s] all their efforts" (p. 95). These companies determine what they can do better than anyone else, eliminate extraneous facets, identify what drives their economic engine, and discover what they genuinely feel passionate about. In schools, principals must lead the processes that help a school to discover and act upon "a

simple, crystalline concept" (p. 95). Collins discovered that charismatic leaders who imposed a vision actually undermined a company's ability to accomplish clarity, because they squelched vigorous and open debate. This conception works against the stereotype of a strong principal riding in with a solution to everyone's problems. Instead, it requires someone who listens to everyone and creates opportunities for frank and realistic discussion prior to making decisions about the guiding concept and how to implement it.

Newmann et al. (2001) defined meaningful coherence in the school setting as "instructional program coherence" (p. 3). ". . . we define instructional program coherence as a set of interrelated programs for students and staff that are guided by a common framework for curriculum, instruction, assessment, and learning climate and are pursued over a sustained period" (p. 3). The two highest scoring schools in their study of the academic effects of instructional program coherence had principals who "led staff to collectively adapt and refine an instructional program framework" (p. 10). When "principals or administrative teams mandated that teachers use purchased frameworks; teacher responses were mixed" (p. 10). Therefore, leadership style had an impact on teachers' commitment to a coherent program.

Strong school-level leadership is central to development of stronger instructional program coherence, but coherence achieved by administrative fiat is of questionable value when it suppresses the development of equally essential supports for learning, such as teachers' professional community and shared ownership of an instructional program. (p. 11)

Effective principals, therefore, must work with individual teachers to elicit participation and positive contributions to efforts toward creating instructional program coherence.

Relational Trust as a Foundation for Leadership

Relational trust emerged in Bryk and Schneider's (2002) analyses of school reform in Chicago as a critical factor in the actual improvement of student learning. Their results showed that:

Schools reporting strong positive trust levels in 1994 were three times more likely to be categorized eventually as improving in reading and mathematics than those with very weak trust reports. By 1997, schools with strong trust reports had a one in two chance of being in the improving group. In contrast, the likelihood of

improving for schools with very weak trust reports was only one in seven. Perhaps most telling of all, schools with very weak trust reports in both 1994 and 1997 had virtually no chance of showing improvement in either reading or mathematics. (p. 111)

These studies focused on schools in a troubled urban district, but the key factors of relational trust – respect, competence, personal regard for others, and integrity – are key to creating healthy organizations in any context.

Because principals hold the positional power within a school community, and both parents and teachers are vulnerable to the decisions the principal makes, Bryk and Schneider (2002) perceived principals as playing "a key role in developing and sustaining relational trust. Principals establish both respect and personal regard when they acknowledge the vulnerabilities of others, actively listen to their concerns, and eschew arbitrary actions" (p. 137). Within the context of this study, these are the key elements of relational trust addressed through the principal's participation in the stories and narratives of her organization. People often communicate concerns, vulnerability, and expectations through the stories and anecdotes they choose to tell. The somewhat indirect nature of a story makes it a less risky form of communication with others than is direct commentary on their actions. A principal can gain huge insight into her own relational trust levels with staff, their trust levels with one another, and their trust levels with parents through listening to the stories individuals share.

Bryk and Schneider (2002) believed that the critical nature of relational trust can hardly be overstated as a condition for successful school reform:

We view the need to develop relational trust as an essential complement both to governance efforts that focus on bringing new incentives to bear on improving practice and to instructional reforms that seek to deepen the technical capacities of school professionals. Absent more supportive social relations among all adults who share responsibility for student development and who remain mutually dependent on each other to achieve success, new policy initiatives are unlikely to produce desired outcomes. Similarly, new technical resources, no matter how sophisticated in design or well supported in implementation, are not likely to be used well, if at all. (p.144)

Their findings supported other research addressed in this review of literature, by pointing out that technical solutions that exclude the sensemaking and perceptions of individuals are likely to fail. They also supported the idea that the individual commitments of the teachers are necessary for improved student learning. Relational trust, however, points out the need for a strong social system working to support these individuals in explicit ways. The school's culture must focus on promoting relational trust for all its members. A school's principal is a key factor in implementing and promoting such a culture. Recognizing and Understanding Teachers' Experiences and Implementation Concerns

Part of trusting and honoring others in the school is understanding the value of teachers' experience. Hargreaves et al.(2001) investigated actual teacher practices, including planning, assessment practices, collaboration, and parent relations. What they found was that teachers temper their use of standards with their knowledge of how their students learn. They utilize professional judgment, developed through years of work with students, in implementing authentic assessment. Furthermore, any efforts at change are filtered through a teacher's baseline of what it is actually like to work with children. As Hargreaves et al. said:

Teachers need to be able to see the reasons for change, grasp the point of it, and be convinced it is feasible and will benefit their students (Fullan, 1991). These reasons must be explicit and compelling in policy, and they also must be ones that teachers have time and opportunity to figure out for themselves, alone and together. (p.118)

The principal must understand teachers' perspectives and must help teachers understand the rationale behind change initiatives. Furthermore, the principal must facilitate teacher time to work individually and collaboratively to understand and implement the initiatives.

Listening to teachers' stories and narratives as they grapple with various aspects of school reform will help the principal understand whether teachers believe the current efforts benefit students and are feasible. The principal will also be giving a place of honor and respect to the teachers' present and past experiences through the process of listening to and responding to teacher stories. Tacit knowledge gained by teachers remains a critical resource for schools. This knowledge may relate to the nature of the community, to deep and broad understanding of students, to the effectiveness of various practices

through the years, or to a multitude of other factors. Accessing this knowledge is not simple; people do not tend to have a five point discussion plan for their implicit understandings. Rather, they store this knowledge as stories. Gabriel (2000) identified this sort of knowledge as passed on in folklore through generations. While tacit knowledge may have shortcomings, it is also a critical resource for effective school reform.

Characteristics of Leaders Effective in Implementing and Sustaining Improvement

Collins (2001) studied companies that went from good to great and identified specific characteristics of the leaders in these companies. He called them "Level 5 leaders" and contrasted them with more traditional conceptions of powerful leaders. Typically, Level 5 leaders came from within the company, bringing a store of personal knowledge about the current issues, past efforts, and environment of the company. These leaders, in addition to the other qualities he identified, had a high level of tacit knowledge about the companies they led. Less successful companies tended to recruit from outside their own organizations, at times choosing leaders with unrealistic perceptions of the company's potential. In schools, principals need to honor the knowledge people within the organization can contribute, especially when those people are getting great results on their own. Once again, hearing and understanding the stories in an organization can give insight into what different people know and how others perceive them.

The Level 5 leaders Collins (2001) and his team found were personally modest, fanatically driven to get results, diligent, generous with credit, promoted effective leadership throughout the company, and took responsibility for poor results. They tended to find the right people, collaborate with these people to find a clear focus for the company's efforts, and then rely on the culture of discipline the right people brought with them to achieve results. In schools, similar patterns of effectiveness emerge (Bryk & Schneider, 2002; Fullan, 2003, 2005; Hargreaves et al., 2001). Schools with strong teacher professional learning communities, targeting clear elements of pedagogy, sustaining high commitment to the moral imperative of benefiting students, and principal leadership that pulls together quality staff and then supports them materially and personally in their efforts perform best (Fullan, 2005; Hargreaves & Fink, 2003; Newmann, et al., 2001). Level 5 leaders are needed in the principalship and throughout

the staff (Fullan, 2003). These leaders promote a keen focus on learning, supported by the relational trust elements of respect, competence, personal regard for others, and integrity (Bryk & Schneider, 2002; Fullan, 2003). Furthermore, newer models of sustainable leadership emphasize the development of leadership in all organizational members (Hargreaves & Fink, 2006). Through teachers' narratives, we gain some insights into the types of leadership experienced by the teachers and how this leadership has influenced a particular school's responses to change.

According to Collins (2001), the best leaders used questions to gain understanding of the facts. They used informal meetings and asked questions, implemented discussion and debate, and employed other intense dialogue, all intended to genuinely search for the best answers. There was no "sham process to let people 'have their say' so they could 'buy in' to a predetermined decision" (p. 77). Collins quoted Admiral Stockdale, who survived brutal treatment as a POW in Vietnam for eight years, as saying "'This is a very important lesson. You must never confuse faith that you will succeed in the end – which you can never afford to lose – with the discipline to confront the most brutal facts of your current reality, whatever they might be" (p. 85). The sincerity and honesty of leadership in relation to others in the organization is an important component for creating an effective organization.

Summary of the Literature Review

The literature review began by exploring the problems schools face in implementing meaningful change that supports and pushes individual teachers in pursuit of reflective pedagogical excellence. One factor in this situation is the dearth of teacher voices in theory, in change initiatives, and in schools in general. Another factor is the flawed reliance on rational planning models as a basis for school change.

The second section of the review examined the problems with rational models and proposed a sensemaking perspective as an alternative view of facilitating change and supporting individuals.

The third section of the review addressed the potentialities of language, contrasting the logico-scientific mode with the narrative mode. This section then delved into perceptions of narrative and story as they relate to individuals and organizations. A case was made for why individuals' stories and narratives are important and relevant for a

researcher to understand. Finally, the section outlined poetic constructs this study can draw upon as possible perspectives from which to view the stories of teachers during data analysis. Other coding categories also arose from the data.

The fourth section reviewed the characteristics of effective principal leadership and its crucial role in improving schools. Material was drawn from research into effective organizational leadership in business and from research into the leadership and interpersonal characteristics of schools demonstrating improved student achievement during reform efforts. The relationship of story and narrative to various aspects of the principal's role was explored.

CHAPTER THREE METHODOLOGY

Grounded Theory

The research design in this study is grounded theory, used as a structure for interviewing individuals in a qualitative manner. The sample was purposefully selected to include teachers who work in schools actively engaged in reform efforts targeting teacher pedagogy and assessment. Stories and other narrative information about teachers' experiences with change initiatives were elicited through interviews with these individuals. Grounded theory coding and sampling procedures as outlined by Strauss and Corbin (1998) were employed.

Grounded theory assumes "that all of the concepts pertaining to a given phenomenon have not yet been identified, at least not in this population and place. Or, if so, the relationships between the concepts are poorly understood or conceptually undeveloped" (Strauss & Corbin, 1998, p. 40). Therefore, the research question clarifies the phenomenon under investigation, tracing broad initial parameters within which the researcher begins. As the study progresses, the focus narrows and gains clarity (Strauss & Corbin, 1998). The central phenomenon in this study is individual teachers' experiences of change initiatives and their perceptions of how various factors that emerge during these initiatives influence their efficacy in promoting student learning. *Individual* teacher response to change initiatives is conceptually underdeveloped in the literature on the effectiveness of change initiatives in education (Fullan, 2001b; Hargreaves et al., 2001; Hargreaves & Fink, 2006; Sarason, 1996). The literature suggests that some patterns may emerge among teacher responses, but that individual factors are also critical to fully understanding teacher responses (Schon, 1987; Weick, 1995). Therefore, each individual's sensemaking processes and perceptions during on-going reform efforts were sought through the stories and narratives elicited. The grounded theory describes conditions or perceptions, derived from the stories and narrative, which attempt to explain the teacher responses.

Justification for this methodology lies in the limited scope of direct research regarding links between a teacher's commitment to reflective excellence in pedagogy and a teacher's interpretations of meaning in his or her professional experience. Examination

of various narratives, including story, can provide insights into the primary sensemaking cognitive schemata used by individuals. Cognitive psychologists, business organizational theorists, narratologists, ethnographers and others all use analysis of narrative to investigate the internal cognitive processes of individuals (Boje, 1991; Gabriel, 2000; Weick, 1995; White & Epston, 1989). Stories have emerged as a primary means by which individuals create threads of meaning linking their actions in past, present, and future (Bartunek & Moch, 1987; Boje, 1991; Gabriel, 2000; Weick, 1995). By analyzing the ways in which a person portrays herself through story and narrative in relation to the actions taken, responsibilities attributed, motivations described, and outcomes recognized, one can better understand an individual's perceptions about her relationships to others and to her professional experiences. Understanding which factors in change situations are regarded by each teacher as promoting or hindering her effectiveness may further reveal patterns of experience and perception in relation to change.

A combination of story and other narrative provided the researcher with information about the sensemaking actions and perceptions of each teacher. As Schon (1987) pointed out, sensemaking combines "knowing-in-action" and "reflection-in-action" (p. 28). According to Schon (1987), "knowing-in-action" is how we work through familiar situations, and "is tacit, spontaneously delivered without conscious deliberation" (p. 28). However, when a surprise occurs, or a situation has unanticipated elements, we move to "reflection-in-action" (p. 28).

Reflection-in-action has a critical function, questioning the assumptional structure of knowing-in-action. We think critically about the thinking that got us into this fix or this opportunity; and we may, in the process, restructure strategies of action, understandings of phenomena, or ways of framing problems. (p. 28) Sensemaking includes this combination of assumption, action, thought, action, all guided by the ideas and values held by the individual. Stories, by definition, relate actions and characters, placing them in physical, temporal, emotional, and ethical settings. Other narratives also contain elements that explore the relationships between thought and action. The actions and relationships portrayed illustrate how the narrator applies these perceptions to particular situations in a climate of change. Change should tend to provoke

extensive reflection-in-action in addition to knowing-in-action as part of the sensemaking world of the individual teacher.

Data

Sample

The theoretical sample was obtained in three stages, as outlined by Strauss and Corbin (1998). They recommended sampling in three stages, as coding progresses. The first is called the "initial sample" and occurs during the open coding phase of research. The second is "relational and variational sampling" and occurs during axial coding. The final stage is "discriminate sampling," which occurs during selective coding.

Initial sampling, as described by Strauss and Corbin (1998), is a relatively open process:

Because the aim of open coding is to discover, name, and categorize phenomena according to their properties and dimensions, it follows that the aim of data gathering at this time is to keep the collection process open to all possibilities. . . . To ensure openness, it is advantageous not to structure data gathering too tightly in terms of either timing or types of persons or places, although one might have some theoretical conceptions in mind, because these might mislead the analyst or foreclose on discovery. (p. 206)

This study drew the initial sample from elementary schools involved in change initiatives targeting pedagogy and assessment as a way to theoretically limit the sample from including all school possibilities. Within these parameters, teachers willing to participate in the study were chosen. The initial goal was to interview three teachers from each of four different elementary schools. However, only one school yielded three volunteers, two schools had two volunteers, and the remaining five volunteers were each from a different school. Every teacher was asked to relate a variety of experiences that revealed factors supporting or inhibiting her ability to practice reflective and effective pedagogy. "Because we are looking for events or incidents that are indicative of phenomena and are not counting individuals or sites per se, each observation, interview, or document may refer to multiple examples of these events" (Strauss & Corbin, 1998, p. 214). Therefore, although twelve teachers and eight sites were involved in the initial sample, they

represented a much higher number of individual incidences of teacher experience with change initiatives. Each teacher provided multiple examples.

Strauss and Corbin (1998) recommended that analysis and coding of data begin with the first interviews, rather than waiting until after several people have been interviewed (p. 207). The purpose for this is to adjust sampling and interview protocols on the basis of emerging concepts (p. 207). Therefore, during the later stages of initial sampling, the researcher pursued information that enriched her understanding of the properties and dimensions of emerging categories. During all interviews, the researcher asked a variety of questions to clarify interviewees' responses. Fuller understanding of the properties and dimensions emerged during "relational and variational sampling" (Strauss & Corbin, 1998, p. 210). At this stage, "the researcher is looking for incidents that demonstrate dimensional range or variation of a concept and the relationships among concepts" (p. 210). As Strauss and Corbin pointed out, a researcher can't know ahead of time which people and locations will maximize the similarities and differences among dimensional variations. Therefore, "the researcher should make the most out of what is available to him or her" (p. 210). In this research study, finding volunteers was extremely challenging. The distribution of interviewees depended on two factors. First, obtaining permission from districts and schools to interview teachers proved to be very difficult. Many districts refused permission to contact their teachers at all. Second, in those districts in which permission was obtained, finding volunteers was difficult, with only one or two individuals responding. However, the individuals who did volunteer each provided many examples and responded in substantial depth.

Another sampling recommendation Strauss and Corbin gave was to return to initial data and reconsider them from the perspective of how they contribute density and variation to the concepts. The data may initially have been considered only in relation to which categories they contributed (p. 210). This study considered both forms of sampling at the relational and variational sampling stages. Unlimited additional samples were not realistic. However, the twelve samples obtained meaningfully explored the properties and dimensions emerging from the data. Strauss and Corbin stressed that ". . . decisions regarding the number of sites and observations and/or interviews depend on access,

available resources, research goals, and the researcher's time schedule and energy" (1998, p. 204. italics in the original).

The final sampling, called discriminate sampling, occurs during selective coding: The aim of selective coding is to integrate the categories along the dimensional level to form a theory, validate the statements of relationship among concepts, and fill in any categories in need of further refinement. Sampling becomes very deliberate at this point . . . a researcher chooses the sites, persons, and documents that will maximize opportunities for comparative analysis. (Strauss & Corbin, 1998, p. 211)

At this stage, the researcher rigorously tests concepts and statements that have become part of the theory. Discriminate sampling is part of the validation process in a grounded theory study, because it leads to saturation of the categories. Saturation is achieved when "...(a) no new or relevant data seems to emerge regarding a category, (b) the category is well developed in terms of its properties and dimensions demonstrating variation, and (c) the relationships among categories are well established and validated" (Strauss & Corbin, 1998, p. 212).

Because saturation is the final sampling goal in a grounded theory study, discriminate sampling is dictated based on the level of saturation achieved. Therefore, the locations, people, and precise methods involved in discriminate sampling cannot be foreseen at the beginning of the study. This study obtained reasonable saturation of the major categories that emerged in relation to the research question. *Reasonable saturation* is used here to denote saturation of the categories relevant to the narrowed and focused research question that emerged through the course of the study. As Strauss and Corbin (1998) pointed out, "Although the initial question starts out broadly, it becomes progressively narrowed and more focused during the research process as concepts and their relationships are discovered" (p. 41) The final narrowed question is clearly stated in the research results as it relates to the "central category" (p. 147) and the analysis shows which categories were chosen for their relevance in exploring the narrowed question. Saturation focused solely on these categories. Categories not relevant to the narrowed question were discarded. According to Strauss and Corbin:

... some ideas do not seem to fit the theory. These usually are extraneous concepts, that is, nice ideas, but ones that never were developed, probably because they did not appear much in data or seemed to trail off into nowhere. Our advice is to drop them. (p. 159)

Selection Process

The purposeful sample, utilizing a criterion sampling technique, was selected by contacting administrators at elementary schools in western Montana to request permission to contact teachers. When permission was obtained, the researcher contacted the teachers in each school regarding the study. In some instances, the researcher traveled to the site and presented the research purpose to the teachers. In other instances, the principal provided materials to the teachers. Those teachers who chose to participate became part of the sample.

Selection Rationale

The critical factor for initial sampling selection was the engagement of the school in change initiatives requiring teachers to examine their instructional practices and pedagogy. Due to recent state policy changes, all Montana schools currently must have five year plans for school improvement that directly address pedagogical practices. Therefore, all Montana elementary schools fit these criteria. A letter was initially sent to seven superintendents in western Montana, asking permission to contact building principals. If permission was granted, the building principal received a letter and a phone call explaining the project and seeking permission to contact the teachers. If principals responded affirmatively, the researcher planned with the principal what method of contact would be appropriate. If the superintendent refused permission, letters were sent to additional districts seeking permission.

In some schools, the principal provided the teachers with an overview of the research project and with mail, e-mail, and phone contact information for the researcher. In other schools, the researcher presented the overview to the teachers and left copies of contact information for them. If the teachers were interested in considering participation, they could mail a prepaid card to the researcher, contact her through e-mail, or call her. Teachers who were interested in more information were contacted by phone to make sure they understood the nature of the study and to answer their questions. The researcher

continued to approach additional schools until 12 teachers agreed to participate in the interviews. Although the initial goal of three teachers from each of four schools was not met, there were three schools with more than one participant.

Twelve teachers in the initial sample gave a mix of cultural situations and school influences, helping to eliminate any environmental factors as consistent determinants of teacher responses. Having more than one teacher from three schools revealed cultural or school influences that consistently affected teachers from those schools. This aided in the development of categories during open coding by helping the researcher understand which might have been related to the institution and which to the individual. Both of these insights helped the researcher discover which aspects of change initiatives teachers responded to similarly across varying situations and which aspects of teacher sensemaking in response to change initiatives seemed indigenous to particular individuals. Additional individuals were not deemed necessary to achieve saturation of categories.

Data Collection

Procedures

Interviews were recommended by Strauss and Corbin (1998) as a critical method for gaining data in a grounded theory study. Because the intent of this study was to understand the individual perspectives of the participants, other forms of data are less relevant.

Interviews. Interviews were conducted 1:1 in a relaxed setting of the interviewee's choice. The interviewees had the opportunity to look over interview questions prior to the interview. The preview is intended to give each subject time to think of responses that appropriately address the questions and to reduce the anxiety of the interviewees. A semi-structured interview process was employed, in which the subjects answered the previewed questions by relating particular aspects of their experiences. This part of the interview was the structured part. Relevant follow-up questions and discussion enhanced the researcher's understanding of how the subjects intended their responses. Because the focus of the follow-up was guided by the answers given to the initial questions, this part of the interview was unstructured and evolved depending upon the responses of the subject. It also was influenced by the responses of prior interviewees as concepts began

to emerge. Every interview was audio recorded to ensure accuracy in recording the responses. The use of a recording device was justified in this study because the details of thought and language used by the participants were critical to data analysis. All tapes were confidential. Notes were taken to record the researcher's thoughts during the interview. However, the note-taking was restricted to times during which it did not disrupt the interactive interview process.

Interview Protocol. Subjects were informed in the initial contact materials of their right to withdraw from the study at any time. Included was information regarding potential benefits and risks of the study. Furthermore, they received information stating specifically how confidentiality would be maintained throughout the research project. Therefore, before deciding to participate, subjects had a clear idea of their rights, of potential consequences of participation, and of the level of confidentiality.

Subjects who chose to participate received a copy of the initial interview questions at least two weeks prior to the actual interview. With the questions was a guideline showing the difference between story and other narrative to help the subject understand the sort of responses sought by the researcher. In the initial interviews, the researcher had hoped for the responses to be in the form of stories. However, none of the subjects was comfortable with story as a mode of response, and they opted to respond narratively to the focus of the interview prompts and questions. With later interviews, the researcher asked the teachers to remember specific experiences and to discuss those, but moved away from the expectation that they would share stories. Subjects were encouraged to call the researcher if they had questions or concerns. At the time of the actual interview, the researcher spent time getting to know the basic situation of the subject as a way to promote a relaxed atmosphere. Any questions the subjects had were answered. After establishing a relaxed feel, the researcher showed the tape recorder to the subjects and explained procedures for the interview.

The initial interview story prompts given to the subjects were intended to elicit four stories that illustrated the teacher's sensemaking in response to the pedagogical change initiatives in the school. To track the sensemaking of the teacher, the questions asked the teacher to reflect on her initial responses to the change initiative, pedagogical responses to it, current feelings about it, and on her own ideals regarding how pedagogy

should work. This distribution of stories was intended to allow the researcher insight into various facets of the subject's sensemaking through time. Some guidance was given to the subject, but the subject still had to decide the plot, characters, and settings appropriate to her own purposes as storyteller. The questions were:

- 1. Please tell a story that illustrates your initial responses to and/or involvement in the change initiatives in your school that target teacher instructional and/or assessment practices. Responses can include thoughts, feelings, and actions.
- 2. Please tell a story that illustrates how you have responded through time to the change initiatives through your own instructional and/or assessment practices.
- 3. Please tell a story that illustrates your current thoughts and feelings regarding your relationship to the requirements and implementation of the change initiative.
- 4. Please tell a story that illustrates your personal ideal of the perfect relationship among leaders, teachers, students, and instructional practices.

Subjects did respond to the ideas in these story prompts, but were resistant to the idea of framing it as a story. Instead, the responses took the form of narrative with short anecdotes used as examples. This meant that plot, character, and setting were present in abbreviated form, or perhaps not at all in some parts of the responses. Interviewees did respond at length and in-depth, giving their thoughts, actions, and feelings, and reflecting on the actions and decisions of others.

When the interviewees finished their initial responses to each of the questions above, the researcher asked questions to clarify such elements as:

- why the teacher selected this story as an important one to share;
- how the teacher felt about the experience;
- why the teacher acted or responded as she did;
- what effect this experience had on the teacher's thinking;
- to what extent the teacher's responses to this experience were typical of the teacher;
- to what extent the experience had affected the teacher's pedagogy;
- how this experience related to the change initiatives in the school;
- to what extent the teacher believed others shared her perceptions;

- what this experience revealed about the relational situations of the teacher and others in the story;
- how the leadership of the teacher and/or others were relevant in this situation;
- to what extent the experience influenced the teacher's relations with her students;
- to what extent the experience affected the level of joy or fun the teacher had in her job;
- To what extent the teacher was experiencing her ideal teaching situation at the time of the interview.

This list is not exhaustive, but does include the main areas that concern teachers during change, as outlined by Hargreaves et al. (2001) in their studies of teachers in climates of change. Many of these elements emerged through the initial narratives in response to the story prompts. If that was so, then the elements not addressed within each story were included in follow up questioning and discussion. The degree to which each subject was responsive to the questions also guided the researcher during the follow up discussion. Furthermore, as categories began to emerge across several interviews, additional questions were asked to explore the properties and dimensions of these emerging categories. An overall understanding of the thinking of the teacher regarding the change initiatives was the goal of the interview.

Development of Questions

Strauss and Corbin (1998) recommended use of a central guiding question, stated as an open-ended question. They noted, however, that the specific focus of the question may narrow as the study progresses. Creswell (1998) explored the use of subquestions in qualitative research. One type he called "issue questions" (p. 102), which delve into various aspects of the context surrounding the central question. The subquestions used in this study are issue subquestions and explore relevant issues to take into consideration during data coding and analysis.

Central Question. Through the course of this study, as the conceptual focuses of teachers' responses began to emerge, the central question was narrowed to enhance the density and saturation of the data. The final central question became:

How do teachers make sense of the complex personal and organizational influences affecting their individual classroom practice, especially when implementing reforms targeting student learning?

Subquestions. The subquestions focus analysis on important aspects of teachers' sensemaking processes.

- 1. What aspects of their professional lives in the context of change initiatives do individual teachers experience as the greatest supports and hindrances to reflectively adjusting their classroom practice and pedagogy to promote student learning?
- 2. What do teachers reveal about their engagement in Schon's elements of professional practice, including the "art of problem framing," the "art of implementation," the "art of improvisation," and the mediation these artistic elements provide to teacher use of applied science and technique (1987, p. 13)?
- 3. What levels and dimensions of relational trust, defined by Bryk and Schneider as including "respect, competence, personal regard for others, and integrity" (as cited in Fullan, 2003, p. 43), are apparent in each teacher's relationships with the principal, other teachers, students, and parents?

Research Question Rationale

Central Question. The central question examines how teachers make sense of and respond to reform initiatives that target student learning. The literature is clear that teachers often do not respond as planned in the reform initiative. However, the internal sensemaking processes teachers use as they translate reform initiatives into practice are just emerging as part of the research base. Research into the sensemaking processes of individuals predicts that teachers will respond as individuals, with significant differences depending upon their personal stories of education and influenced by their individual life experiences (Weick, 1995). Research into change processes predicts that some factors will be experienced by teachers as supporting their efforts and other factors as inhibiting their efforts (Fullan, 2001b; Hargreaves et al., 2001). This research project is interested in the thinking and perceptions of teachers as they participate in change initiatives targeting the heart of their professional lives – their pedagogy. The central question left open the possibilities that teachers may respond idiosyncratically, that they may respond similarly to others at the same school, or that patterns may emerge among the responses. Other

possibilities also exist, so the research questions should not presume a particular stance regarding expected answers. As data were gathered during the initial sampling, it became clear that focusing the question directly on classroom practice would assist in the development of categories and in achieving saturation of these categories. As the basis of an inductive study, the question is intended to establish parameters for inquiry. Final hypotheses emerged from the data as part of the theory-building process.

Subquestions. Subquestion one seeks information regarding the quality of teachers' professional lives in the context of change. Fullan and Hargreaves both repeatedly referenced the quality of the teachers' experiences as a critical factor in teachers' motivation and capacity to work toward productive and sustainable changes in pedagogy. Teachers need opportunities for individual development and working conditions conducive to collaboration if we expect them to commit the energy required for meaningful change (Fullan, 2003, p. 77). Therefore, discovering which aspects of their professional lives teachers are experiencing as supports and which as hindrances should help school leaders effectively focus change efforts on critical factors.

Subquestion two explores the nature of reflective professional practice, as explored by Schon (1987). Schon's perspective is relevant to this study because he explicitly examined the relationships among individual sensemaking patterns, experiences, and technical knowledge. His theory of professional artistry meshes smoothly with the idea that truth in one's professional life is a subjective experience. This experience is often communicated through stories. Schon's "art of problem framing" is very similar to delineating the plot in a story. Any experience can be given clear parameters, suspense, and a central point, depending on the way the individual has framed the problem. The "art of implementation" focuses on choices of action the teacher makes in a familiar situation. "The art of improvisation" addresses the teacher's response to the unexpected and initially unknown facets of the situation. Weick, in agreement with Schon, pointed out that our sensemaking patterns and past experiences tend to guide our responses to new situations. Because many aspects of current school reform requirements originate from a scientific technical mindset, teachers are required to meld "applied science and technique" (p. 13) with the artistic elements inherent in complex realities involving the interactions of many individuals. Coherence, a concept defined in detail by

Fullan (2001b), is created first on the individual level through sensemaking processes. Only after a teacher discovers a level of personal coherence can that teacher productively contribute to the coherence and capacity of the organizational change efforts.

Fullan (2003) also pointed out that,

'Collaborative School Cultures Are Anxiety Provoking and Anxiety Containing' (p. 26). The more we delve into the moral imperative in action, the more we realize that the ambivalence of anxiety is part and parcel of all movement forward. It is how we value and contain it that counts. (pp. 62-63)

The implications for this concept under subquestion two are that the ways in which teachers portray their personal blending of various artistries with the technical demands of reform mandates should provide insights into the nature of the anxieties the teachers experience. Extreme or enervating anxiety would demonstrate a level of adaptation and performance falling short of professional artistry in pedagogy. A heightened awareness and willingness to employ individual creativity and original thought to the challenges faced, in response to anxiety, would indicate teachers who are more like Schon's graduate students who succeeded with advanced levels of self-reflection and changed practice. Schon (1987) delineated three qualities in those students who adapted most readily to new patterns of thought and action:

They were highly rational, . . . in their ability to recognize logical inconsistencies . . . their abhorrence of inconsistency and incongruity, and their readiness to test their assumptions by appeal to readily observable data. They were highly reflective, as evidenced by their readiness to analyze their errors, try out thought experiments, and critically examine their own reasoning. And they were inclined toward cognitive risktaking: more challenged than dismayed by the prospect of learning something radically new, more ready to see their errors as puzzles to be solved than as sources of discouragement. (p. 294)

Teacher stories and narratives are likely to reveal the levels of anxiety and the response patterns of the individual teachers. Therefore this subquestion offers grounds for investigating whether teachers are employing productive patterns of response to change or are stymied by the complexities and challenges.

Subquestion three addresses the key component of relational trust, an important indicator of "academic productivity" (Fullan, 2003, p. 42) in schools. Bryk and Schneider (2002) concluded that " 'As a social resource for school improvement, relational trust facilitates the development of beliefs, values, organizational routines, and individual behaviors that instrumentally affect students' engagement and learning (p. 115)'" (as cited in Fullan, 2003, p. 42). Through the various experiences related by each teacher, relational trust patterns in their professional relationships became apparent. The relational trust experienced by the individual teacher influences the beliefs and values that guide the teacher's actions and interactions with students, other teachers, and administrators. In addition, through interviewing more than one teacher from several schools, relational trust patterns regarding principal leadership and teacher leadership emerged during the interviews. This allowed contextualization of the experiences the individual teachers related within a larger environment of relational trust.

All of the subquestions delve into some facet of the "commitments and capacities of . . . teachers" (Darling-Hammond, 1997, p. 293). As previously discussed in Chapters I and II, the teacher's ability to understand, orchestrate, and sustain meaningful improvements in his or her practice is a critical factor in improving student academic performance. The subquestions focus inquiry in this study on elements that have proven important to improved teacher performance in an environment of change.

Data Analysis

An important initial consideration for the qualitative researcher is her stance relative to the subjects and the data. Strauss and Corbin (1998) stressed that:

The problem that arises . . . is how one can immerse oneself in the data and still maintain a balance between objectivity and sensitivity. Objectivity is necessary to arrive at an impartial and accurate interpretation of events. Sensitivity is required to perceive the subtle nuances and meanings in data and to recognize the connections between concepts. (p. 43)

They recommended several general analytic strategies to help the researcher balance objectivity and sensitivity. These apply during all phases of coding, but especially during the initial open coding as a researcher tries to conceptualize the properties and dimensions of the data (p. 44).

One technique Strauss and Corbin (1998) recommended was "to think comparatively" (p. 43). Comparative thinking includes comparisons between incidents in the data and comparisons with examples in the literature or in experience. The point of comparative thinking is to discern the properties and dimensions of concepts by "opening up our minds to the range of possibilities, which in turn might apply to, and become evident, when we sample other cases." Specific comparative techniques they discussed included "questioning," "analysis of a word, phrase, or sentence," "the flip-flop technique," and the "systematic comparison of two or more phenomena" (pp. 89-97). These techniques help sensitize the researcher to possibilities while reminding the researcher of how the data fit with a variety of perspectives to promote objectivity. Important sources for questioning, analysis, and comparison in this study included: Gabriel's (2000) concept of poetic tropes found in story; Weick's (1995) concept of sensemaking; White's and Epston's (1989) ideas about individual cognitive schemata; Hargreaves et al's (2001) conclusions regarding aspects of professional life critical to teachers; Rosenblatt's (1978) theory of the literary event as a transactional relationship between the text and the reader; Clandinin's and Connelly's (2000) ideas regarding narrative analysis and types of teacher stories; Fullan's (2001b) discussion of complexity, overload, and coherence in school environments; Darling-Hammond's (1997) emphasis on teacher commitment as a critical component of student learning; Newmann's and Wehlage's (1996) emphasis on student learning as the focal point for effective reform efforts; the personal experiences of the researcher in public school settings as a teacher and administrator; and the responses of the teachers participating in this research study. However, none of these will be imposed as a conceptual framework over the data. Rather, they will facilitate "close 'listening'" (Strauss & Corbin, 1998, p. 66) to the conceptual properties and dimensions to emerge from the data.

Strauss and Corbin (1998) differentiated between open coding, axial coding, and selective coding for the purpose of breaking the process "down artificially to explain the logic and procedural steps involved" (p. 58), but they first stressed the fluid movement between open and axial coding as "microanalysis" (p. 58) is applied:

Microanalysis involves very careful, often minute <u>examination and</u>
<u>interpretation of data.</u>... Included in this microscopic examination are two

major aspects of analysis: (a) the data, be they participants' recounting of actual events and actions as they are remembered or texts, observations, and the like gathered by the researcher; and (b) the observers' and actors' interpretations of those events, objects, happenings, and actions. There is also a third element: the interplay that takes place between data and researcher in both gathering and analyzing data. (p. 58, emphasis included in the original)

In addition to explaining relationships among facets of analysis, this stance recognizes a transactional relationship among the researcher, the subjects, and the recorded materials. The transactional relationship they describe has close ties to the transactional relationships described by literary critic Louise Rosenblatt (1978). She cites the transactional relationship described by John Dewey and Arthur F. Bentley as foundational to her conception (pp.16-17).

Thus, a 'known' assumes a 'knower;' a 'knowing' is a transaction between a particular individual and a particular environment. . . . 'Transaction' designates, then, an ongoing process in which the elements or factors are, one might say, aspects of a total situation, each conditioned by and conditioning the other. (p.17) For this study, the commonalities between Strauss and Corbin (1998) and Rosenblatt support a transactional stance regarding the researcher's relationship to teachers and their narratives. The questions asked, the interactions during the interview between researcher and subject, and the researcher's interpretation of the responses all "condition" the results of this study. In addition, the gender of the researcher and of the subjects may have played a role in the interviews. Furthermore, the ideas in the literature review employed in this study guided the questioning and analytical processes of the researcher.

The movement of grounded theory research is from the general to the particular. Inductive reasoning processes underlie the formulation of the eventual hypothesis that attempts to explain the data. Open coding, as described by Strauss and Corbin (1998), teases apart the data and regroups them into related pieces:

Broadly speaking, during open coding, data are broken into discrete parts, closely examined, and compared for similarities and differences. Events, happenings, objects, and actions/interactions that are found to be conceptually similar in nature or related in meaning are grouped under more abstract concepts termed

"categories." Closely examining data for both differences and similarities allows for fine discrimination and differentiation among categories. (p. 102)

Categories are explored based on their "properties" and "dimensions" (p. 117). Strauss and Corbin explained that ". . . whereas properties are the general or specific characteristics or attributes of a category, dimensions represent the location of a property along a continuum or range" (p. 117, emphases in the original). In other words, each category has characteristics that distinguish it from other categories, but it also contains variation in these characteristics among its members. Each category potentially represents a phenomenon. Open coding is the basis from which inductive reasoning begins.

Axial coding links explanatory bits of data with the categories they illustrate. In the open coding phase, the analyst might not know which categories are phenomena and which are information that further develops one of the phenomena. Strauss and Corbin (1998) explained axial coding as:

... the act of relating <u>categories</u> to <u>subcategories</u> along the lines of their <u>properties</u> and <u>dimensions</u>. It looks at how categories crosscut and link.... A <u>subcategory</u> is also a category, as its name implies. However, rather than standing for the phenomenon itself, subcategories answer questions about the phenomenon such as when, where, why, who, how, and with what consequences, thus giving the concept greater explanatory power. (p. 125)

By exploring the relationships among the data, axial coding begins to answer questions about how circumstances and human actions interrelate through time (p. 127). In this study, the circumstance is school reform focusing on teachers' pedagogy; the human actions are the responses by the individual teachers as they make sense of this circumstance.

The final analytic stage in grounded theory is selective coding. According to Strauss and Corbin (1998), this stage leads to analytic integration revolving around a central category (pp. 145-146). The categories generated during open and axial coding are scrutinized and a concept is developed that gives explanatory power to the relationships among the categories and logically and consistently explains "variation as well as the main point made by the data" (p. 147). The researcher writes a "memo that

tells the story using concepts and their linkages" (p. 150), allowing the full complexities of the relationships among concepts to emerge. No attempt is made to determine cause and effect; the point is to convey the complexities needed to accurately describe the data (p. 150). The framework for the conceptualization ought to be generated by the researcher "... because, more often than not, existing concepts only partially fit the data. It_might also prevent the researcher from arriving at new perspectives and approaches. . ." (p. 155). The final presentation of the research findings can establish how the "conceptualizations of data extend or fit with the existing literature" (p.156).

The final analytic step in the selective coding phase is refining the theory. "Refining the theory consists of reviewing the scheme for internal consistency and for gaps in logic, filling in poorly developed categories and trimming excess ones, and validating the scheme" (Strauss & Corbin, 1998, p. 156). The review for logic and internal consistency requires that the researcher consider all properties and dimensions of the relevant categories in light of the proposed theory. Strauss and Corbin (1998) indicated that variability and outliers should have logical connections to the explanation. "Density" (p. 158) refers to adequate development of the properties and dimensions of the relevant categories:

Filling in can be done through review of memos or raw data, . . . Or, the analyst can go back into the field and selectively gather data. . . The analyst always will find gaps when he or she begins to write. The problem is deciding when to let go. Not every detail can be well developed or spelled out. Of course, large gaps should be filled in. A category should be sufficiently developed in terms of properties and dimensions to demonstrate its *range of variability* as a concept. (p. 158, emphasis in the original)

Extraneous concepts should be dropped. The theory and the data should work together to create a united whole, as framed by the theory. The final step in refining the theory, validation of the theory, is examined in more detail in the next section, under the heading "Verification."

Verification

Creswell (1998) examined a variety of conceptions of verification in qualitative research. He recommended the term verification, instead of validity, because it upholds

the legitimacy of qualitative research (p. 201). Creswell recommended a minimum of two forms of verification. This study employs five forms of verification, based on recommendations from Creswell, Eisner (1998), and Strauss and Corbin (1998). Verification for accuracy includes triangulation, limited member checks, and thick, rich description. Verification for analytic credibility includes detailed communication of the interview and analytic processes, and the application of Strauss and Corbin's eight criteria that examine the empirical grounding of the study. Each stage of the research process is addressed through one of the types of verification.

Accuracy. Triangulation will be used as a means for gauging the accuracy of the analysis. Triangulation is the use of varied viewpoints and sources of data to provide "the varied meanings and interpretations of events, actions/interactions, and objects so that we can build these variations into our theory" (Strauss & Corbin, 1998). In this study, triangulation consisted in accumulating a "body of work" that included multiple stories and other narrative from each subject. In addition, having more than one individual from three schools provided differing perspectives on the same school context. The analysis of multiple stories and other narrative provided multiple sources of information when drawing conclusions about the perceptions of any one individual. Eisner (1998) compared triangulation to what he called "structural corroboration" (p. 110). Structural corroboration also requires multiple forms of data and adds important criteria regarding the use of the data:

Structural corroboration in educational criticism, as in law, requires the mustering of evidence. The weight of evidence becomes persuasive. It is compelling. In a sense, matters of weight and coherence appeal to the aesthetic criteria. They are qualities felt as a result of what is revealed. The *tight* argument, the *coherent* case, the *strength* of evidence are terms that suggest rightness of fit: . . . At the same time it should be recognized that most situations about which an educational criticism is written will not be crystal clear or unambiguous; most of life is riddled with dilemmas, trade-offs, ambiguities. . . . Precision can be concocted, but that doesn't make it useful. (p.111)

This study focused on creating clear theoretical connections with strong coherence in the argumentation. However, as Eisner pointed out, creating a coherent case does not mean

disregarding complexity or striving after precision at the expense of acknowledging credible alternative interpretations. Therefore, triangulation and strong argumentation with recognition of complexity contributed to verification of this study.

A second verification procedure was limited member checks, which consisted of checks for understanding during the interview (Creswell, 1998). The researcher often stated back to the subjects what she thought she understood them to say. Follow-up questions were based on the understandings gained in this way.

The third verification procedure was thick, rich description, describing in detail the responses of the subjects (Creswell, 1998). Regular use of quotations anchored the analysis in the words of the interviewees, helping to bring their voices into the study. Clear description allows the reader to decide whether the conclusions drawn bear a credible relationship to the qualitative data.

Analytic credibility. The fourth verification procedure was detailed communication in the final study of the elements of the research process and of the analytic processes incorporated. Strauss and Corbin (1998) provided criteria for information readers need in order to gauge the quality of a study. Criteria include information on sampling, categorization, grounding in specific data, relationship of categories to theoretical sampling, hypotheses and the associated reasoning processes, accounting for discrepancies, and processes by which the core category was selected (p. 269). Chapters Four and Five of this study address each of these elements specifically.

The final verification procedure was thorough discussion of the empirical grounding of the study, according to the criteria delineated by Strauss and Corbin (1998). These eight criteria require the researcher to: (a) evaluate whether concepts are generated; (b) examine the systematic relationships among the concepts; (c) determine whether many conceptual linkages exist, categories are well developed, and categories have conceptual density; (d) build variation into the theory; (e) explain the conditions under which variation is built into the study and explained; (f) take process into account; (g) decide significance of theoretical findings and extent of significance; (h) anticipate whether the theory will stand the test of time, perhaps through clear links to relevant literature. By incorporating these criteria into the verification procedures, the theory building process of this study is transparent to the reader.

Verification in qualitative studies provides evidence of sound inductive reasoning processes. The five elements of verification provided by this study addressed the quality of data gathered, the communication of these data to the reader, the processes by which the data were analyzed, coherent linkage of analysis with conclusions, and evaluation of the quality of the final theory.

Transferability

Readers of the research will need to decide, as Eisner (1998) suggested, whether they can use the conclusions from this research study. This study will be subject to what Eisner called retrospective generalizability, which is developed by "formulating an idea that allows us to see our past experience in a new light" (p. 205). Just as stories themselves convey truth, but not necessarily empirical facts, this research should help people examine the connections that may exist between the environment of educational reform, various responses, as depicted in story and narrative, of individuals to this environment of change, and the perceptions these individuals have of the influences of others and the environment on their professional practice.

Data Reporting

As discussed elsewhere in this study, data and analysis reported were a product of a transactional relationship between the researcher and the participants, and between the researcher and the data. Strauss and Corbin (1998) noted that "by the end of the inquiry, the researcher is shaped by the data, just as the data are shaped by the researcher" (p. 42). Because the researcher framed and modified the study according to the emerging data, the influence of the researcher might be considered the initial shaper. However, as the study progressed, the data also shaped the actions of the researcher.

Role of the Researcher

The role of the researcher was of crucial importance in this study. The researcher engaged all subjects enthusiastically and with similar levels of encouragement and interactive feedback. Subjects needed to feel relaxed and to have a measure of trust in the researcher for their stories and narratives to reflect their true feelings and perceptions of their experiences. Despite the researcher's best intentions and efforts to elicit stories during the interviews, all of the subjects were resistant to telling detailed stories in that setting. Instead, they engaged in long-view stories of their lives as teachers. These were

structured more as narratives with illustrative anecdotes than as stories. However, at the close of every interview, the subjects did tell stories as we walked down the hall or looked at their classrooms. Overall, the subjects were comfortable enough to be detailed and honest in their responses, but not enough so to let go and tell emotive stories.

The researcher is female, as were all the subjects. This gender factor may have played a role in the content and phrasing of some of the interview responses. It may also have played a role in which teachers chose to volunteer to participate in the project.

This researcher's background as a high school English teacher, elementary school principal, and speech coach influenced her perceptual biases. The most important bias in the context of this study was the researcher's belief that the individual teacher's voice has been largely missing in educational reform efforts, except in the classroom. Her teaching and coaching experiences biased her toward the importance of story in human life and the importance of an individual's situation as a determining factor in her commitment to reflective excellence in pedagogy. In addition, she has participated in several change initiatives. Her bias regarding change initiatives was that the voices of individual teachers are crucial components of any change initiative, especially those targeting student learning. However, many change initiatives are conceptualized in ways that exclude the teacher voice.

The researcher's biases were mitigated through several strategies. Using openended questions in the interview process allowed the subjects to determine the content and focus of the responses. Subjects were asked to frame their responses as stories or narratives. Follow-up questions elicited additional narrative to add depth and context to the stories. Grounded theory analysis, with the various checks on the researcher's processes and thinking, also helped to balance subjectivity and objectivity. Any clearly subjective elements to the interpretation were identified as such. The astute reader should be able to ascertain how the researcher's biases have affected the final research product.

Summary of Methodology

In summary, this study followed the recommendations for grounded theory research as outlined by Strauss and Corbin (1998). Data were in story and narrative form, derived through a semi-structured interview process. Analysis and sampling interacted as explained by Strauss and Corbin. Verification addressed each step of the research

process, which included ascertaining data accuracy, valid inductive reasoning processes, and legitimate theory-building. Throughout the study, explanations of the analytic processes employed allow the reader to evaluate the quality of the study.

CHAPTER FOUR

FINDINGS FROM THE QUALITATIVE INQUIRY

One central research question guided this study: How do teachers make sense of the complex personal and organizational influences affecting their individual classroom practice, especially when implementing reforms targeting student learning? This section details the data that emerged during the study and the stages of analysis employed in search of answers to the question. The initial intent of the study was to obtain a purposeful sample of three teachers from each of four schools that were actively engaged in reform. A purposeful sample of teachers from schools actively engaged in reform was obtained, but only three schools yielded more than one volunteer to participate in the study. Therefore, the sample of twelve teachers represents eight schools, with three from one school, two from two schools, and one from each of the other five schools.

Volunteers were interviewed during the 2005-2006 school year. All of the subjects teach in grades K-8, all are female, and all are employed by public schools in western Montana. Nine of the subjects were interviewed in confidential settings at their schools, one at her home, one at my home, and one at my place of employment while she was on vacation. These settings were determined by the preferences of the volunteers. The individual interviews were based on open-ended questions that had been sent to each participant prior to the interview, which sought both stories and other narrative responses from the participants. The structures of the interviews varied based on participant responses, but all were guided by the original questions. In later interviews additional questions were asked to clarify emerging concepts. During the course of each interview, follow-up questions were asked to ascertain the researcher's accurate understanding of the responses. As recommended by Strauss and Corbin (1998), sampling and interview protocols were adjusted on the "basis of emerging concepts" (p. 207) after several interviews had been completed and important concepts began to emerge.

Responses obtained were predominantly narrative in nature, rather than taking the form of stories as had been sought by the researcher. Participants told short anecdotes to illustrate their points, but were uncomfortable engaging in prolonged storytelling. The tape recorder and more official nature of the interview seemed to play a role in that discomfort, because many of the subjects did tell more extended stories after the formal

interview while we were walking down the hall or visiting their classrooms. Due to the narrative nature of the responses, the discussion of the data in Chapter Four hinges more on the analytic perspective underlying the follow-up questions based on Hargreaves' work with teachers than on the analytic perspective relative to stories based on Gabriel's work, both of which were explained in Chapter Three of this study. Where applicable, both perspectives will be explored.

The qualitative data are reported in narrative form, with some direct quotations offering specific insights in the participants' own words. Participants' identities and places of employment are confidential, so consistent pseudonyms have been used throughout the study. All direct quotations and interpretations of individuals' perspectives can be traced to the correct sources, represented here through their pseudonyms. The interviews were tape recorded and transcribed from the tapes, ensuring accurate reporting of the participants' words and context. The assurance of confidentiality was important to the participants and helped them feel more comfortable being forthright in their responses.

As outlined in Chapter Three, data obtained from the study participants underwent analytic processes that first examined the data in detail, identified and pursued emerging concepts, scrutinized the relationships among the concepts, and distinguished between emerging categories and the properties and dimensions of those categories. These steps in the process, as explained by Strauss and Corbin (1998), include the open coding phase and the beginning of axial coding. Strauss and Corbin emphasized the fluid nature of the analytic processes involved. After determining the categories and their properties and dimensions, the data were examined to determine the relationship of these elements to various contexts, each of which includes intervening conditions, actions and interactions, and consequences of the situation. The completion of this process finalized the axial coding phase. Finally, the researcher analyzed the data to determine its integration around a central category. This final phase, selective coding, allowed the full complexities of the relationships among concepts to emerge within the integrating framework of an explanatory concept that took the range and variability of the concepts into consideration (Strauss & Corbin, 1998, pp. 145-146).

The data in this study proved to be dense and complex. The interviewees all discussed many influences on their experiences through time. Analysis revealed high commonality among the types of influences discussed, but significant variability among the manifestations of these influences in teachers' experiences. Six categories emerged during open coding. They included Individual Influences, Student Influences, Relational Trust, Culture, Leadership, and Influences of Institutional Structures.

Therefore, detailed axial coding analysis was conducted on six categories that emerged during open coding. The final selective coding process revealed the complex relationships that emerged among these categories and their properties. The density and complexity of the data cannot, in the judgment of the researcher, be reduced to fewer categories and still retain the meanings intended by the interviewees.

Participants in this study each contributed multiple examples from their varied experiences through time. Table 1 details general information about each subject, including career stage, gender, teaching position when interviewed, previous positions, formal education, size of community, and whether the teacher lives in the community in which she teaches. As Table 1 shows, all of the volunteers were female and most were very experienced teachers with varied backgrounds.

Table 1
Subject Information

Subject	Career	Gender	Current	Former	Rural or	Lives in
	Stage		Teaching	Teaching	Large	Community
			Position	Positions	Town	
T1	Late	Female	7-8 Math/	2-8	Rural	Lifetime
			Language			
			Arts			
T2	Early	Female	1 self-	2	Large	Yes
			contained			
T3	Late	Female	3-5 Title	K,1,2,3,5	Rural	Yes
			Reading	1,3 mostly		
T4	Mid-Late	Female	5 self-	4-5	Rural	Yes
			contained			
T5	Mid-Late	Female	1 self-	K-2	Rural	No
			contained			
T6	Mid	Female	5 self-	6-8	Rural	No
			contained			
T7	Late	Female	5 self-	2-3	Rural	No
			contained			

Т8	Mid-late	Female	Library	2	Rural	Yes
Т9	Mid-late	Female	Literacy Coach	K-1	Rural	Temporary
T10	Late	Female	6	2-8	Rural	Lifetime
T11	Mid	Female	K-5 Title Reading /Math	2-8	Rural	Yes
T12	Late	Female	K	Library/K 4-5	Rural	No

As stated in Chapter 3, the sample was purposely limited to elementary school teachers who would share more similar circumstances than would high school teachers. Only one teacher taught in a district in a large town with many elementary schools, with the others all teaching in smaller towns with one or two elementary schools. Most of the teachers lived in the communities in which they taught, with four exceptions. However, only two teachers had been lifetime residents and teachers in their towns. The others had taught previously at other schools in other districts. Two of the teachers currently worked with female principals, although others had done so earlier in their careers. The other six principals were male. Although the researcher analyzed the demographic factors during initial open and axial coding, no significant relationships emerged regarding longevity in a district. Gender was relevant in the relationships of two teachers to their principals, and is reported throughout. Career stage was important in several ways and is reported in full.

It is important to remember, as one considers the data in this study, that the narrative data represent the individual perceptions of twelve teachers. They framed and represented their thoughts as they chose, in response to the prompts and questions framed by the researcher. The point of this study was to elicit the individual perceptions and insights of teachers, because people act based on their own perceptions of situations. Any generalizations made by the researcher on the basis of the perceptions reported apply only to the twelve female elementary teachers included in this study. Conclusions are drawn in the analysis about common processes and factors that emerged in the perceptions of these particular teachers. The reader of the research will need to decide if or to what extent these conclusions might apply to other teachers.

As explained previously, open coding was the first analytic step in examining the interviews from the participants. The next section details the open coding analysis.

Open Coding

Open coding employed questioning, analysis, and comparison as tools for revealing patterns within the data. Numerous concepts emerged, which then had to be examined, interpreted, and regrouped into related pieces (Strauss and Corbin, 1998). This regrouping process determined the relationship between categories, properties, and dimensions within the data. Categories are larger concepts, explained by the properties delineating the attributes of a category, and dimensions outlining the range of occurrence for each property (Strauss & Corbin, 1998). This process revealed six categories. Analysis of the open coding explores each category, its properties, and the dimensions of these properties. Tables summarize the data; narrative and quotations anchor the summary into the thick, rich descriptions in the interviews (Strauss & Corbin, 1998).

The first category analyzed is Individual Influences.

Individual Influences

Table 2 illustrates the properties and dimensions of this category.

Table 2

Properties and Dimensional Ranges of the Individual Influences Category

Category	Property	Dimensional Range
Individual	Professional	Career stage
Influences	Experience	Early → Late
		Levels Taught
		K → 8
	Educational	Formal Masters → Informal Professional Development
	Background	
	Craft	Repertoire of Craft Knowledge
	Knowledge	Developing → Extensive
		Understanding Complexity of Student Learning
		Figuring it out → Help them learn in variety of ways

Teacher Reflective Processes	Personal → Instructional
Evolution of Practice	Improving coherence & effectiveness of practice Tried this & that → know what works
Teacher Emotions	Positive → Negative

Descriptive narratives based in the interview data explore each property and its dimensional range. After the exploration of details present in the data, the category, properties, and dimensions are related to the literature review. The property "Professional Experience" is first in Table 2 and will be explored first in the narrative.

Professional Experience. Participants' professional experiences shaped their perceptions through the confluence of many variables. All of the participants viewed their experience as a valuable asset that enhanced their capacity and competence. Career stage emerged as a differentiating factor in this category, due to changes in teacher perspectives when they had more experience compared with early in their careers. Early in their careers, participants tended to welcome reforms as illustrated by Mia's experience with Reading First implementation in her school.

I think it was actually easier for me, because I didn't have any old habits. . . I was embracing all of this . . . this is how I teach it successfully. It's like a crash course in how to teach reading in three years, whereas the other teachers had . . . developed their ideas and their philosophy, so it made it much more difficult with them to make the change.

Mia is an early career teacher who was hired as part of the change process in her school.

Similar early career attitudes toward change were recounted by late career teachers. Eleanor, a late career teacher in her fourth school, remembered an instructional reform experience from her early career at her second school:

... I first encountered some change that was significant to me and that was in the days of new math. It was like, okay, what's new math? I just got out of college here a few years ago. I thought I was in new math and all of a sudden here's this

new idea on what you're supposed to be doing for math, but it was a learning process for me and I was always so thankful that I'd had an administration who saw that it was a need to bring people to an awareness to. So, I've used that my whole career, because of that change that went through. . . looking back, probably my age and being open to that had something to do with the way I received it, because I know there were older teachers who just did not want to go to those classes and did not want to make changes in what they were doing.

Eleanor also reflected on experiences in her third school, during which older teachers had refused change, and she did not "ever want to fall in that trap." However, when asked her perceptions of her success in avoiding that trap now that she is a late career teacher, she said ". . . you'd have to ask somebody else whether I achieved that or not." Eleanor's reflections were typical of the late career teachers in this study, in that they all had the experience as young teachers of older teachers who resisted changes. Emma recounted an experience when she was young with an older teacher about whom she thought "Man, you're kind of an old crabby thing." Later she came to understand the point he was making about recurrent change, but she has tried to avoid developing his attitude. Most of the participants related feeling openness to change in their early careers and a perception that older teachers were unnecessarily resistant.

In contrast with early career teachers, mid-career to late career teachers demonstrated more caution regarding reforms and measured the reform's worth by considering the lessons they had learned through their careers. Patricia, a mid-late career teacher, experienced powerful formative experiences with a whole language literacy program in her first school, at which she taught for nine years. Her subsequent career moves have allowed her to follow the philosophical path on which she began, until the latest move into a reading coach position for a Reading First school. Her mixed feelings are reflected here:

So far so good. It's been a real challenge, because as I say, it seems to be a step backwards because it's direct instruction, but Reading First requires only approved programs that have to be scientifically based. . . . It was a very difficult transition. In fact, [a second grade teacher trained in Reading Recovery] came to

me after the first week of it. She said "This is too painful for me to do this to these kids." And I said "I feel your pain 'cause I had a hard time with it too." . . . it's been an interesting change process more from the teachers who know their stuff. I think it's been the most difficult for them. And, you know, for me too because some of it, I just thought, "This seems so archaic, you know, it just seems backwards." . . . when do kids really get to interact with the text? When do they have fun with it? And that is part of this, but we need to be patient with the process.

Her response is emblematic of the attitude the mid-career to late career teachers expressed, in that she is skeptical of some aspects of the reform, but is hopeful that she will see positive outcomes for students. Grace, a late career teacher, welcomes changes in reading instruction in her school because she sees benefits for the students, but mourns the loss of time for art and science. Generally speaking, mid-career to late career teachers believed in their own expertise as one valid measure of the value of a reform, especially as their expertise related to the overall impact they believed the reform had on students.

In addition to career stage, the grade levels taught and whether the teacher was a classroom teacher or a specialist also influenced their priorities and understandings as they participated in reform. Specialists providing intervention in academic areas tended to focus on systemic issues, such as aligned expectations and consistent instructional practices. Two teachers who had been classroom teachers and librarians felt less pressure when they were in the library and tended to be less emotionally engaged in the reforms than when they were in the classroom. One of them, Louise, discussed Montana criterion referenced test (CRT) results and accountability as having positive impacts on the school, without making a connection to the children taking the test. In contrast, the third through eighth grade classroom and Title teachers, who administer the CRT to children, focused primarily on the impacts the tests had on the children personally and on instructional time. Kindergarten through second grade teachers tended to focus on changes in their schools' primary grade reading programs, but did not discuss the testing as one of their concerns. Overall, participants' views of needed reforms, current reforms, and the success of reforms was related to their past and present teaching responsibilities.

Educational Background. Formal education and professional development training are also related to teachers' grade level responsibilities and participation in reform. Everyone started teaching with a similar elementary education credential at the bachelor's degree level. Some of the teachers added other formal endorsements, such as reading specialist or librarian. Five participants had a single masters degrees, two in curriculum and instruction, two in educational leadership, and one in technology in education. One participant had two masters degrees, in curriculum and instruction and in literacy. Louise and Katie, the two with masters degrees in leadership, discussed the potential options that degree opened for them. One of them was actively seeking a principalship, while the other had taken on leadership roles in her school. Neither of them was a grade level classroom teacher. Kristin and Emma, with curriculum and instruction masters degrees, and Eleanor, with a technology degree, continue to work as fifth and sixth grade classroom teachers. The only individual teaching in primary grades who had a masters degree was Patricia, who has two, and she was a reading coach due to her high level of education in that specific area.

Primary grade teachers tended to pursue specific professional development training focused on instructional practices at their level. Many of these had been associated with major reform efforts in their schools. For example, Katherine and Patricia had trained in Reading Recovery, and many of the teachers mentioned colleagues who had this training. Susan, Katie, Grace, and Patricia had all been involved in the Learning Network, an early literacy model taught by the Richard C. Owens Institute. Grace, a kindergarten teacher, had also participated in extensive science professional development and had attended a number of kindergarten specific conferences. As she said, "Those places are the best thing, places to pick up new trends and new things you can do." Mia, Katherine, Susan, and Patricia had all participated in Reading First Grants, which target reading instruction K-3 and provide substantial training over several years. Many additional examples were provided by interviewees. The immediate practicality of the training was important to most of the interviewees.

Craft Knowledge. Participants reported that their craft knowledge improved with experience. As Carol said, "I'm always trying to figure out what I can do . . . if I take a little bit of this and that, but it's just putting it all together." Mia recalled spending "five,

six hours on my reading instruction every week" when she began teaching, and progressing to feeling more comfortable "so it's nice to be able to pick and choose what fits you, what fits your kids." She began to apply her professional insights to the materials provided through the Reading First Grant, rather than following step-by-step directions, and thus felt she more easily and effectively adjusted instruction to fit the students. Patricia, despite having an extensive reading background, noted that she continues to develop her craft knowledge. "I have these deep understandings of how kids learn to read, and . . . this is another piece of it . . . I'm really learning that struggling readers, you need to take them back to the very basics of that strong phonics instruction." Another experienced teacher, Katherine, works with student in Title I reading. She continually uses her ability to understand her individual students to adjust the programs and strategies she uses with each of them. Although she has core reading programs available, she uses them according to the effect she observes with the students, rather than counting solely on the program to provide direction.

Overall, teachers explained craft knowledge as a development of the ability to understand student needs, and then to create effective lessons drawn from a variety of instructional strategies and materials. They further noted that they became more effective and efficient at this process as they gained experience. Susan's reflection on her growth was a good summary of this progression:

[I] had come from a student teaching experience where it was very workbook oriented, and at first, I was a little scared. And then all of a sudden it became this challenge. I had to come up with my own spelling, my own language, my own themes, . . . and I was a type person I think that truly benefited me because it made me go out and research and find things.

The responses of the teachers in this study relate closely to those discovered by Hargreaves et al. (2001). They noted that "Most teachers were committed to having or developing a broad repertoire of teaching strategies" (p.153) which they drew on depending on their relationships with students, their understanding of what would engage students effectively, and their feelings about what would excite and motivate themselves.

Teacher Reflective Processes. One important measure of personal success for participants was their instructional effectiveness with students. Katherine expressed her

excitement with student progress due to the Reading First reform at her school. "[T]he thing that's changed the most for me is the excitement, . . . I can visit with them and be completely honest, and I think these kids sense my excitement, that I can make a difference for them if they'll just buy into it and work with me. . . I've seen kids advanced almost a year with reading with this program . . . and they can see that growth." Another measure of instructional effectiveness that participants discussed was the ability to target instruction to a student's needs. Grace, a kindergarten teacher, and Susan, a first grade teacher, noted how the reading program they were using with kindergarten and first grade students allowed them to "[S]end kindergarten readers to first grade, first graders back to kindergarten. We deal with them where they are." This idea of instructional success tended to include the students' self-perceptions as being successful, as was illustrated in Katherine's example.

Two teachers, Mia and Carol, gave examples of specific children they think about who are emblematic of the idea of success for them. These examples included student qualities beyond instructional successes, such as development of healthy personal lives, continuing education beyond high school, and feeling good about themselves as learners. Success also included developing high levels of student engagement in class. Susan noted that "you can just feel the learning that's taking place" when she successfully creates high levels of student engagement in a lesson. Human connections with the students were critical components of success from the perspective of the interviewees. Reform initiatives that undermined these human components tended to lessen participants' feelings of success.

The final element involved in participants' ideas of success as a teacher was the degree to which they found balance between their personal lives and professional lives. No one expressed great satisfaction with their success in this regard. Grace thought she should do better than she did. Carol's father and family told her she spent too much time at school, but she couldn't figure out how not to. Kristin had a new baby and felt her classes were suffering if she didn't spend weekends at school. Mia never imagined teaching would take up all of her personal time. Gretchen worked long hours during the week and then just stopped working, even if she was not done, so she could spend time with her family. Eleanor felt less organized and caught up with every passing year. Not

one participant expressed satisfaction with the balance between her personal and professional lives. They tended to feel that with more time they could be better teachers, but that they already spent as much time on teaching as they could. This aspect of their definition of success and failure was closely linked to the emotion of guilt that will be explored in more detail later.

Evolution of Practice. Participants noted several ways in which evolution of an individual teacher's practice through time is important. Every participant believed she was working in good faith to meet the changing needs of her students and school. This did not necessarily equate with full compliance with imposed reform measures, if the teacher saw them as undermining students and/or teachers.

Most of the participants noted that many of their students came from dysfunctional homes and lacked basic supports for academic success. One area in which practice had been adjusted to address this was student disciplinary systems. Two participants were strong supporters of a particular program that addressed discipline issues in the classroom in strict and consistent ways and involved parents. Most of the participants noted that behavioral problems could be quite severe with individual students, requiring teachers to develop effective responses. Some gave examples of personalized approaches to discipline with troubled children. Academic adjustments included how homework was dealt with, how tests were graded due to student cheating, and finding ways to help students learn to be responsible for their own learning. Participants believed they needed to adjust their practice so they could be more effective with students who faced difficult situations at home.

In addition to evolving to meet students' individual needs, all participants believed that their practice should evolve to reflect new understandings about content and about student learning. Interviewees gave examples of colleagues who had not adapted through time and still used the same text, lesson plans, and tests. Some of the examples were specific, and others did not refer to a specific person. This raised some question about the actual pervasiveness of stagnant teachers compared to the interviewees' perceptions of that pervasiveness. The interviewees thought stagnation was wrong and believed that administrators should require teachers to continually improve their instruction.

As part of their evolution, interviewees thought continued education through professional development and formal education was important. They also saw students as an important source of learning for teachers. As Gretchen noted, "Kids are definitely the best teachers for us, and they do help you become better teachers, find out things that worked well and things that don't." Again, the interviewees characterized teachers who did not take advantage of learning opportunities as stagnant and employing poor practice.

However, interviewees did not equate disagreement with or actual resistance to a particular reform as a refusal to evolve. Some reforms were perceived as a return to failed practices of the past, some as infringing on appropriate teacher judgment, and some as harmful to students. When faced with what they regarded as harmful reform, teachers saw resistance as a form of positive evolution in their personal practice. Susan and Carol gave examples of retreating to their own classrooms and privately using more engaging materials and activities when confronted with administrative requirements to standardize their practice in relation to worksheets and tests. Kristin lamented the loss of joy due to testing pressures. "It certainly takes the joy out of teaching for me and for other teachers who always teach to the test. It's not fun for us, and it's not fun for the kids." Her stated individual goal was to use interesting instruction as much as possible and to focus on making students independent learners.

Hargreaves (2003) found that teachers confronted with standardized reform often responded similarly to the teachers in this study, by trying to mitigate the impacts in their classrooms. They experienced similar feelings of pressure and loss of creativity and joy in the teaching environment.

Teacher Emotions. Individual emotions emerged as an important influence on how participants responded to the demands of reform. As might be expected, positive emotions served as strong motivators for higher levels of commitment and effort. Negative emotions weakened commitment and contributed to withdrawal in some instances. Most interviewees experienced a mix of positive and negative emotions associated with teaching and reform.

Positive Emotions. Fun, joy and enjoyment tended to be associated with creative teaching practices that promoted active student engagement. Kristin's words were representative of the general attitude, when she described a weather broadcast unit. "Oh,

they love it. It's fun and I think they get more out of it, probably." She characterized this unit as an especially valuable learning experience. Other examples of similarly engaging units included a gardening unit, a checkbook unit, and a money unit. Participants linked their levels of fun and joy to the levels of fun and joy they observed their students experiencing. Love of teaching was closely linked to these concepts of creativity and joy. Creation of compelling units of instruction is discussed in the literature as a source of motivation and joy for both teachers and students (Darling-Hammond, 1997; Hargreaves, et al., 2001). The literature supports the view that emotional engagement with planning and the ability to experience autonomy in that process are important for teachers (Hargreaves, et al., 2001; Sergiovanni, 1992).

Love of students also linked strongly with love of teaching. Carol and Emma both talked about calling their students at home, attending activities, and otherwise maintaining strong personal ties. Carol, Gretchen, Mia, Emma, Susan, Katherine, Eleanor, Katie, and Patricia all specifically mentioned the rewards they felt from working with students who have significant challenges. They expressed joy because they helped these students grow significantly during the course of their relationships. Each of these teachers perceived herself as working well with and enjoying a wide variety of students. Katherine, Katie, and Patricia worked extensively with high needs students and were committed to these students' success. Kristin, Gretchen, Emma, Grace, and Susan all discussed how they work effectively with advanced students and the rewards they find in these relationships. Most of the participants characterized their feelings for their students as love. Hargreaves et al. (2001) found that teachers often identified love for students and the successes of individual students as a source of psychic rewards. The ethic of caring was central to the self-perceptions of many teachers in their study.

Other positive emotions were less linked to the relational aspects of the classroom. Confidence was felt more strongly when teachers had clear purposes within their classrooms. Sometimes these were associated with organizational purposes, but sometimes the teacher's purpose was more individual. Most of the experienced teachers had a high degree of confidence in their own judgment and in their ability to set appropriate purposes for instruction. A couple of experienced teachers felt their confidence undermined by current reforms promoting a purpose they did not agree with

and were left feeling confused about how to accomplish the goals. Confusion was also associated with a teacher's early career experiences, especially when the teacher was in a situation with little guidance. Confidence appeared to develop as teachers experienced success at meeting various purposes. Fullan (2001), Hargreaves et al. (2001), and others discuss the relationships of teacher competence to the reform environments within which they find themselves. Their research upholds the idea that teacher learning must continue for teachers to approach situations with competence and optimism.

Fulfillment was also associated with successful accomplishment of a teacher's purposes. Carol gave an example of her rejection of a one current reform, which she felt was undermining her purposes with students, in favor of a different new approach. The second approach promoted student learning and engagement, and she felt she was finally achieving her purpose of helping students learn language arts.

Participant feelings of competence centered partly on their knowledge of their own capabilities, but also depended on having the support from others and the material support to successfully enact the reform. When teachers tried to enact new programs without sufficient support, they doubted their effectiveness. Carol's experience with the testing required by No Child Left Behind led her to comment that "I don't really see the nuts and bolts that someone has in place to make that happen . . . I'll be real honest, it's not coming together for me very well." Some took this as a reason to put in more individual effort to resolve the difficulties, others saw it as a reason to abandon the reform until more support was provided. Interestingly, self-perceptions of competence had differing influences here, perhaps also related to the nature of the reform. A couple of teachers believed in their own competence to such a degree that they knew they could arrive at a successful implementation, despite difficulties. A couple others, after considering a reform, believed that their personal competence levels assured their students of a good education even if they did not embrace the reform.

Negative Emotions. Negative emotions tended to be associated with either organizational situations that undermined the teacher's ability to function to her own standards or with difficult interpersonal situations. Frustration was the most pervasive negative emotion expressed in the interviews. Generally, high levels of frustration were directed toward individuals, structures, and processes that thwarted the interviewee's

ability to effectively meet her purposes or the purposes of a reform program. Reform associated with Montana's criterion referenced test (CRT) was the target of much frustration. Kristin believed her everyday teaching was "very good" and felt that "to have to teach to a test is really frustrating. . . . I just don't like that and I thought it was pretty sad." Others, including Carol, Emma, Gretchen, Eleanor, Katherine and Katie shared this source of frustration. Katherine said "Fourth grade, I'm appalled at the testing fourth grade has to do. . . I probably missed a month of instruction with the fourth graders last year, just because of testing. . And I think, to put it my way, it's stupid." Gretchen noted "There is a burnout factor with our kids."

Other specific sources of frustration included lack of support materials for implementation of Six Traits of Writing, lack of textbooks for teaching core subjects, use of workbooks to the exclusion of teacher choices, lack of time to plan and implement effectively, fellow teachers who acted in ways that made the interviewee's job more difficult, and failures by principals to address the interviewee's concerns. Hargreaves et al. (2001) also found high teacher frustration associated with imposed reforms. Lack of support for implementation or focuses that undermined teachers' ability to create engaging instruction were pervasive sources of teacher frustration for the teachers they interviewed also.

Teacher guilt was a pervasive emotion, expressed in various ways throughout each interview. Susan felt guilty that she had stopped calling all her students' parents early in the year to tell them positive actions by their children, despite having taken on a new job and greater obligations. Katie felt guilty that she only could offer half an hour of time to each group of Title math and reading students, despite having already given up her lunch time and prep to provide more time for students. Carol said "I feel like I'm not ever doing enough. I don't feel like I've met enough needs or I've met enough goals, or I've called enough parents . . . when I see what we're supposed to be doing, I just can't quite get there." Eleanor reflected on her early career when her sons were young, and noted that she had to learn to make choices. "I don't always feel good about 'em, but sometimes I've lost a lot of sleep trying to do both." For most of the interviewees, guilt originated when they were unable to meet the multiple demands they faced. They felt guilty for not meeting their personal standards, for letting down their students, for letting

down their families, and for letting down their colleagues. None of them thought they had done anything wrong, but rather that they had not done enough of the right things.

Interviewees associated pressure mostly with demands from their organization and from other institutions that they should perform at a certain level. One example was pressure to meet the 100% proficiency goals on the Montana CRT, because teachers could not see any reasonable and realistic way to meet this goal. Another example of pressure was when districts printed the test results in the paper and teachers were made to feel inadequate for the performance of their students. As Emma said, "I'm uncomfortable with my name in the paper with my kids' test scores because . . . there's no real way you can thoroughly assess a child in comparison to judging a teacher . . . I know they look at names with their scores . . . that really bothers me." New instructional programs mandated by a district, such as Differentiated Instruction, could also be a source of pressure if the teacher felt someone was continually checking her performance with the program. Teachers did not experience negative pressure when they had professional development support and sufficient resources to effectively meet the goals at hand. A good example of more positive pressure was Mia's experience with Reading First, because continual training, time, and support personnel were provided. It was only when the goal seemed unachievable that pressure became negative.

Feeling overwhelmed was closely related to feelings of pressure. Interviewees felt like more and more had been piled on them, to the point that they did not have sufficient instructional or preparation time to meet all the demands. When a large demand, associated with high accountability, demanding unrealistic performance was piled on top of all the rest of the responsibilities, the teachers experienced negative feelings of pressure added to the continual feeling of being overwhelmed. This was also closely related to the guilt teachers felt. When these negative emotions pervaded every day, teachers expressed a sense of loss for their sense of enjoyment with teaching, and felt they lacked fun in their professional lives. Fullan (2001a, 2001b) and Hargreaves (1994, 2004) repeatedly discuss the negative impacts of overload on teachers' emotions and commitment. Their research also indicates that collaborative structures, professional development, and structural adjustments help teachers cope more effectively with the plethora of expectations they face.

Participants tended to distinguish stress from pressure as originating in relationships rather than in teaching responsibilities. The distinction was not constant, but occurred often enough to be notable in terms of differing influences on teacher responses. In situations with high interpersonal conflict, the interviewees reported higher stress levels than did those who experienced little conflict. Two teachers worked in situations in which they felt conflict with the principal and superintendent. Their perceptions were that their concerns and input were dismissed because they were women, and that men enjoyed greater prestige and professional regard than did women. Each of them gave specific examples of times they were treated dismissively by the local administrators. Another interviewee, Eleanor, related an on-going situation in which another teacher at her grade level had what she described as a "personality disorder." His negative behavior toward her continued through several years and also caused her to feel disregarded by administrators because they did not address the situation after she had brought it to their attention. Most of the interviewees expressed only occasional stress due to interpersonal relationships, and a few expressed no concerns at the time of the interviewe.

Internal conflict, associated with guilt, pressure, and conflict between personal and professional commitments, was pervasive. Some participants also experienced increased stress when they were asked to implement reforms that went against their values as a teacher. All of the participants cooperated in the reform initiatives in their schools, even when they disagreed to some extent. For those who disagreed, sustaining this essential internal conflict seemed to build stress through time. Every interviewee expressed some measure of stress in this regard. However, the stress was mitigated more effectively for those teachers who identified supportive professional networks in their schools. Those who felt more isolated seemed to feel more stress through time and to feel less capable of mitigating the stress. Hargreaves et al. (2001) noted that "The intellectual work of thinking one's way through new programs and practices is never more difficult than when it is undertaken alone" (p.166).

As has been discussed pertaining to success and guilt, a difficult source of internal conflict for participants was how to meet both professional and personal commitments. Carol, Katherine, and Eleanor took several years off from teaching while their own children were small. Patricia, Katie, and Kristin discussed the difficulties of meeting their

own childrens' needs while fulfilling teaching duties effectively. Mia did not think she could have children until teaching became more manageable for her. No participant expressed a feeling that she had achieved an effective balance, although several late career teachers expressed less conflict now that their children are grown.

Individual Influences and the Literature Review. Due to the varied properties within the individual influences category, the connections to the literature were made throughout the section as relevant. The next category that emerged as a crucial influence in teachers' professional lives was Student Influences.

Student Influences

Table 3 illustrates the properties and dimensions of this category.

Table 3

Properties and Dimensional Ranges of the Student Influences Category

Category	Property	Dimensional Range
Student	Learning Needs	High Intervention → Low Intervention
Influences		
	Self-Perceptions	Academic → Personal
	of Success	
	Family Support	Extensive → Lacking

Student-centered. The degree to which their organizations were student centered was critically important to participants. They all personally expressed highly student-centered values and expected their schools to share these values. Any proposed reform was scrutinized from a student-centered perspective. Every participant gave positive examples of reforms that benefited students, perceiving the benefits to students as the characteristic that made the reform a positive one. Mia struggled with many aspects of the reform she worked with, but felt the struggle became worthwhile when students succeeded:

I remember feeling very overwhelmed, but within three or four weeks you started seeing the progress with the kids and . . . the overwhelming feeling kind of left because you weren't thinking about that. . . . this really works and what we're doing is really making a difference.

Several participants gave negative examples of reforms that had, in their view, hurt students. Katie detailed several negative impacts she perceived due to mandated pressures:

You're pressured to do more, in less time. And, sadly, I think, you're pressured to take away things kids like to do the most . . . science, and art, and social studies . . . especially with our latest . . . federal mandates. . . . I don't want to stress these poor little kids out . . . I had a little girl in third grade. . . and she had to do one hundred take away thirty seven, and she couldn't remember how to borrow with the zero. She was in tears, couldn't do it, in tears over a test.

Katie's response regarding the impacts on students was similar to that of many teachers who encountered the testing requirements.

Participants also gave examples of individuals who had benefited or harmed students at various times. The overall feel of the organizations that emerged showed those that were more student-centered as a usual situation were also more student-centered in their reform efforts. Susan related how her previous principal made decisions about materials and programs based on teacher accountability and standardization of practice. Her new principal, in contrast, pursued individual supports for students and opportunities for students to learn effectively as the basis for his decisions regarding programs and instruction. Flexible strategies were employed with student success as the goal. Schools that emphasized administrative control as a primary consideration were perceived as less student-centered by teachers.

Student Influences and the Literature Review. Collins (2001) noted that when the leader becomes the focus of employees' attention, instead of their work being their focus, an organization is headed for trouble. In schools, the appropriate focus for teacher and principal attention is student learning. The teachers in this study understood that and appreciated leaders who also understood. Hargreaves et al. (2001) discussed how student-centered practices, such as engaging students in assessment, integrating curriculum and incorporating student experiences, and considering the emotional impacts of reforms on students are critical in terms of gaining teacher commitment. Without this student-centered focus, reforms are unlikely to be effectively implemented or sustained (Hargreaves et al., 2001). In this study, teachers repeatedly discussed the benefits of

hands-on experiences, the value of modeling units on real life situations, and the importance of engaging their students' emotions. They wanted reforms that moved to support these aspects of instruction, rather than reforms that undermined them.

Relational Trust

Table 4 summarizes the properties and dimensional ranges associated with this category. Table 4

Properties	and Dimensiona	l Range of the	Trust Category
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Category	Property	Dimensional Range
Relational	Respect	Disrespectful → Highly respectful
Trust		
	Competence	Incompetent → Highly competent
	Personal Regard	Low regard → High Regard
	for Others	
	Integrity	Lack of Integrity → Consistent Integrity

Trust emerged as an important consideration in many facets of teachers' sensemaking. The term relational trust, as conceptualized by Bryk and Schneider (2002), is specific to school communities and emerged from their research in the Chicago Public Schools. Their conceptualizations provided workable property subcategories through which the dimensional ranges that emerged in the data could be explored. Bryk and Schneider (2002) noted that "[T]eachers must engage not only particular subjects and ideas about how to teach them, but also their students, parents, and professional colleagues (p. 5). The role relationships and the expectations associated with these roles within schools form the basis of relational trust (p. 21). "[R]elational trust requires that expectations held among members of a social network or organization be regularly validated by actions (p. 21)." The behavior and intentions of others, and the respect with which these are carried out, are critical components of relational trust (p. 21). The following analytic properties allow exploration of relational trust as it emerged in the data in this study.

Respect. Respect includes "recognition of the important role each person plays in a child's education and the mutual dependencies that exist among various parties" and conversation characterized by "a genuine sense of listening to what each person has to say" (Bryk & Schneider, 2002, p.23). Furthermore, the actions various parties take must

reflect that consideration is, in fact, given to what has been said. In this study, several dimensions of respect emerged.

The first dimension was the respect experienced among teachers in an organization. This respect had personal aspects and professional aspects. Seven participants representing six schools reported that professionally they believed a number of their fellow teachers were disregarding their input and ideas about how to be more effective. At the same time, they characterized these individuals as their friends, and believed that these individuals would help them personally if a need arose. There seemed to be some disconnect between the respect achieved organizationally among teachers and the respect achieved socially. A specific example of this difference in respect was given by Carol.

They're lovely people and . . . they're here for all the good reasons. . . They really, truly are. . . The frustration I have sometimes is because of the fact they've been here, been doing the same thing forever. They think that's the way it should be and they're not as willing to change or look at new ways of doing things.

Other patterns of teacher respect also emerged. Three participants did not express different levels of professional and personal respect for fellow teachers. They felt teachers listened to one another and acted in good conscience as a general characteristic of their organization. One teacher expressed high levels of professional respect among colleagues, but did not discuss the personal aspects of their relationships. One teacher discussed deep rifts among teachers in her school, who had allied as either for or against a reform program. Generally speaking, the respect levels among teachers in a school influenced trust levels in the organization. The culture of the school seemed to influence these levels.

Respect between teachers and organizational leaders was also important to interviewees. Most teachers expressed the belief that their principal listened to them and understood their concerns. However, they also gave examples of times when the actions taken by their principals had not lived up to their expectations. Specific examples included a principal's failure to address rude, negative, or incompetent behavior by other teachers, even after they had discussed the participant's concerns about the situation, and the persistence of reforms teachers regarded as negative for students, even when the

teacher had discussed it and believed the principal understood the nature of the concerns. Most of these teachers believed that they tried to meet the expectations the principal had for their actions. Some teachers expressed high mutual respect with their principal, believing that he listened to them and acted on concerns in effective ways. They also expressed their willingness to listen to him and to give his suggestions a try.

One teacher gave examples of the principal being actively rude by telling female teachers to get out of his office, or by refusing to listen to them. She also characterized him as unresponsive to teacher communications in general. Her response had been to avoid interaction with the principal. One teacher gave examples of lying by the principal and superintendent, and of other examples of teacher input on various issues being disregarded. Teachers were refusing to work on committees, so the level of respect given to the principal was also low. Another teacher was temporarily assigned to a school as part of a grant, and she discussed generally respectful relations with the principal. They worked closely together as delineated by the terms of the grant. However, the bonds of respect she expressed with other teachers in this setting were much weaker than those she had felt in previous schools where she had been a teacher.

Respect emerged as a factor in teacher-parent relations in many of the interviews. Because the interviewes were giving their perspectives, more data emerged about teacher feelings toward parents than about parent feelings toward teachers. Teachers tended to feel that some parents were not fulfilling their role obligations toward their children and toward the school. Concerns about parents included not supporting their children with homework, avoidance of communication with the teacher, not meeting the childrens' basic needs, and actively undermining the school's priorities. Parents exhibiting these behaviors were further characterized as very difficult to get in contact with or as actively hostile when contact was made. Several teachers framed some of these difficulties as partly within their grasp to address, and undertook respectful actions toward parents, such as regular phone calls, getting to know them in the community, inviting them in to school, and other ways of reaching out. Other teachers believed that parents and students should be made to act respectfully, and were strong proponents of a disciplinary program that demanded certain actions from parents. They noted that some parents had been unhappy with the program, but had gotten over it. The remaining

teachers briefly touched on parental relationships, but did not seem to place a high priority on establishing and sustaining a situation incorporating active listening and action by the school in response to parent perceptions.

Competence. Competence is the second aspect of relational trust, and represents "the execution of an individual's formal role responsibilities" (Bryk & Schneider, 2002, p. 23). Because wide variation exists among expectations of what competence looks like and how individuals achieve it, competence is not a clearly defined construct. However, most people within a school recognize signs of gross incompetence when they see it (p. 24). Bryk and Schneider (2002) found that relational trust could exist within widely varying degrees of competence, but that gross incompetence undermined trust, and with it, the ability to enact collective improvements (p. 25).

Participants in this study regarded their competence as highly important and worked hard to enhance their competence. They expected other adults in the school to do the same. Every participant gave several examples of specific professional development, work to develop programs, and work within their classrooms as ways in which they viewed themselves as pursuing competence. Positive recognition of other teachers and administrators usually included evidence of the other person's competence. This held true for principals also, as was evident in this observation by Patricia regarding a previous principal. "She knew her stuff. . . . She got trained and she was the kind of principal who said 'I won't ever ask you to do anything I'm not willing to do myself." The principal dropped into the classroom regularly and participated with doing running records. In addition, the principal became a national trainer and implemented in-depth reading reform in the school. Patricia held this principal up as an exemplar of a strong leader.

Negative discussion of other teachers and administrators usually was associated with a lack of competence. Emma stated strong opinions regarding the competence of administrators in addressing the competence of teachers.

I think one of the big answers is we need strong administration . . . to come in and be able to sit down with the their staff and say, "Look, this isn't working with you, what can, how can I help you?" I don't think there's a lot being offered to people who need help in specific areas. . . I think a lot of times, teachers are let go

a long time. . . . I feel I was strong when I started, but I think some people aren't strong until their eighth, ninth year.

Emma was typical in her expectation that other teachers be competent and that administrators hold them to standards of competence. Her perception that she was a strong teacher was also typical of the teachers interviewed.

Louise and Gretchen addressed a different aspect of principal competence. They noted that their schools tended to lack clear direction. Louise in particular felt that her school would buy materials, give them to teachers, and then expect things to happen with no further supports. Another way in which she felt follow-through was missing was when committees came up with ideas, shared them with the principal, and then implementation did not occur. An interesting aspect of this attitude was that there did not appear to be an expectation that teachers would take an active role in planning and implementing follow-through. The non-collaborative functioning of the school provided few avenues for accomplishing goals, which impaired the operational competence of individuals.

Personal Regard for Others. This aspect of relational trust addresses the vulnerability members of school communities feel due to their mutual dependence. "Any actions taken by a member of a role set to reduce others' sense of vulnerability affect their interpersonal trust. . . . interpersonal trust deepens as individuals perceive that others care about them and are willing to extend themselves beyond what their role might formally require in any given situation (Bryk & Schneider, 2002, p. 25). As with the other constructs of relational trust, teachers in this study brought up personal regard repeatedly in their examples.

Personal regard functioned as the foundation for the differences in personal and professional relationships noted at many of the schools. As was discussed in the respect section, seven teachers expressed higher personal respect than professional respect for their peers. The examples they gave of personal respect often contained elements of personal regard, such as another teacher covering a class, offering personal support during an illness, giving them a break for a few minutes if they were stressed, and other gestures not connected to the person's formal role. These teachers believed that they offered personal regard in return. Many of these teachers also noted particular instances

in which their principals had exhibited high personal regard for them, outside the role expectations.

When teachers expressed high professional respect for others, there were often elements of personal regard embedded in the professional behavior of the other teachers. This could be thought of as exceeding the level of performance embedded in local role expectations, rather than going outside of the role expectations. Mia and Kristin gave examples of hours spent with teachers on their grade level teams, beyond what was required, to plan together, create materials together, and to share teaching responsibilities in ways that helped one another. These activities went beyond those expected by the school and were experienced by the teachers as a personal support from the other teachers. Susan, Grace, and Katie, who taught in a highly respectful environment, all gave examples of similar behavior by other teachers and by their administrator.

Integrity. Integrity is the final property of relational trust. Basically, it means being consistent between what one says and does, and behaving professionally in ways that reaffirm the moral-ethical principles of the organization. Integrity can be observed by others through behaviors that ". . . publicly affirm an individual's commitment to the core purposes of the school community" (Bryk & Schneider, 2002, p. 26). Teachers in this study gave examples of high and low integrity by colleagues.

Mia, Katherine, Patricia, and Susan gave examples of teachers who were involved in Reading First grants as having high or low integrity. Mia's experiences included a group of teachers who had initially signed on as wanting to participate, and later changed their minds and were very negative with the rest of the school community and resisted implementing the agreed-upon reforms. Other teachers in the same setting demonstrated high levels of integrity in following through with their obligations, despite having reservations about the high level of compliance required. Katherine and Patricia both noted particular individuals who undermined the goals of the grant in their school by refusing to comply in their practice with what they had committed to. In their situation, this was rare and they identified most of the teachers as operating with high integrity toward their commitment, even when some of the individuals had misgivings about it. All three believed it was important to follow through with their Reading First obligations, although they still applied professional judgment to the precise form that compliance

took. They regarded this application of professional judgment as an essential component of their integrity toward their students, even though it varied slightly from the expectations of the grant. Susan had changed schools and was no longer involved in Reading First. She had felt coerced into agreement with the reform and felt that compliance undermined her integrity to principles she perceived as important. In her new school, programs functioned in alignment with her beliefs.

The third through eighth grade teachers experienced some misgivings about integrity regarding the implementation of programs in their schools in response to the criterion referenced testing (CRT) demands of No Child Left Behind. All of them felt pressured to adjust their instruction so that students would perform better on the test. All of them complied with these expectations, thereby maintaining their integrity in regard to being supportive of organizational programs. However, in this situation, they regarded the goals of the testing program as harming the integrity of the educational mission of the organization by narrowing it to a focus on testing, rather than on the development of the whole child. They felt it harmed their own integrity when they imposed activities they did not believe in on their students in pursuit of testing goals.

Participants were also very conscious of the integrity of their principals. They gave both positive and negative examples of how principals had acted as they said they would. Louise portrayed her principal's lack of follow-through with agreed upon changes in the school as a form of betrayal toward the teachers. On a more personal level, Emma thought one of her principals "did a very nice job in that, you know, talking with the kids and that kind of stuff, and I'll work for him any day." She consistently expressed high regard for her students and perceived integrity in the actions by her principal regarding students, because his actions aligned with her beliefs. Most principals were portrayed in a mixed light regarding their integrity. Interesting differences in perspective from different teachers who had worked with the same principal affirmed Bryk and Schneider's observation that some elements involved in perceptions of integrity are organizational and others are personal.

Relational Trust and the Literature Review. The subjects in this study repeatedly brought up elements of trust, as conceptualized by Bryk and Schneider (2002). Fullan (2001a) discussed the importance of relationships among the professionals in a school,

which depend to a great extent on respect, personal regard, integrity, and competence. Others pointed out that lack of trust contributes to isolation and withdrawal from organizational activities (Barth, 2001; Sarason, 1996). Hargreaves (2002) noted that "Because many schools still operate according to principles of classroom autonomy and norms of professional politeness, trust in colleagues' commitment or competence tends not to be actively renewed, . . . until crises or difficulties draw attention to it" (p.396). Teachers in this study did appear to have stronger bonds of trust in the competence of those with whom they worked closely. They also did value professional politeness very highly. Overall, this study supports the work others have done in terms of the importance of trust to teachers.

Culture

Table 5 summarizes the properties and dimensional ranges within the category of culture. Table 5

Category	Property	Dimensional Range
Culture	Commitment to Mutual Purpose	Mutual Purpose → Unclear Purpose
	Communication	Processes for Communication → No Processes for Communication
	Instructional Collaboration	No time together → Regular planned & paid time together

The category of culture encompasses the processes for human interaction in the organizational environment.

Properties and the Dimensional Range of the Culture Category

Commitment to Mutual Purpose. Participants in this study addressed commitment to mutual purpose repeatedly. Most of the subjects had experienced situations in which each determined her own course of action. Although they enjoyed the personal freedom associated with creating one's own direction, they identified problems for students and for the organization when this occurred. Katherine expressed her frustration in trying to work with students from various classrooms.

I would maybe be working with third graders who had come from three different third grade classrooms, no consistency in their instruction, no way to know for sure what they knew and what they didn't know, and so you start at ground zero. .

. . I just felt like I didn't know where to go with them.

Positive comments were associated with organizations that had a strong mutual purpose. Katie discussed the effectiveness of her building's reading program and other efforts. Her overall perception of the schools was that "We have . . . sort of a collective vision for where we're headed, and . . . targets for me to reach. And so generally we're going to get there in some specific ways." She also noted that the teachers were a diverse group, but that they worked together effectively.

Another aspect of commitment to mutual purpose was the origin of the purpose and the involvement of teachers in choosing the purpose. Higher commitment was associated with internally generated changes. Carol relates that at her school,

If we see something that needs to be changed, and we all think that's the way it should be, then we pretty much will just do it . . . we've changed our . . . study hall . . . grouping for math and for our reading classes. . . different programs that fit the kids' needs better than what we have.

Medium levels of commitment accompanied external reform programs to which teachers had agreed, such as Reading First. Low levels of commitment were generated by externally imposed reforms focusing on a purpose with which teachers did not agree, such as the testing requirements.

The data showed that participants did not regard an organizational purpose as a mutual purpose if it was externally generated and they did not agree with its focus. They did regard externally generated purposes as having a degree of mutuality if they agreed with the purposes and had a say in whether to take them on. They regarded purpose generated within their school with teacher participation as having the highest degree of mutual purpose to which they could commit.

Communication. Having formal lateral and vertical communication processes in place seemed to support a more school positive culture than did a lack of formal communication, according to the perceptions of participants. It also seemed to enhance relational trust by guaranteeing a voice to all members of the school community. The most positive data were provided by teachers from the same school, in which a number of communication processes were in place. A faculty council met biweekly with the principal and they addressed new issues, concerns, and logistical problems, engaging in problem-solving together. This kept vertical communication intact on a regular basis.

Lateral communication occurred during regular grade team meetings that addressed any current concerns and implementation details.

Most schools had some vertical communication intact, such as occasional faculty meetings. However, the nature of the trust relationship between principals and teachers played a large role in the effectiveness of these meetings as a communication tool. Eleanor discussed how her principal used groups and discussion to elicit ideas from the teachers. Teachers felt comfortable sharing their thoughts with the principal. Gretchen, in contrast, described everyone just sitting there with the exception of a few vocal individuals. Female teachers in her school felt uncomfortable talking with the principal. Emma described the change that had occurred in her district when a woman took over as superintendent for the first time as getting away from the good ol' boy way of doing things.

Participants appreciated schools with more formalized lateral communications, identifying this as a positive factor in their schools. Mia appreciated the study sessions and grade level planning associated with the Reading First Grant in her school. Katherine expressed disappointment because she had thought a Reading First grant would lead to enhanced lateral communication, but did not yet see that occurring. Katherine valued the regular allocation of grade level time as a way to communicate with other teachers. An important aspect of having processes in place appeared to be the allocation of time for people to meet face to face to talk things over. Use of e-mail, notes, and other modes of communication were not identified as particularly important to the interviewees. They did not have a negative attitude toward these things; they just did not mention them.

Instructional Collaboration. In this analysis, instructional collaboration means time teachers spend working together to plan, prepare, and implement instruction. It may or may not be related to a change initiative, but always focuses on the classroom instructional level of action. Most participants in this study brought up instructional collaboration with peers as a highly positive opportunity. Of those, five had regular opportunities to collaborate, with paid mutual time made available by the institution. In one school, regular time with grade levels and regular early release time were both provided to support teacher collaborative efforts. Other individuals were in Reading First

schools, one as a teacher and the other as a coach. Their opportunities were largely tied to the terms of the grant and to the roles they played. Two other teachers remembered specific fortuitous circumstances that had allowed them to collaborate, but as soon as the circumstances changed, their opportunities faded.

Four participants did not identify collaboration as a specific goal. In fact, Emma said that a one room schoolhouse would be her ideal work environment, because she would get to decide what to do, when to do it, and how much instructional time she would spend on each thing. Another teacher in the same district wanted to be able to consult productively with other teachers regarding specific questions, but expressed no desire to plan or prepare materials with them. Of the remaining two, one was a librarian, so was not a member of grade level teams. She did participate on committees, but expressed negative opinions about the functionality of the committees. The final interviewee expressed a sense of longing for the collaboration she saw among some members of the school, who had created their own opportunities to collaborate. Her grade level partner had been very negative and she could not relate to him effectively. It was unclear if other chances for instructional collaboration existed in her situation.

Culture and the Literature Review. Collaboration is consistently identified in the literature as perhaps the most critical component for effective schools. In the ideal situation, collaboration occurs in an environment providing for both a clear mutual purpose and teacher autonomy in pursuing that purpose. In the absence of structural supports such as time and materials, collaboration is not enough, in itself, to establish positive working relationships among the teachers. Without collaboration, however, structural elements have very little impact on the effectiveness of a school (Barth, 2001; Darling-Hammond, 1997; Fullan, 2001a, 2001b, 2003, 2005; Hargreaves, 1994, 2003, 2004; Hargreaves et al., 2001; Hargreaves & Fink, 2006; Kruse, Louis, & Bryk, 1994; McGhan, 2002; Newmann, 1994; Sarason, 1996; Sergiovanni, 1992, 1995).

Leadership

Table 6 summarizes the properties and dimensional ranges within the category of leadership.

Table 6

Properties and the Dimensional Range of the Leadership Category

Category	Property	Dimensional Range
Leadership	Teacher	Formal Processes → Lack of Processes
	Leadership	
		Classroom → Organizational
	Principal	Formal Processes → Few Formal Processes
	Leadership	
		Collaborative → Directive
	District	Thoughtful & Responsive → Repetitive Change
	Leadership	Syndrome

Teacher Leadership. On-going formal teacher leadership processes were identified by many participants. These included a faculty council in one setting, and committees and school improvement teams in other settings. Informal processes included teachers getting together to solve a mutual concern, such as how study hall worked in their building. A couple of participants identified themselves as people who pushed others into actions that would be good for students. Two participants discussed how teachers in their buildings had established informal networks to bring ideas to the principals, because they perceived the principals as not listening to the women when they had ideas.

Every teacher, however, saw herself as the undisputed leader in her classroom. The most common form this leadership took was the use of the teacher's particular strengths to craft engaging learning opportunities. Eleanor had used her familiarity with technology to design whole language plans that used the computer lab for close to an hour daily. They integrated a variety of subjects into the reading and writing they did in that setting. Gretchen brought gardening skills to the classroom. Emma loved math and did a checkbook unit. Within this creative process, the teachers noted how they included text materials and learning goals. When their autonomy was threatened by administrators or by reform efforts, teachers carefully weighed the potential benefits to their students.

They believed that they knew how to teach effectively and warded off or mitigated negative influences that reforms might have. Every teacher gave examples of how they applied their own judgment to structuring their pedagogy, no matter what other influences were present. Some of the external influences, such as access to hands-on materials, were perceived as helpful. Others, like test preparation, were regarded as dangerous interference.

The highest participant commitment to specific changes occurred when that individual identified the need for the change, acted as a catalyst for the change, and continued to perform as a change agent. Patricia had acted repeatedly in different schools as a change agent and classroom implementor of changes in reading and kindergarten instruction. Sometimes teacher-initiated changes involved other teachers, but sometimes they were changes in the teacher's own practice. When participants felt personally involved in determining the means of implementation, they were more likely to express strong commitment and more likely to see themselves as effective in implementing the change. When interviewees felt coerced to participate and had low levels of input into implementation strategies, they tended to resist the change by avoiding its implementation. Some change initiatives, such as Reading First, seemed to make some teachers feel involved in the implementation and others feel coerced. An interesting perception shared by several teachers was that teacher leaders who emerged from within the organization had difficulty establishing themselves as resident experts who had a right to give other teachers feedback. Teacher leaders who came from outside the organization were more likely to be listened to, although that did not happen universally either. Teachers were wary of influences that threatened their leadership and autonomy in the classroom.

Principal Leadership. All of the participants reported principal leadership processes that included staff meetings and occasional work sessions. However, the ways in which principals used these structures varied widely. Some participated in a collaborative mode with the teachers, some listened to teachers and then made decisions, and a couple used them to tell teachers what to do. Interviewees who experienced collaborative principal processes had the most positive views of their school's culture. Susan recently moved into a school with a collaborative culture and says "It's just been

wonderful. . . to be with an administrator that I really believe believes in teachers, believes in kids, believes in just all the things I believe in. . . is so big on encouraging us to work together and giving us time." Those who felt principals listened, but did not necessarily collaborate, had mixed feelings. Katherine reported a school environment in which some teachers persisted in negative behavior, and other teachers talked with the principal about their concerns. This pattern of filtering concerns through the principal, who remained the primary problem-solver was common. Minor concerns were addressed at staff meetings, usually by more vocal staff members. Those who lacked interactive processes with the principals expressed the most negative views of their school's culture. Interactions with the principals were perceived more as opportunities for the principals to tell them what to do or to complain to the principals. These perceptions link closely with those identified under the trust and communication analyses.

Principal leadership in change processes also varied. Participants were somewhat likely to support changes that originated with their principals. In one school, the principal tried a new idea for giving teachers time that some liked and some did not. Teachers liked him, so gave it a try. Although they appreciated his attempt to find time, the structure of the time was not as usable as they would have liked. Patricia and Grace had both experienced a strong push from a previous principal, when they were in the same school, to implement the Learning Institute literacy program. Patricia was a wholehearted supporter of the program; Grace saw some benefits and some drawbacks. Both eventually left the school, and Patricia continued to implement the strategies from the program. Grace felt a sense of relief to have more freedom to adjust her instruction. Generally, the data showed that the participants in schools with more positive cultures gave their principals the benefit of a doubt and tried new programs with a reasonable degree of commitment. However, in the two schools with negative leadership cultures, participants expressed a clear lack of commitment to changes promoted by their principals.

District Leadership. Data in this study showed that participants were more likely to support an initiative that originated within the district than one with its origins in state or federal policy. However, this support only stayed intact when teachers felt included in determining the processes used to implement the changes, and supported in their needs for time, training, and material resources. Many of the late career teachers expressed

frustration with the cyclical nature of change. They also felt exasperated that new administrators tended to bring new changes that the teachers may not have perceived as necessary. One teacher stated "I'm not sure, my hardest part was when we change administration. And I feel like it's always a game, who sells themselves the most, you know, this kind of stuff." If a district did not work effectively with changes, whatever the origins of the changes, participants became frustrated and likely to withdraw from the changes to the extent possible.

Leadership and the Literature Review. Fullan (2001a, 2001b) noted the importance of positive leadership. It brings focus to and provides opportunity for the other crucial elements of effective change to happen. Both principal and teacher leadership are important factors. Establishing leadership capacity within the organization was identified by Collins (2001) and Hargreaves and Fink (2006) as an important aspect of sustaining change through time. In complex work environments, employees have to make continual decisions and take leadership in their own situations. This is very similar to the self-identification of the teachers in this study as the leaders in their classrooms. Some of them also perceived themselves as leaders within the organization. Organizational leadership needs to be responsive to the strengths and needs of the teachers (Hargreaves et al., 2001).

Influences of Institutional Structures

Table 7 summarizes the properties and dimensional ranges within the category of leadership.

Table 7

Properties and the Dimensional Range of the Institutional Structures Category

Category	Property	Dimensional Range
Influences of	Curriculum	Basis of Curriculum
Institutional	Coherence	Idiosyncratic → Standards Based
Structures		
		Teacher Understanding & Implementation of Curriculum Poor → Outstanding
	Curriculum Continuity	Gaps & Holes → High Continuity

Materials	Quality Poor → Excellent
	Continuity Standardized Commercial → Teacher Generated
	Type Text-based → Hands-on
Instructional Practices	Specific Skills & Drills → Complex Integration
Assessment Practices	Text-based → Experiential Instructional Uses of Standardized Measures Some → Extensive
	Instructional Uses of Teacher-Generated Assessments Some → Extensive
Support Personnel	Not Available → On-going Availability
Funding	Sufficient for Priorities → Significantly Lacking
Technology Resources	Few → Highly Available
Professional Development	Quality Support for Programs & Needs → Sparse Support
Time for Individual Planning & Preparation	Distribution of Expectations Relative to Time Provided Mismatched → Somewhat Aligned
Instructional Time	Instructional Time Aligned to Expectations Misaligned → Some alignment

Curriculum. Participants repeatedly brought up curriculum as a focus of current and past reforms, or as needing reform. Current efforts to move toward standards-based curriculum were supported by many of the interviewees, despite the high amount of work associated with implementation. They saw curriculum based in standards as a better foundation for reporting student progress to parents. Grace and Katie preferred this method because it communicated the specific accomplishments of the students more effectively. Several teachers discussed wanting a clear and current basis for the curriculum. Most teachers related experiences in their pasts when they had either not had a curriculum from which to work, or the one in existence was largely ignored. They generally equated the lack of curriculum with organizational dysfunction in the school.

They felt it increased demands on them personally to have to figure out where their teaching fit within the school. Katie gave an example of having to meet with teachers in the grades above and below her when she was new to one district in order to determine where her instructional focus should be.

Because teachers in schools with poor quality curricula in place shouldered much of the responsibility for determining what to teach, the subjects also associated lack of quality curriculum with discontinuity in the school. Katherine gave examples of the differences in children's learning and capabilities, depending on whom they had as teachers. Several people said discontinuity caused gaps and holes in student skills. These impacts on students appeared to be the motivating force for several of the participants to work on curriculum development committees, with the goal of increasing continuity and coherence in the curriculum. Susan, Katherine, Emma, Carol, Louise, Gretchen, and Eleanor all believed that a major administrative responsibility was to pursue organizational continuity and to hold teachers accountable for their individual roles in achieving continuity.

The final relationships that emerged regarding curriculum were teacher choices and competence in its implementation. Most teachers gave examples of colleagues who did not, in their opinions, effectively implement the curriculum, thus contributing to the problem of gaps and holes. They also gave examples of times the curriculum did not fit the needs of particular students and they had to adapt to make it work. This practice was regarded as a positive deviation from curriculum. Overall, a strong curriculum with high continuity was viewed as an important resource by interviewees. In situations where one was lacking, teachers worked to change the situation. In situations where one was present, they expected their colleagues to use it effectively.

Materials. Eleanor discussed how earlier in her career, she had moved to her current district, in which no standardized materials were used. Teachers had instead developed sophisticated units on their own. In Katherine's school, reading instruction had been directed individually by teachers, with no standardized materials. They both expressed dissatisfaction with having no standardized materials, due to the difficulty for teachers in pulling appropriate materials together every day and a lack of continuity for

students. Both were strong advocates for having standardized materials available to teachers.

Other teachers reported varying degrees of reliance on teacher-generated materials. Most expressed enthusiasm for well-planned units of instruction generated by teachers. However, most of these same teachers also integrated standardized materials from texts into these units, so they were not operating without the resource of standard materials. One school officially avoided calling its reading instruction a "program," but had textbooks available as a resource for teachers to use. Generally speaking, having standardized materials and using them based on the teachers' professional judgment was associated with the most positive attitudes. However, several participants pointed out that poor quality standardized materials tended to not be used.

At the other extreme were schools that had Reading First Grants, which required teachers to follow a particular textbook program with fidelity. Interestingly, Katherine had taken leadership in her school, which originally avoided standardization, to pursue a Reading First grant to gain greater standardization. However, she continued to adapt the standardized materials to the needs of her students. Patricia had spent her career teaching from teacher-generated materials and was now in charge of helping teachers achieve text fidelity at her school. Mia, at another Reading First school, strongly supported the standardized approach to instruction, as long as teachers could still adapt to individual needs. These three all reported that a number of teachers in their schools were unhappy with the demands the grant placed on them to standardize their practice. The exclusive use of standardized materials appeared to be associated with mixed feelings from teachers. No interviewees supported using only direct instruction models, because all of them believed they needed to adapt materials to individual students. Overall, when the presence or absence of standardized materials interfered with effective instructional planning and implementation, participants were less satisfied. When standardized materials supported a participant's ability to plan and implement effectively, participants were more satisfied.

Instructional Practices. Content focus was brought up by most of the primary teachers, especially in terms of reading. They had been through various cycles in which phonics was taught, not taught, whole language literacy was the focus, not the focus,

writing was critical, not critical, etc. Some of them reported clear building and grade level agreements generated within the school, which tended toward teaching a balanced program. The two schools with Reading First grants were required to use a much more skills-based program and could not deviate from the content structure of the program. All of the teachers in these schools expressed concern about the focus of content and said they would be likely to modify their practice after the grant ended. Therefore, even though they were part of a highly focused reform, it was not likely to persist in its original form.

Intermediate grade teachers were more concerned with the change in focus from complex integration of skills and concepts to skill-based instruction driven by testing concerns. Several of them noted the negative impacts on their ability to teach what they thought they needed to, and thought that test-driven instruction actually undermined student learning.

Another aspect of instructional practice participants noted repeatedly was their ability to balance the use of textbooks and worksheets with hands-on experiential learning. Susan discussed a prior district in which a principal had mandated use of workbooks so that student progress could be communicated to parents in terms of movement through the workbook. Her response was to shut her door and use experiential learning in defiance of the expectation. Gretchen, Susan, Kristin, Eleanor, Patricia, Emma, and Grace all repeatedly noted the importance of using hands-on experiences with students. Several of them were quietly resisting pressure to use more worksheets targeting specific skills by continuing to balance their instructional practices as they saw fit. Instructional practice was the area in which experienced teachers seemed least likely to comply with reform agendas, if the reform undermined their ability to use what they regarded as effective learning experiences for students.

Assessment Practices. Interviewees supported assessment practices with strong ties to instruction. They repeatedly brought up the positive instructional uses for standardized classroom measures, such as DIBELS, Measures of Academic Progress (MAP), and textbook tests. These measures give immediate results that show the current level of performance by a student and inform teachers about what students need to learn next. Teacher-generated formative and summative assessments also were used for

positive instructional purposes, according to the interviewees. Several interviewees noted that the Montana Criterion Referenced Test (CRT) results often are not returned for many months, or even until the following year. The results give broad information about students, but were not useful for adjusting instruction for specific students. Overall, much of the value of an assessment was tied with its immediate instructional effectiveness.

The other way in which teachers valued assessment was for its impact on students' motivation and understanding of their own learning. Several of the teachers discussed how they had their students tracking their progress, using writing rubrics, and other ways in which students were actively involved in the assessment process. Some of them had extensive training in how to effectively involve students in assessment. The same teachers noted that the CRT was not motivating for their students and tended to produce feelings of failure and burnout. To the participants, the value of an assessment was partly tied to its perceived effects on student motivation and engagement.

Support Personnel. One important resource identified by participants was the availability of support personnel. Most of the teachers felt that the needs of some individuals required more intervention than they alone could provide effectively. At the intermediate grades, teachers talked about needing more people for Title I or special education assistance. Katie and Katherine, both Title I teachers, could not effectively meet the demands within their schools. Primary teachers had some access to paraeducators for support in reading groups, but thought more support would help reduce the overwhelming nature of the demands they faced. Generally, interviewees felt that the demands that needed to be met required more people to do so effectively.

Teachers in the Reading First schools offered a slightly different perspective than the others, because they were experiencing the additional support of two tutors and a reading coach, all trained to help with the K-3 reading program. These individuals worked with students, helped with assessments, worked with teachers, and did much of the program organizational work. However, both schools noted that they would not be able to pay for the additional positions after the three year grant expired, so they were already trying to figure out how to sustain services with three fewer people. Teachers in both schools concluded that they probably would not be able to sustain the reform as initially implemented.

Funding. Interviewees tended to view funding as a restriction on their ability to teach as effectively as they would like to. For Emma, Gretchen, and Kristin, lack of funds meant fewer hands-on activities, because materials or transportation were not available. Eleanor felt fortunate because her district had used grant money to develop extensive hands-on resources and was able to fund their refurbishment most of the time. Several teachers related lack of funding with a loss of collaborative time used for program development, because the district could not afford to pay substitutes. The Reading First schools had ample current funding, but as soon as the grant was over, they would not have the funds to sustain the programs.

Another concern interviewees raised with funding was the way districts chose to use funds. Louise felt that her district hopped from one thing to another, never fully developing or following through with materials, training, and implementation time. Gretchen reflected on a past administrator who had funded building priorities and felt that later administrators had lost effectiveness by not having clear focuses. Kristin, Eleanor, Carol, and Emma had mixed feelings, because they disagreed with funding testing preparation, but saw other focuses in their districts as appropriate. In contrast, Katie, Susan, Grace, Katherine, Patricia, and Mia saw their districts using their funds on targeted priorities and felt that those things that were funded were effective. They still saw more needs, but appreciated being able to accomplish particular goals.

Technology Resources. Technology use was noted by most of the teachers as a continuing change in their practice. Instructional technology use ranged from kindergarteners using a skills development program to extensive writing and publishing in a fifth grade class. Eleanor's experience is typical of what teachers discussed. When she began using computers with her classes, access was limited. Through the years it has slowly gotten better, partly through support from grant money. Use of a computer was perceived as a more hands-on type of learning, especially when student were generating their own work. In a few districts, access was so limited that technology was not really an accessible tool for teaching.

Organizational technology was noted more in passing, in reference to grading programs, report card systems, and school databases. Katie and Kristin saw their grading and reporting systems as helpful. In general, these systems have become part of teachers'

daily lives and they expressed ways in which their lives were easier and more difficult as a result. Having training and people who could help out with problems was important so that teachers did not have one more thing to contend with.

Professional Development. All of the teachers expressed appreciation for targeted professional development that gave them usable strategies. Louise, Gretchen, Carol, and Emma all noted training in various forms of student-involved assessment as worthwhile. Susan, Grace, Mia, Katherine, and Patricia all discussed in-depth training in teaching reading as particularly useful to them in the classroom. The most helpful uses of professional development were identified as connected to programs the districts were implementing. However, teachers also expressed appreciation for being able to pursue individual interests for classroom application. When districts did quick passes through complicated materials, teachers felt pressured and lacked confidence. They were critical of implementation based on superficial training with no backup sessions. Susan, Katie, and Grace particularly liked the collaborative sessions generated to address specific needs. They had the chance to identify the problem, work through its components, and arrive at mutually agreed upon training solutions.

Time for Individual Planning and Preparation. Time was identified by every interviewee as a resource in critically short supply. They gave examples of the mismatch between expectations placed on them with the time provided to them to meet the expectations. Although early career teachers felt a greater degree of mismatch, late career teachers continued to feel a high degree of mismatch, despite having improved their personal efficiency and effectiveness in doing the job. Kristin expressed the conflict between expectations and available time that many participants felt:

I just had this wonderful child . . . I used to go to school at 6:30 in the morning and I' work until 4:00 or 4:30 and I'd still bring homework home, probably an hour of things to correct and things to work on. And now I can't go to work until about a quarter 'til eight, so I figure I'm losing . . . at least six hours a week and boy do I notice that . . . So I go out [to school] on the weekends. . . . I take my papers for a drive, . . . I bring them home at night and if I don't get to them, . . . I do them at lunch. . . . It's certainly not a six hour a day job, and it's not an eight hour a day job. It's a minimum ten hour a day job. So I think, and maybe it's just

me, I don't know how to do it. I haven't figured out a way to manage it differently and I've been trying for eleven years.

Carol, Mia, Katherine, Gretchen, Susan, Eleanor, Emma, Katie, and Grace all had similarly lengthy discussions of the demands on their time and the difficulty of meeting all the demands effectively. Like Kristen, they believed they would be better teachers given more prep time. Also, like Kristen, they tended to worry about whether it was just their own shortcomings that made accomplishing all the demands so difficult. For every participant, the lack of sufficient time to meet the demands was a negative influence in the school culture. Several of the late career teachers also believed that the amount of expectations they confronted continued to grow, with nothing being taken away as new things were added.

Most of the teachers noted that they had about 35-45 minutes during the day to use for individual planning and preparation, in addition to about 30 minutes before and after school. However, as Carol said, "I don't feel like I have planning time . . . in junior high we have forty seven minutes and for the most part that time I spend calling parents. So to me, doing instructional stuff comes after school or on the weekend, on my own type thing, . . . it's got to be done." The point she made was one that others made as well. Time provided during the day was often used to work with other people in the school environment or to address organizational demands, rather than being available for individual preparation. Several noted that they worked with individual students during their prep time.

Instructional Time. Most of the teachers expressed a feeling of overload regarding instructional expectations and the time available in which to accomplish the expectations. All of the teachers expressed having more demands to address within shorter or more fragmented time. Many of them identified several ways in which instructional time in their schools was broken up and over-allocated. Although teachers tended to support a strong daily focus on reading, they noted that by spending 90 minutes on reading they had to cut time for math, science, art, and other curricular areas. They also noted that the addition of counseling programs, health programs, and safety programs takes time away from core instruction. Demands on instructional time also felt compressed for third

through eighth grade teachers, because they were required to cover certain content by March when the state testing occurred.

Institutional Structures and the Literature Review. Fullan (2001a) identified "program coherence" and "technical resources" (p.64) as two of five critical aspects of school capacity. Program coherence includes curriculum, clear learning goals, and coordinated use of materials and instruction. Technical resources are necessary for instructional improvement and include "materials, equipment, space, time, and access to new ideas and to expertise" (pp. 64-65). Each of these aspects of school capacity was identified by the teachers in this study as crucial to their ability to teach effectively. When these were present, teachers identified them as supports. When they were lacking, teachers identified them as hindrances.

Hargreaves et al. (2001) discussed the effects of structural supports on teacher commitment. When teachers are left on their own to manage in a complex and demanding reform environment, they perceive the organization as lacking commitment to them and are likely to withdraw. On the other hand, if they experience extensive commitment of resources by the organization, they are more likely to sustain their efforts as well. Subjects in this study responded to organizational support much as the literature predicted they would (Barth, 2001; Cohen, 2002; Darling-Hammond, 1997; Donahoe, 1993; Fullan, 2001a, 2001b, 2003, 2005; Fullan & Hargreaves, 1996; Hargreaves et al., 2001; Hargreaves & Fink, 2006; Newmann & Associates, 1996; Sergiovanni, 1995).

Axial Coding

Axial Coding Process

The detailed examination and categorization of the data during open coding resulted in the identification of six related categories. Axial coding further delved into the details of the data, de-contextualizing them from the specific interviews and considering them as part of a body of evidence. The final phase of axial coding re-contextualized the data in new ways, guided by the analytic processes of comparison, categorization, and synthesis. Axial coding related "categories to subcategories along the lines of their properties and dimensions" (Strauss & Corbin, 1998, p.124). The structure of the recontextualization followed the process recommended by Strauss and Corbin (1998).

Various categories were analyzed for their relationships to determine causal conditions, intervening conditions, contextual conditions, actions and interactions, and consequences. The data were revisited to ascertain the nature of the relationships and the specific conditions with which they were associated. Strauss and Corbin (1998) recommended this process of examining the relationships among the data by exploring the *Causal Condition, Phenomenon, Context, Intervening Condition, Action/Interaction*, and *Consequence*. Explanations of the terms are discussed below.

Causal Condition. Causal conditions are events and happenings that influence the development of the phenomena, such as being at a certain kind of place or experiencing a particular type of influence (Strauss & Corbin, 1998). They can be thought of as the background necessary, but not sufficient for, the development of the phenomena. In this study, the causal condition was the employment of all participants as teachers.

Phenomenon. A phenomenon represents a repeated pattern of actions, events, or happenings that represent individual and group responses to problems and situations (Strauss & Corbin, 1998). In this study, teachers were influenced by and responded to a variety of situations and contexts. Patterns in experience, response, and action/interaction are labeled as phenomena and examined for relationships.

Context. Contextual conditions are the patterns of conditions at a particular time and place that create the particular circumstances or problems. Individuals respond to the particular blend of conditions through action/interaction (Strauss & Corbin, 1998). For each phenomenon in this study several patterns of interconnecting conditions are explored under the label "contexts."

Intervening Condition. Intervening conditions "mitigate or otherwise alter the impact of causal conditions on phenomena" (Strauss & Corbin, 1998, p. 131). Often the intervening conditions are unexpected or cause the individual to respond in a new way to the situation. The intervening conditions in this study were present for everyone experiencing a context, but were manifested variably in different situations, influencing teachers' experiences of the phenomenon and therefore their actions and interactions.

Action/Interaction. Actions and interactions can be strategic or routine, according to Strauss and Corbin (1998). Strategic actions/interactions are purposeful and are intended to resolve a problem or to respond to the unexpected. Routines are the

actions/interactions taken in response to everyday life. They include rules, protocols, and ways of acting that maintain the social order. This study discusses many routine behaviors and teachers responses to contexts affecting the routine actions and interactions. It also examines strategic actions taken during reform or in response to individual circumstances.

Consequence. Consequences are the results of actions and interactions (Strauss & Corbin, 1998). In this study, consequences are the larger outcomes associated with the phenomena, rather than specific outcomes for every action/interaction explored.

The axial coding analysis in this study follows the structure explained above and illustrated in Table 8. Elements are explained throughout the axial coding in the order they appear here.

Table 8

Axial Coding Process

For the purposes of simplifying the presentation of data, Table 9 represents the relationship of all six phenomena to the causal condition of employment as a teacher. Thereafter, each section includes a table showing the contexts for each phenomenon. Following each table, each context is explored separately by explaining the intervening condition, the actions and interactions, and the consequence.

Table 9

Causal Condition and Phenomena

Causal Condition	Phenomena
employment as a teacher	individual influences
	student influences
	relational trust
	culture
	leadership
	influences of institutional structures

The first phenomenon to be explored is Individual Influences.

Phenomenon of Individual Influences

The synthesis of ten contexts illustrates the phenomenon of Individual Influences.

Table 10 details the ten contexts from which the phenomenon of Individual Influences emerged.

Table 10

Phenomenon	Contexts
Individual Influences on Teacher Sensemaking	• Career stage influenced a teacher's perceptions of her appropriate role and of her competence to fulfill that role effectively.
	• A teacher's priorities and understandings were influenced by the teacher's experiential and educational background.
	• A teacher's repertoire of craft knowledge developed through experience.
	• Teachers enjoyed the challenge of figuring out the complexities of individual student learning and regarded creating effective instruction in response as one of the rewards of their job.
	• Teachers sought coherence, continuity, and effectiveness within their own practice.
	• Sources of fun and enjoyment in teachers' professional lives centered on their relationships with students and peers and on their ability to exercise creativity in their classrooms.
	• Fulfillment of a clear moral purpose was associated with higher feelings of teacher competence and confidence. Lack of clear purpose, or being thwarted in achieving a purpose, was associated with confusion and frustration.
	• When goals were perceived as unreasonable, teachers experienced the pressure to meet the goals as highly negative; when goals were reasonable, teachers experienced pressure more positively.
	• Stress originated when teachers experienced high internal and/or external conflict and felt little control in finding a solution.
	Pervasive guilt occurred because subjects were seldom able to effectively meet all the demands placed on them

Each of the ten contexts of the phenomenon of Individual Influences is listed below. The intervening conditions, actions and interactions, and consequences that emerged through axial coding accompany each context.

Individual Influences Context #1:

Career stage influenced a teacher's perceptions of her appropriate role and of her competence to fulfill that role effectively.

- Intervening Condition
 - o The subject's career stage
- Action/Interaction
 - Mid to late career subjects believed they should step into leadership roles where appropriate.
 - Early in their careers, subjects tended to uncritically welcome reforms as a way to improve their work with students. Later in their careers, subjects welcomed a reform only if they saw clear evidence that it would improve their work with students.

Consequence

 During reform, early career teachers are more supportive, but experienced teachers supply effective leadership and expertise when they choose to support reform initiatives.

Individual Influences Context #2:

A teacher's priorities and understandings are influenced by the teacher's experiential and educational background.

- Intervening Condition
 - Experiential and educational background included teaching assignments, the cultures and structures of the organizations, and education.

Action/Interaction

 Teachers' perceptions differed depending on the grade levels and subjects that comprised their primary responsibilities.

- Teachers' conceptualization of the relationship of their classroom to the organization was closely related to past individual experiences.
- Teachers' priorities in their classrooms originated within their own value systems, shaped by individual, generational, and organizational influences.
- Subjects regarded intensive professional development programs, additional endorsements, and advanced degrees as credible evidence of content expertise in themselves and others.
- Subjects believed that formal education must be tempered by experience to achieve practical competence.

- O Understanding a teacher's actions required understanding the underlying priorities, values, and past influences; attempts to change a teacher's actions must address these individual factors.
- Teachers sought intensive professional development and advanced degrees to enhance their personal expertise, situational competence, and professional options.

Individual Influences Context #3:

A teacher's repertoire of craft knowledge developed through experience.

- Intervening Condition
 - Classroom experience developed a teacher's sense of what works and why.

Action/Interaction

- Early in their careers, subjects reported wanting explicit guidance from curricula, standardized materials, and experts. This was true for current early career teachers and for experienced teachers when they discussed their early careers.
- By mid-career, most subjects reported significant satisfaction in creating their own units and projects, and preferred using their own professional judgment to following guidance from outsiders.

• Craft knowledge was an important resource within a school. *Individual Influences Context #4:*

Teachers enjoyed the challenge of figuring out the complexities of individual student learning and regarded creating effective instruction in response as one of the rewards of their job.

- Intervening Condition
 - o Teachers work with a variety of students.
- Action/Interaction
 - Subjects gave examples of numerous individuals with whom they had worked effectively, and framed these student successes as a rewarding aspect of their jobs.
 - Subjects enjoyed the challenges of meeting student instructional needs and continually sought greater expertise so they could be more effective; several of them referred to this process as learning from the students.
 - Subjects noted that organizational resources could help or hinder them in meeting these challenges.

Consequence

 Teachers enjoyed meeting challenges posed by individual students, especially when they had sufficient resources to do so effectively.

Individual Influences Context #5:

Teachers sought coherence, continuity, and effectiveness within their own practice.

- Intervening Condition
 - Coherence and continuity were not always supported by the organization.
- Action/Interaction
 - Subjects expressed frustration with organizational settings that pushed all responsibility for coherence, continuity, and unity onto them individually.

- Subjects gave numerous examples of solutions they had tried to improve coherence and continuity in their own classrooms.
- O Subjects expressed strong support for some organizational actions that provided greater resources for instructional coherence and continuity, even when these removed some personal discretion in practice.

 Teachers pursued coherence and continuity as primary requirements for effective instruction, in the classroom and in the organization.

Individual Influences Context #6:

Sources of fun and enjoyment in teachers' professional lives centered on their relationships with students and peers and on their ability to exercise creativity in their classrooms.

- Intervening Condition
 - o Teachers wanted to enjoy their jobs.
- Action/Interaction
 - Subjects created lessons and units that promoted fun and enjoyment for themselves and their students.
 - Subjects avoided or disliked instructional practices that removed joy and fun from the learning experiences.
 - Subjects sought opportunities to experience joy and fun with their colleagues, both in the classroom and in other professional venues

Consequence

 Subjects experienced increased fulfillment in their work when they, their students, and their peers found fun and enjoyment in the learning processes. *Individual Influences Context #7:*

Fulfillment of a clear moral purpose was associated with higher feelings of teacher competence and confidence. Lack of clear purpose, or being thwarted in achieving a purpose, was associated with confusion and frustration.

- Intervening Condition
 - o Teachers want to feel validated in their actions.
- Action/Interaction
 - o Subjects made moral judgments about the purposes they experienced.
 - o Subjects expressed frustration and confusion when they had no clear focus for their efforts.
 - o Subjects disliked having their efforts thwarted through lack of time or resources, or through lack of administrative support.
 - o Teachers established individual purposes within their classrooms; when these aligned with organizational purposes, teachers experienced greater fulfillment; misalignment of purposes contributed to frustration and withdrawal.

Consequence

Individual enthusiasm and commitment varied situationally,
 depending on whether the subject felt supported in pursuing a clear
 purpose with which she agreed.

Individual Influences Context #8:

When goals were perceived as unreasonable, teachers experienced the pressure to meet the goals as highly negative; when goals were reasonable, teachers experienced pressure more positively.

- Intervening Condition
 - o Teachers based their perceptions of realistic goals in their own experiences with students.

Action/Interaction

- o Subjects often felt that schools and teachers set reasonable goals and could track their progress toward these goals.
- o Subjects felt that NCLB set unreasonable goals and saw no clear path for achieving these goals with students.
- o Subjects believed they had good insights into their students' capabilities; they cited local assessment results as one source of insight, and their past experiences as another critical source.

Consequence

o Subjects enjoyed working toward learning goals set within the building or with individual students.

Individual Influences Context #9:

Stress originated when teachers experienced high internal and/or external conflict and felt little control in finding a solution.

- Intervening Condition
 - Many aspects of a teacher's daily experiences are outside her direct control.

Action/Interaction

- Subjects who worked in buildings with high interpersonal conflict levels and low collaboration sought to reduce these stressors by isolating themselves.
- o Subjects in buildings with high collaboration talked about solving problems together and sharing difficult responsibilities.
- o Subjects who felt their principals listened to them and worked with them felt less stressed, because even though some decisions were outside their control, they could exert influence on the decisions.

Consequence

o Subjects took whatever avenues were available to them in an effort to reduce the daily stresses of their jobs.

Individual Influences Context #10:

Pervasive guilt occurred because subjects were seldom able to effectively meet all the demands placed on them.

• Intervening Condition

o Teachers wanted to succeed, and had limited resources with which to work.

Action/Interaction

- Subjects reported varying specifics about their situations, but experienced similarity in that all of them felt overloaded and overwhelmed.
- o Lack of time was the factor every subject identified as most critical in limiting her performance lack of instructional time, lack of planning time, lack of collaborative time, lack of social time, lack of family time, lack of personal time, lack of time with individual students, lack of professional development time, etc.
- o Subjects felt they should do better in finding ways to effectively meet all of the demands, but after many years they still could not accomplish this feat. This undermined their feelings of competence, which also contributed to their guilt.

Consequence

o Subjects experienced pervasive guilt due to circumstances largely beyond their personal control, although they attempted daily to exert control and to find solutions.

Phenomenon of Student Influences

The synthesis of six contexts illustrates the phenomenon of Student Influences. Table 11 details the six contexts from which the phenomenon of Student Influences emerged.

Table 11

Phenomenon	Contexts
Student Influences on Teacher Sensemaking	• Teachers regarded the engagement levels, academic successes, and personal growth of their students as indicative of their personal success as a teacher.
	• Individual teacher practice evolved to meet changing student needs.
	• A teacher's willingness to participate in a reform was often related to the impact she believed it would have on students.
	• Subjects experienced increased levels of fulfillment when they succeeded with at-risk students.
	• Subjects expressed a love of teaching and of students, even when things were difficult.
	• The level of family support for students contributed to student successes and difficulties.

Student Influences Context #1

Teachers regarded the engagement levels, academic successes, and personal growth of their students as indicative of their personal success as a teacher.

- Intervening Condition
 - o Student success related to teacher effectiveness.
- Action/Interaction
 - Subjects discussed their own and others' multiple impacts on students as indicative of the teacher's effectiveness.
 - Subjects regarded teachers as responsible for the well-being and growth of the whole child.
- Consequence
 - Teachers perceived successful teaching as a multifaceted response to student needs.

Student Influences Context #2

Individual teacher practice evolved to meet changing student needs.

- Intervening Condition
 - o Effective instruction targeted student needs.

Action/Interaction

- Subjects gave negative examples of peers who did not adjust their instruction, using the same plans, activities, and quizzes through many years.
- Subjects gave examples of how they have adjusted through the years to meet what they perceive as changing student needs.
- Several subjects thought that stagnant teachers should be forced to adjust through administrative intervention.

Consequence

 The subjects believed all teachers should adjust their practice to meet student needs, either through their own initiative or by administrative compulsion.

Student Influences Context #3

A teacher's willingness to participate in a reform was often related to the impact she believed it would have on students.

- Intervening Condition
 - o Reforms had varying impacts on students.

Action/Interaction

- O Third through eighth grade teachers were unanimous in their dislike of the emotional and academic impacts the CRT had on their students, and cited this as a major reason they disagreed with its use as the central tool in reform.
- O Subjects gave examples of increased student motivation, learning, and engagement as a result of various other reforms, and felt these were strong reasons to support a reform, even when it had other aspects they did not like as well.
- O Sometimes subjects liked a reform better after they saw its positive impacts on students than they did when they considered it before implementation.

 Teachers often supported reform that improved student learning, motivation, and enjoyment of school, while rejecting reform that undermined any or all of these factors.

Student Influences Context #4

Subjects experienced increased levels of fulfillment when they succeeded with at-risk students.

- Intervening Condition
 - o At-risk students required more supports from their teachers.
- Action/Interaction
 - Most subjects identified students in difficult circumstances as their favorite students with whom to work.
 - O Successes of students who initially struggled were experienced by the subjects as successes in their teaching.

Consequence

o Subjects tried hard to teach their at-risk students effectively.

Student Influences Context #5

Subjects expressed a love of teaching and of students, even when things were difficult.

- Intervening Condition
 - o Individuals needed personal reasons for sticking with teaching.
- Action/Interaction
 - Subjects reported various aspects of teaching that contributed to their love for teaching.
 - Subjects reported love of students as a primary motivator for them as teachers.

Consequence

 Despite the difficulties associated with teaching, subjects remained deeply committed to seeing themselves as teachers.

Student Influences Context #6

The level of family support for students contributed to student successes and difficulties.

• Intervening Condition

Student learning depends on family behavior, as well as on school,
 which means that families can inhibit or promote student learning.

Action/Interaction

- Teachers associated the quality of a student's home life with a student's likelihood of success at school.
- Teachers felt frustrated with families that persisted with nonsupportive patterns after repeated contacts with the school.
- Teachers observed that many students did not complete homework or read at home.
- Some students had extremely high absenteeism, which undermined their ability to keep up with learning activities.
- Teachers felt like they were expected to guarantee that all students meet proficiency targets, and that parents ought to also have a defined role in that goal.

Consequence

 Teachers wanted families to share responsibility for the academic success of their children.

Phenomenon of Relational Trust

The synthesis of five contexts illustrates the phenomenon of Relational Trust. Table 12 details the five contexts from which the phenomenon of Relational Trust emerged.

Table 12

Phenomenon	Contexts
Relational Trust	• Levels of respect and personal regard among members of a school community related to levels of trust in the motives of others.
	• Personal integrity allowed others to trust that a person would do as she said, and that she would live up to her obligations under the mutual agreements.
	• Competence was important for both personal and professional trust among teachers.
	• Teachers felt overwhelmed by the obligations they individually faced; they expected their peers and leaders to fully meet their own obligations.
	• Communication both reflected and influenced the levels and types of trust within an organization.

Relational Trust Context #1

Levels of respect and personal regard among members of a school community distinguished schools in which teachers trusted the motives of others from schools in which they did not trust the motives of others.

- Intervening Condition
 - The levels of respect and interpersonal regard experienced and given by teachers.

Action/Interaction

- Subjects at most schools tended to have higher respect and personal regard for their peers personally than professionally.
- The highest levels of professional respect and personal regard for fellow teachers were associated with the highest levels between principals and teachers.
- Most teachers felt respected by their principals and noted examples
 of the principal demonstrating personal regard or respect.
- Teachers who felt respected expressed trust in the motives of others, while those who felt disrespected expressed distrust in the motives of others.

The level of professional respect and personal regard offered to teachers by the principal, and to the principal by the teachers, tended to be predictive of the overall levels of respect and personal regard, and therefore of the extent to which people trusted one another's motives.

Relational Trust Context #2

Personal integrity allowed others to trust that a person would do as she said, and that she would live up to her obligations under the mutual agreements.

- Intervening Condition
 - Teachers, principals, and paraeducators relied on one another to fulfill their obligations without continual oversight.

Action/Interaction

- All subjects identified most of their colleagues as having high professional integrity in that they could count on them to do their jobs well.
- Most subjects reported feeling burdened by a few teachers who did not meet their professional obligations or blamed others for their difficulties.
- All subjects believed that they held themselves accountable for doing the very best they can on behalf of their students.
- Subjects interpreted being asked to take on leadership responsibilities by their principals as a tribute to their professional integrity.

Consequence

o Processes and structures that reinforced a teacher's sense of responsibility for her students and for her school as a whole were likely to promote higher levels of professional integrity, which strengthened organizational trust levels.

Relational Trust Context #3

Competence was important for both personal and professional trust among teachers.

• Intervening Condition

 Teachers regarded professional competence as a critical attribute in themselves and their peers.

Action/Interaction

- Every teacher in this study had worked hard throughout her career, however long it had been, to enhance her own professional competence.
- Teachers expressed mixed feelings toward incompetent peers,
 often liking them personally, but believing that they should not continue to teach unless they gained competence.
- Subjects did not understand colleagues who had not chosen to continually enhance their professional competence.
- Subjects expressed respect and admiration for particularly competent colleagues.

Consequence

 Processes and training that promoted high and consistent levels of competence within an organization were associated with higher levels of professional trust in the organization.

Relational Trust Context #4

Teachers felt overwhelmed by the obligations they individually faced; they expected their peers and leaders to fully meet their own obligations.

• Intervening Condition

 Workloads in schools were high and required that everyone do his or her share.

• Action/Interaction

 Most subjects felt they could count on their principal to do most of his or her job, but several noted a weakness in principals holding

- deficient staff members accountable, and a few noted other weaknesses.
- Subjects appreciated peers who met their own professional obligations and resented peers who did not.
- Subjects felt continual guilt and anxiety about their own capacity to meet their professional obligations effectively, due to a lack of sufficient time and resources.

 Relational trust suffered when individuals were allowed to shirk the full expectations of their professional obligations.

Relational Trust Context #5

Communication both reflected and influenced the levels and types of trust within an organization.

- Intervening Condition
 - Communication was fundamental to both personal and professional relationships.

• Action/Interaction

- Subjects in one school reported formal communication systems that operated in an environment of openness and honesty, both laterally and vertically.
- Subjects in different districts reported high levels of gender-based factionalization, causing women to feel cut off from effective communication, which led to making secret plans with the men to bring the women's ideas forward.
- Most subjects reported positive, but not systematic,
 communications between teachers and administration.
- Most subjects reported insufficient collaborative time with peers to sustain effective professional communication, although there was a distribution within this group from almost none to weekly time.

 Planned and sufficient opportunities to participate in open, honest, respectful communication seemed to establish the highest trust levels among organizational members.

Phenomenon of Culture

The synthesis of four contexts illustrates the phenomenon of Culture. Table 13 details the four contexts from which the phenomenon of Culture emerged.

Table 13

Phenomenon	Contexts
Culture	• Presence of a clear mutual purpose provided direction, allowing teachers to direct their efforts effectively to promote continuity and coherence in the classroom and organizationally.
	• Teacher commitment to a purpose could not be coerced, although compliance could be.
	• Clear communication processes facilitated both lateral and vertical communication; without clear processes, communication depended on individual efforts and styles.
	• Time availability was the biggest factor in effective and sustained teacher collaboration.

Culture Context #1

Presence of a clear mutual purpose provided direction, allowing teachers to direct their efforts effectively to promote continuity and coherence in the classroom and in the organization.

- Intervening Condition
 - o Individuals perceived their own purposes as important and moral.
- Action/Interaction
 - When teachers were forced to act contrary to their purposes, they lacked commitment and at times actively resisted.
 - When teachers' individual purposes aligned with the purposes of the institution, they were committed to it and tended to believe that others should also be committed to it.

 Institutional purposes that disregarded the personal purposes of the teachers lacked support from the teachers.

Culture Context #2

Teacher commitment to a purpose could not be coerced, although compliance could be.

• Intervening Condition

 Organizations could use their power to force teachers to comply, even when a purpose went against the teacher's professional judgment.

Action/Interaction

- Most subjects who taught third through eighth grades reported being forced to use particular strategies and materials to increase CRT scores, against their professional judgment.
- Subjects reported a loss of joy and connectedness with their students when using these required strategies and materials.
- The CRT was not perceived as representing improved student learning, but as a negative experience that made many students feel like failures.
- Lack of commitment to CRT preparation did not translate to lack of commitment to improved reading and math instruction and assessment.
- O Subjects in Reading First schools felt ambivalent about some of the requirements and complied with them because the grant required them to for three years; they did not plan to continue these specific elements of the program after the three year grant oversight was finished. Some of their colleagues were actively resisting.

Consequence

 Teacher commitment was highly linked to joy and to effectiveness in teaching and learning; coercion was necessary to get teachers to act in ways they saw as undermining joy and effectiveness.

Culture Context #3

Clear communication processes facilitated both lateral and vertical communication; without clear processes, communication depended on individual efforts and styles.

- Intervening Condition
 - Effective communication among all parties required time and planning.

Action/Interaction

- Most subjects felt that communication could be clearer both between administration and teachers and among teachers.
- Most subjects cited their personal styles and those of others as either enhancing or inhibiting communication, in the absence of established processes.
- Most subjects appreciated the processes that were in place and wanted more.

Consequence

 Subjects adapted their own communication strategies to the processes in place in their institutions.

Culture Context #4

Time availability was the biggest factor in effective and sustained teacher collaboration.

- Intervening Condition
 - o Teachers had to be together to collaborate effectively.

Action/Interaction

- Subjects viewed collaboration as highly motivating and desirable.
- Subjects felt the effectiveness of their collaboration depended on having access to the other teachers on a regular basis.
- Few subjects felt they had enough time to collaborate as well as they would like; several felt time was insufficient for much collaboration at all.

 In schools with more time available for collaboration, teachers reported higher trust levels, effective programs, improved relationships, greater coherence and continuity for students, and greater job satisfaction.

• Consequence

 Making time available for collaboration had significant positive impacts on school culture and student learning in organizations that had done that.

Phenomenon of Leadership

The synthesis of six contexts illustrates the phenomenon of Leadership. Table 14 details the six contexts from which the phenomenon of Leadership emerged.

Table 14

Phenomenon	Contexts
Leadership	• Teacher leadership varied widely among schools and individuals; stronger organizational teacher leadership emerged in those schools with formal teacher leadership structures.
	• Every teacher perceived herself as the leader in her classroom.
	• Principal leadership varied widely among schools, with the strongest support for the leadership of a principal related to effective collaborative structures throughout the school, and the weakest support for the leadership of a principal related to gender-based favoritism by the leader.
	• Principals who employed processes that included teachers in all phases of a reform, from planning to implementation, enjoyed greater trust, support, and commitment to the reform than did those who resorted to directive leadership.
	• Teachers felt most committed to implementation of reforms they identified as necessary, and they believed they effectively implemented the reforms. In contrast, imposed reform forced on them by external forces using compliance-based processes received low commitment and generated feelings of teacher hopelessness about meeting implementation criteria.
	• Virtually all of the late career teachers are wary of repetitive change syndrome, with their degree of wariness directly related to the change processes used in their districts.

Leadership Context #1

Teacher leadership varied widely among schools and individuals; stronger organizational teacher leadership emerged in those schools with formal teacher leadership structures.

• Intervening Condition

 To establish strong leadership, teachers needed time and support from the organization.

Action/Interaction

- The higher the degree of formal processes in place, the more the subjects felt that teachers in their building exercised organizational leadership.
- Subjects varied widely in the organizational teacher leadership roles they had chosen to fill.
- Subjects reported a lack of consistent and sufficient collaborative time across grades and subjects as an obstacle to effective teacher leadership.

• Consequence

 Teachers exercised the available organizational leadership options; therefore, the available options determined the levels and focuses of teacher leadership occurring in a school.

Leadership Context #2

Every teacher perceived herself as the leader in her classroom.

- Intervening Condition
 - o Teachers are responsible for all facets of the classroom.

Action/Interaction

 All subjects saw themselves as the leader in their own classrooms, with the responsibility of filtering outside influences in the ways they perceived as most beneficial for their students.

Consequence

 Teachers exercised continual leadership in their own classrooms, determining the interplay of individual and organizational influences within the classroom setting.

Leadership Context #3

Principal leadership varied widely among schools, with the strongest support for the leadership of a principal related to effective collaborative structures throughout the school, and the weakest support for the leadership of a principal related to gender-based favoritism by the leader.

• Intervening Condition

 Principals decided at what level they included teachers in schoolwide decision-making processes.

Action/Interaction

- Subject perceptions of the effectiveness of the leaders were related to the collaborative or directive styles of the leaders. Subjects respected more collaborative principals more than they did less collaborative principals.
- Subjects did not equate collaborative behavior by the principal with principal tolerance of poor teaching practice or teacher negativity.

Consequence

 Principals who expected strong positive contributions from teachers, and provided effective processes to elicit these contributions, were more likely to create an effective and positive school culture.

Leadership Context #4

Principals who employed processes that included teachers in all phases of a reform, from planning to implementation, enjoyed greater trust, support, and commitment to the reform than did those who resorted to directive leadership.

• Intervening Condition

 Teachers wanted their professional judgment to play a key role in the implementation procedures they employed.

Action/Interaction

- When teachers knew their perspectives were valued by the principal, they made mutual commitments and worked hard to implement the changes.
- When teachers were not included in change processes, they stayed isolated with their own concerns and committed to their own purposes, at times actively avoiding the principal.

Consequence

 Principal leadership of change processes played a key role in levels of teacher commitment to any particular reform.

Leadership Context #5

Teachers felt most committed to implementation of reforms they identified as necessary, and they believed they effectively implemented the reforms. In contrast, imposed reform forced on them by external forces using compliance-based processes received low commitment and generated feelings of teacher hopelessness about meeting implementation criteria.

• Intervening Condition

 Teachers felt more confident and competent when they determined what changes to make and how to make them.

Action/Interaction

- o Teachers valued higher levels of student learning.
- Teachers in many schools had initiated and implemented new programs and had the freedom to revise their practices based on their observations of student responses.
- Improved student learning due to local initiatives gave teachers confidence in their own competence.
- Imposed reform focused on goals with which teachers disagreed or which were perceived as unachievable received low commitment..

Consequence

 When emphasis was placed on teacher-driven processes that promoted student engagement, more teachers chose to participate, because they viewed the goals as achievable and as good for students.

Leadership Context #6

Virtually all of the late career teachers were wary of repetitive change syndrome, with their degree of wariness directly related to the change processes used in their districts.

• Intervening Condition

 Experienced teachers had participated in many changes during their careers.

Action/Interaction

- Many teachers spoke of how similar ideas had come around at different times, presented in each situation as something new.
- Mid to late career teachers only wanted to invest energy in changes that had a positive impact on their students' learning and/or wellbeing and would be sustained through time.
- Mid to late career teachers perceived thoughtless changes as a hazard often associated with a change in administrators.
- Experienced teachers provided leadership when they considered a change worthwhile.

Consequence

o Mid to late career teachers were valuable resources for effecting change when they perceived a significant and legitimate student need that would be met; they were unlikely, however, to jump on any bandwagons for changes they viewed as poorly conceived.

Phenomenon of Institutional Structures

The synthesis of 13 contexts illustrates the phenomenon of Institutional Structures. Table 15 details the 13 contexts from which the phenomenon of Institutional Structures emerged.

Table 15

Phenomenon	Contexts
Institutional Structures	• The basis from which a curriculum is constructed influences the coherence and continuity of teacher instructional experiences and decisions when using the curriculum.
	• The ability of an individual teacher to understand, implement, and supplement the curriculum affects the educational outcomes for her students.
	• The availability and quality of standardized materials affects the coherence and continuity of a program.
	• The level of reliance on teacher-generated materials determines the degree to which the quality and focuses of these materials impact program coherence and continuity.
	• Balanced use of instructional techniques between textbook and worksheets and hands-on experiential is influenced by individual preferences, organizational philosophies, and the availability of materials.
	• Uses of standardized assessment measures vary widely by individual, building, program, and district.
	• Teacher-generated assessments have a variety of instructional uses, influenced by individual teachers, grade level goals, building goals and programs, and state standards.
	• Subjects viewed support personnel as a critical resource in short supply.
	• Funding was viewed as problematic due to concerns about availability of funds through time, sufficiency to meet identified needs, and how priorities for funding are set.
	• Subjects viewed the usefulness of technology as depending on its availability, the types of technology provided, and training and personnel provided as support for teachers.

- There was a relationship between the perceived effectiveness of professional development and its connection over time to clearly defined individual or programmatic needs.
- The allocation of teacher preparation and planning time was often inadequate, given the multiple demands on teachers.
- Instructional time was a finite resource that teachers perceived as becoming overloaded.

Institutional Structures Context #1

The basis from which a curriculum was constructed influenced the coherence and continuity of teacher instructional experiences and decisions when using the curriculum.

• Intervening Condition

 The quality of the curriculum content, its realistic connection to daily classroom practice, and its relevance within current theory determined each teacher's commitment to using the curriculum to guide instruction.

Action/Interaction

- Teachers followed the curriculum to a greater degree when they believed in the validity of the content.
- Teachers followed the curriculum to a greater degree when they believed it promoted continuity for student learning.
- Teachers modified the curriculum to meet the instructional needs of the learners in their classrooms, as determined by teacher judgment.

Consequence

 Teacher implementation of curriculum was less consistent when the curriculum was perceived to be low quality, which negatively affected program coherence and continuity.

Institutional Structures Context #2

The ability of an individual teacher to understand, implement, and supplement the curriculum affected the educational outcomes for her students.

• Intervening Condition

 Individual teachers differed in their commitment and capacity to effectively implement curricular goals.

Action/Interaction

- Teachers disliked the discontinuity that resulted when everyone did their own thing rather than following the curriculum.
- The degree to which most teachers in a setting followed the curriculum guide affected program coherence and continuity.
- Teacher capacity and commitment were both influenced by professional development focused on curricular implementation.

Consequence

 Professional development enhanced effective teacher implementation of curriculum.

Institutional Structures Context #3

The availability and quality of standardized materials affected the coherence and continuity of a program.

• Intervening Condition

 Standardized materials had a variety of impacts on instructional focus and practice.

Action/Interaction

- Teachers associated a lack of standardized materials with a lack of continuity and with gaps in student learning.
- Teachers associated poor quality standardized materials with low levels of student learning and high levels of teacher rejection of the materials.

 Teachers associated high quality standardized materials, used according to their own judgment, with increased learning and continuity for students.

Consequence

 High quality standardized materials brought a perception of increased coherence and continuity to the instructional practices of teachers.

Institutional Structures Context #4

The level of reliance on teacher-generated materials determined the degree to which the quality and focuses of these materials impacted program coherence and continuity.

• Intervening Condition

 Schools relied to differing degrees on teacher-generated materials, which varied widely.

Action/Interaction

- Some schools trained their teachers to effectively plan and implement instructional units according to particular guidelines.
- o Most teachers interviewed believed that effective teachergenerated materials were better than standardized materials.
- Most teachers interviewed believed that their own materials were high quality.
- Most teachers interviewed believed that they needed some standardized materials available to draw from while generating their lessons, due to limited time for planning.

Consequence

 If schools relied heavily on teacher-generated materials, then training, time, and oversight provided to the teachers provided better program coherence and continuity then if they were lacking.

Institutional Structures Context #5

Balanced use of instructional techniques between textbook and worksheets and hands-on experiential was influenced by individual preferences, organizational philosophies, and the availability of materials.

- Intervening Condition
 - Systems for determining and supporting preferred instructional techniques varied among schools and districts.

Action/Interaction

- All teachers interviewed expressed a preference for a balance between textbook /worksheet learning activities and experiential/hands-on learning activities.
- All teachers considered hands-on activities to be critical for students to internalize the meaning of the learning.
- Some districts had invested significant teacher time and money into developing hands-on resources, while others had few resources available to teachers.

Consequence

 Teachers expressed a preference for having access to both textbook materials and hands-on materials, within a framework of freedom to apply their professional judgment in pursuit of clear learning goals.

Institutional Structures Context #6

Uses of standardized assessment measures varied widely by individual, building, program, and district.

- Intervening Condition
 - Many schools and teachers used Measures of Academic Progress
 (MAP) tests, Dibels, textbook assessments, and other standardized measures for a variety of purposes.

• Action/Interaction

 Teachers supported measures that gave them immediate, specific data about their students' performance.

- Teachers preferred measures that helped students understand and track their own individual growth, because they promoted student motivation.
- Teachers preferred to use their professional judgment in determining the appropriate instructional response to the information gleaned from an assessment.
- Teachers in grades 3-8 agreed that accountability was important but did not believe that the CRT was an effective tool for meaningful accountability.

Consequence

 Teachers used a variety of standardized measures to track student growth, promote student motivation, and inform their instructional decisions.

Institutional Structures Context #7

Teacher-generated assessments had a variety of instructional uses, influenced by individual teachers, grade level goals, building goals and programs, and state standards.

Intervening Condition

 Teachers regularly created assessments to determine whether students were meeting learning targets. Both learning targets and assessment practices were subject to individual and systemic influences.

Action/Interaction

- Teachers used a variety of types of formative assessment to track growth on a regular basis.
- Teachers used learning standards as a basis for planning instruction and assessment, especially in schools using standards-based grading practices.
- Many teachers expressed a preference for complex projects as final assessments of student learning, because students had to put their learning into context and had fun doing the projects.

 Many teachers involved students in assessing themselves and peers.

Consequence

 Teachers wanted to know continuously how their students were progressing and saw the best teacher assessment practices as those that also motivated students.

Institutional Structures Context #8

Subjects viewed support personnel as a critical resource in short supply.

- Intervening Condition
 - Hiring support personnel was expensive and difficult for districts to achieve and sustain.

Action/Interaction

- Most schools had some support personnel through Title I. No teachers felt the amount of support was sufficient to meet the needs of the students.
- Teachers believed additional teachers and paraeducators were necessary if they were to move toward full proficiency with all students, because some students required additional intervention programs beyond regular classroom instruction.
- Teachers felt overwhelmed by the scope of responsibilities they faced and by the lack of time to meet the expectations. Support personnel were viewed as essential if teachers were to do their best in planning and implementing quality individualized instruction.

Consequence

O Pressure to have each child meet proficiency goals had increased demands on teachers to individualize instruction. However, additional personnel had not been funded to provide the support necessary for full implementation of effective intervention programs for all students.

Institutional Structures Context #9

Funding was viewed as problematic due to concerns about availability of funds through time, sufficiency to meet identified needs, and how priorities for funding are set.

- Intervening Condition
 - o Schools did not have enough funding to meet all perceived needs.
- Action/Interaction
 - o Having clear priorities for funding was important to teachers.
 - Teachers said they would do more hands-on and experiential learning with more funding available.
 - Teachers felt that funding was sufficient to meet identified student needs.
 - Teachers felt like they are being asked to do more with fewer time and material resources, all of which they related back to funding levels.

Consequence

Although teachers believed that setting clear priorities helped a
district or school use limited funds more effectively, no teachers
believed that funding was adequate to meet the needs at their
school.

Institutional Structures Context #10

Subjects viewed the usefulness of technology as depending on its availability, the types of technology provided, and training provided.

- Intervening Condition
 - Technology served various purposes within the schools, and required teachers to gain competence to use it effectively.
- Action/Interaction
 - Some teachers appreciated the organizational data-management systems, such as grading programs.

- Some teachers expressed difficulty gaining sufficient access to technology as a limiting factor on their instructional uses of it.
 Others had sufficient access to meet their needs.
- Some teachers had extensive training in technology, due to either self-directed learning or professional development.
- Teachers noted wide variability in the use of technology by teachers in their schools.

Consequence

 When technology enhanced the classroom environment for teachers and students, and was easy to use, teachers tended to move toward more use of technology. When barriers to effective use existed, teachers used it less.

Institutional Structures Context #11

There was a relationship between the perceived effectiveness of professional development and its connection over time to clearly defined individual or programmatic needs.

- Intervening Condition
 - Individual teachers invested energy and thought into professional development experiences they cared about.

Action/Interaction

- Teachers chose and appreciated individual opportunities based on their self-determined needs and priorities.
- Teachers participated enthusiastically in school-wide professional development when they supported the associated program or focus.
- O Teachers did not want to spend time on professional development activities that were not directly applicable in the classroom; having a practical focus was a desired attribute.
- Even when teachers chose to participate in highly structured programs, such as Reading First, they tended to dislike the rigidity of the expectations and the focus on compliance rather than on development of individual judgment.

Consequence

O In schools or districts that used professional development effectively, teachers helped determine the nature and focus of the training to ensure that it met their needs within their classrooms and within the reform environment. Furthermore, overly rigid training programs undermined teacher commitment over time.

Institutional Structures Context #12

The allocation of teacher preparation and planning time was often inadequate, given the multiple demands on teachers.

- Intervening Condition
 - o Each job took a certain amount of time to complete effectively.
- Action/Interaction
 - All subjects cited increasing expectations on them as a significant stressor, because they had not received an increase in time available to plan and prepare for the added load.
 - All subjects reported spending significant time during evenings and weekends to achieve a basic level of preparation for their job.
 - Most subjects repeatedly expressed feelings of guilt about their inability to figure out how to do their jobs effectively within the time provided.

Consequence

 Because schools did not provide prep time based on the amount of time it actually took a teacher to plan and prepare, teachers experienced high levels of stress, fatigue, and guilt associated with their jobs.

Institutional Structures Context #13

Instructional time was a finite resource that teachers perceived as becoming overloaded.

- Intervening Condition
 - State standards determined subjects to be taught at every grade level.

Action/Interaction

- Teachers had more instructional topics to cover within the same amount of time.
- O Teachers were expected to guarantee proficiency, not just coverage, and proficiency required more time.

Consequence

 Teachers spent the most time on core subjects and fit the others in where possible.

The axial coding process has explored the relationship of each phenomenon to the data, exploring the contexts, intervening conditions, actions and interactions, and consequences. Through this re-contextualization process, relationships among the phenomena have emerged. So far the coding processes have examined the data in detail, during open coding, in search of emerging categories and properties. The properties themselves and the dimensions of these properties became richer and better understood as all of the interviews were integrated into the coding. Axial coding related the phenomena to contexts and actions, and allowed a conceptual understanding of the consequences. By analyzing, comparing, categorizing, and synthesizing the data, conceptual relationships have emerged. The following section uses the narrative selective coding process recommended by Strauss and Corbin (1998) to state these conceptual relationships among the elements of the phenomena.

Selective Coding

Selective coding requires that the categories generated during open and axial coding be scrutinized with the goal of developing a core category that gives explanatory power to the relationships among the categories. The narrative developed during selective coding explores the complexities of the relationships among the concepts that emerged from the data. Strauss and Corbin (1998) likened this process to telling a story that explains the "variation as well as the main point made by the data" (p. 147). This interactive process reveals the core category, which, once revealed, provides a perspective from which to refine and focus the narrative. In this study, the data were revisited with the purpose of understanding the participants' larger meanings and understandings.

In the final phase of selective coding, the narrative explanation is reviewed for logic and internal consistency. Refining the theory that has emerged requires the researcher to consider all properties and dimensions in light of the proposed theory. Variability and outliers should have logical connections to the explanation (Strauss & Corbin, 1998). As Eisner (1998) recommended, creating clear theoretical connections with strong coherence in the argumentation is important for establishing credibility (p. 111). The strength of the grounded theory, therefore, depends upon weaving the complexities of the data into a consistent and coherent argument that recognizes outliers. The argument should be convincing without being artificially precise (Eisner, 1998).

Because this research sought to understand teachers' thinking through their narratives and stories, the selective coding incorporates analysis of the attributions teachers made in their thinking. As explored in the review of literature for this study, insights into the thinking of a narrator may be revealed by exploring the attributions of such things as motive, responsibility, and cause and effect. The open and axial coding explored what concepts the teachers brought up as being important to them. The selective coding attempts to bring larger meaning to these ideas and actions, in terms of the relationships teachers have with the various elements they discussed, and how those elements relate to one another. Understanding attributions as part of this story of how individuals make sense of teaching lends another facet to the analysis (Gabriel, 2000; Weick, 1995).

Within the narrative explanation of this study, the interrelationships of the contexts of the phenomena are explored. Concepts related to the contexts and to the subquestions of this study are identified in **bold** typeface (Strauss & Corbin, 1998, pp 150-152). The story line of the narrative provides a central linkage for the relationships and concepts revealed in the data. The narrative is intended to generally represent the relationships among the perceptions that emerged through the twelve teacher interviews. *Teacher Sensemaking*

For the teachers in this study, **the classroom was the focal point** for their evaluation of all the other factors. Positive classrooms with quality instruction that engaged students and helped them learn were the single most important factor for these teachers. **Individual influences, student influences, relational trust, culture,**

leadership, and institutional structures were all discussed in terms of their relationships to the classroom experiences of students and teachers. The **classroom practicality** and **human impacts** of various contexts were of primary importance.

The teachers mediated and brought together the multiple facets of a school in their practice. They had to simultaneously be aware of and orchestrate the interaction of the various contexts. Some of the contexts persisted through time, and teachers could establish routines for working with them. Other contexts were volatile and required continual readjustment and strategic thinking from teachers. Reforms, by definition, changed some aspect of a school's or an individual's functioning. Some reforms contributed to establishment of teacher routines within a school for addressing on-going concerns. Other reforms disrupted teacher routines and required significant strategic responses from groups and individuals over time. In either case, teachers mediated the implementation of the reforms in their individual classrooms. The teachers in this study fully understood the complex nature of their work and strove to integrate the various influences into meaningful educational experiences for their students.

Each teacher's **individual** capacity and competence **evolved** in response to the demands of her classroom. The levels at which she taught and the environment of the school **influenced her priorities and understandings** as she sought education and professional development. In general, teachers pursued **coherence and effectiveness** within their personal teaching practices. Teachers responded to their macro and micro environments by seeking to maximize their personal **effectiveness** in providing **targeted instruction** to their students. A sense of internal unity was tied to their successfulness in this endeavor.

Each teacher pursued various educational opportunities beyond the basic teaching certification. Which opportunities they pursued tended to **relate to the grade levels** for which they were primarily responsible. Middle grade teachers had more formal education, in the form of **masters degrees**, than did primary teachers. They also pursued a variety of **professional development** targeting classroom processes and management, assessment, and subject area teaching strategies. Typically the middle grade teachers conceptualized their role as integrating various content areas into a day, so learning that helped them be more effective in a variety of areas was valued. Several middle grade

teachers stated explicit goals focused on **crafting a more unified experience** for their students.

Primary grade teachers tended to pursue **in-depth professional development** related to reading instruction. They attributed this choice to the need for the teacher to bring **balance** to reading instruction in her own classroom. Professional development was perceived as **practical and immediately applicable**, whereas formal education was characterized as often not directly tied to primary level instruction. Because reading and math are the main responsibilities of primary teachers, integration of content was less of a concern for them. Rather, having a wide variety of strategies and a deep knowledge of how to adapt reading and math instruction were viewed as critical **elements of individual teacher competence**.

Early career teachers were more likely to pursue **any available professional development**, because they felt a **lack of expertise**. **Mid to late career teachers** were more **selective**, choosing options that **filled knowledge gaps or added new instructional techniques**. **Career stage** also influenced a **teacher's perception of her appropriate role in the classroom and her competence to fulfill that role effectively**. Early career teachers tended to look to more experienced teachers for **craft knowledge** and guidance. They were seeking the **means for creating coherence and continuity** in their classrooms. More experienced teachers had **honed their craft knowledge** through trial and error, and had **accumulated a store of flexible strategies**. They perceived themselves as having **acquired significant expertise and operational competence**.

Both middle grade and primary teachers viewed themselves as the creators of academic **coherence and continuity** in their classrooms. The school environment outside the classroom might support or hinder their pursuit of coherence, but they all saw **themselves as responsible for the classroom level of coherence**. Elements of coherence and continuity, as conceptualized by teachers in this study, included **clear instructional targets**, useful and immediately **applicable assessment information**, and **instructional practices that moved purposefully** without leaving **gaps in student learning**. Because one of their main goals was to eliminate gaps in student learning, they also saw themselves as responsible for **individualizing their instruction** to target gaps. In the

view of many of the participants, one hallmark of an ineffective teacher was that the teacher created gaps in student learning.

Part of the reason coherent and effective instruction was so important to participants was that it contributed to **student feelings of success**. All of the participants saw the **success of their students** as a primary goal. When students were successful, they **tried harder**, were **happier**, and had **better relationships with the teachers**. These teachers structured the classroom expectations and activities to optimize student opportunities for success. Another factor contributing to student success was the nature of the instructional activity. **Hands-on** and **experientially-based** learning opportunities were more **fun and engaging for students** than were **workbooks and textbook** lessons. As a consequence, study participants believed their **students learned more** when **hands-on techniques complemented the book learning in their classrooms**. Additionally, teachers believed that the interactive nature of the hands-on activities allowed them to work more supportively with students, which promoted **better relationships with the students**.

Participants reported feeling more **personal success and joy** when they observed their students feeling successful and joyous. In pursuit of this sense of success and joy, teachers enlisted their **personal creativity** to meld the **available materials and resources** into **stimulating units of instruction** focused on important **learning goals**. The exercise of **creativity** and **strategic thinking** in their efforts to **meet student needs** was reported as a significant **motivating force**. Teachers saw the opportunity to **think and act creatively** as one important reason they **enjoyed teaching**. **Overcoming difficulties**, in the form of **at-risk students** or **institutional barriers**, added to feelings of **teacher accomplishment and competence**. Difficulties did not, in themselves, undermine teacher fulfillment or enjoyment in teaching. When success required **expertise**, **strategic thinking**, **and instructional flexibility**, teachers felt affirmed in their personal competence and became more **confident**.

The relationships, communication, and instructional orientation of the school had the potential to contribute to or detract from a teacher's efficacy and fulfillment in the classroom. As categorized in this study, these human influences include **relational trust**, **culture**, and **leadership**. Each of these aspects of the way a school worked contributed

to the complexity of a teacher's mediation between school and classroom. The three categories are interrelated, in that each affects the others.

A central factor influencing relational trust, culture, and leadership was **principal** leadership. Participants attributed different motives to their principals, based on the respect and personal regard they experienced, the general focuses of the principal's efforts, and the unique processes employed by the principals during reforms. A principal's competence was generally regarded as how effectively he or she performed in all these spheres. In some ways, principals were perceived as a causal factor creating a particular effect in their schools. Even when not seen as directly causing a situation, principals were still held responsible and awarded credit or blame for influencing the outcomes of the situation. The first category explored is relational trust.

Respect and personal regard were seen as basic qualities that teachers had a right to expect from their principals. In some situations, teachers were treated with a lack of respect and personal regard. This foundational deficit negatively affected all other aspects of the teacher-principal interactions. The **teachers retreated** into their own practice, avoided the principals, and did not perceive the principals as instructional leaders. Blame for the dysfunction was assigned partly to the personal disregard the principals had for the teachers. The teachers **did not trust the motives** of their principals. On the other extreme, teachers credited their principal with high levels of respect and personal regard. They, in turn, put forth extra effort to contribute to their school as a whole, because they **trusted his motives** in asking for their assistance. All of them returned the respect and personal regard in full measure. More commonly, teachers experienced basic respect and personal regard from their principals and believed they had positive interpersonal relationships. However, the strength of these relationships was **not** enough to become a **definitive factor in shaping teacher actions** either positively or negatively. Other influences tended to determine whether the teachers trusted the principal's motives.

A second context of relational trust, a principal's **personal integrity**, was apparent to participants when the principal's **actions matched his or her stated intentions** and priorities. They also felt it was related to whether the principal's intentions were based in **moral principles** with which they agreed. For example, one

principal was portrayed negatively due to his preoccupation with using workbook completion as a measure of teacher effectiveness. This focus was perceived as detrimental to students and teachers. The motive attributed to the principal was one of self-protection, and his focus was seen as causing harm to students. Neither of these was morally justifiable in the perception of the interviewee. In contrast, principals who supported practices that benefited students were perceived as having a moral purpose. Those who achieved the highest level of adherence to benefiting students were seen as having the highest integrity. Primary teachers tended to perceive higher levels of personal integrity in their principals, perhaps because the reforms they were experiencing tended to align better with their perceptions of effective and morally justifiable practice.

Many principals were seen by middle grade teachers as experiencing personal conflict regarding their integrity as they enforced the testing requirements imposed by No Child Left Behind. However, teachers did not excuse these conflicted principals from responsibility for finding student-centered ways to work toward improved test scores. When principals expected teachers to teach to the test in ways that undermined student engagement and motivation, the teachers expressed lower regard for the integrity of the principals. Instead stepping in to protect and help teachers and students, the principals took on the priorities of those outside the school community and imposed requirements. A couple of principals managed to retain their perceived integrity in this situation by having teachers generate their own approaches to improving student performance on tests. In these situations, principals put their efforts into actualizing the teachers' plans, which the teachers perceived as more student-centered.

Just as principals who included teachers in planning were perceived as having higher integrity, they were also perceived as being more **competent**. **Competence** in a principal was defined by participants as the **principal's ability to work effectively with teachers and students** to improve conditions at the school. Elements closely related to competence were the **communication style** of the principal and his or her ability to **follow through with commitments**. The principal perceived as **the most competent** by teachers engaged in highly **collaborative processes** all the time. **Collaborative processes were routine and structured** into the daily and weekly functioning of the

school. During reform, additional collaborative measures were instituted. This principal was perceived as **listening to teachers and students**, allowing **dissent and honesty** in discussion, and keeping the **best interests of students** at the forefront of decision-making. Teachers working with him saw him as **creating an environment** in which effective teaching occurred. In contrast, principals who were perceived as **not listening**, having **gender-based biases**, and **failing to follow through** on teacher priorities were not seen as competent. Teachers working with them saw them as **disrupting the teachers' ability to create optimal learning environments** for their students. **Most principals** fell somewhere in the **middle of the range**. Therefore, perceived principal competence was highly related to the ways in which principals chose to interact with teachers.

Relational trust among teachers was related to the levels of relational trust between teachers and the principal in a building. When teachers worked together collaboratively, they perceived the other teachers in the building as having higher levels of competence. This enhanced the professional respect shared among teachers in the building. Teachers who were more isolated tended to perceive themselves as more competent than some of their colleagues, perhaps because they had fewer opportunities to understand their peers' professional capacities. Professional respect tended to be accorded to the few teachers with whom the teacher did work more closely.

All of the teachers interviewed expressed feeling **overwhelmed**. They saw it as an **expression of personal integrity to meet their classroom obligations fully**, and expected others to do the same. The priority for teachers was to ensure that they **sustained effective classroom practice**, even in difficult circumstances. They saw it as a **lapse of integrity** when some teachers just **did the same things over and over**, without adapting instruction to student needs. Teachers who did that **failed** to operate from a **moral decision-making** basis that put the needs of **students first**. When **teachers failed to live up to their own classroom obligations**, not only was it a test of their personal integrity, but teachers regarded it as a **test of the principal's personal integrity**. They thought the principal should work with the teacher to make him or her meet the classroom obligations. Teachers saw committee work and contributions on behalf of the school as a whole as being important, but not necessarily as an expression of personal

integrity. In schools with **more collaborative climates**, the **expectation of participation** with other teachers was **higher**.

Personal regard among teachers was reported as high in all of the schools. Teachers believed they could rely on their fellow teachers to support them in times of need and to treat them well on a personal level. Even in schools with low levels of relational trust in other respects, teachers tended to be friends with other teachers. The activities in which teachers took part together were more social in nature in schools with lower levels of professional respect. In schools with higher levels of professional respect, teachers also participated in study groups and planning sessions with each other, and saw these as expressions of their friendship with the other teachers.

The kinds of principal actions highly associated with **positive relational trust** also were associated with successful implementation of instructional reforms. Teachers who reported successful implementation of reforms also reported high levels of **collaboration and support from their principals.** From the teachers' perspectives, the classroom was the focal point of any reform. Principals who listened to and addressed their implementation concerns made the **teacher's job more manageable**. Examples of this included structuring reading instruction so that teachers could meet individual student needs without having to plan for six different lessons each day. Principals who disregarded teacher input complicated the challenges the teacher faced in the classroom and created a burdensome situation. For example, the addition of testing packets to a teacher's instructional load reduced the instructional time available to teach the content. Requiring teachers to use only particular instructional strategies or materials created challenges for teachers when they tried to individualize for student needs. Overall, teachers did not hold principals responsible for the effectiveness of their individual classrooms, but they did **hold principals responsible for supporting them** in their efforts to be effective in their classrooms.

Teacher leadership in a building was another aspect of a building's culture that **related to principal leadership**. In buildings with collaborative principals, teachers tended to participate in **formally designated opportunities for leadership**, such as committees, faculty council, and grade level teams. These teacher groups helped determine the **purposes of their organizations**. When **teachers helped generate the**

purposes, they were more likely to commit to them. Furthermore, the purposes were more likely to align with the individual purposes of the teachers. Teacher commitment to a mutual purpose was highest when teachers helped establish the purpose, it aligned with their individual purpose, and the teacher saw evidence that the principal and institution were also committed to the purpose. Having a clear purpose helped teachers determine what they should do in their classrooms. When faced with a decision, they had clear guidance. Teachers appreciated having a clear purpose that they could support in principle. Generally speaking, the purpose needed to focus on meeting the individual needs of students in positive ways.

In contrast, teachers whose principals were **not collaborative** tended to have **informal leadership structures** in which **outspoken teachers** brought their **demands** to the administration. These study participants reported feeling a **lack of voice in the priorities** their schools addressed. It was more likely that these teachers would have an **us versus them** perception of the **power relations** in the school. The feeling of being **disempowered** also seemed to be affiliated with **blaming the administration** for some aspects of **classroom dysfunction**. These teachers noted the **lack of direction** at the school level. They were more likely to **decide not to participate** in setting a building purpose, even if the chance arose, because they felt it was **risky** to put themselves forward.

The middle ground of teacher leadership activities tended to be in schools with principals who were **somewhat collaborative**. At some of these schools, strong **teacher teams had emerged that set purposes** for their grade levels and committed to these together. At others, **individual teachers had their own purposes** and expected to be able to pursue them **without interference from the principal. Principals** were not seen as particularly relevant to setting the purposes of the school, but were **expected to uphold teachers as they pursued the purposes they had determined. Teacher leadership was evident in groups and in individuals**, among whom **cordial relations** were typical. Teacher relations with the principals also tended to be cordial. Teachers did tend to **wish that the principals would step in** and work with teachers toward greater **institutional coherence and continuity** in these situations. Typically these teacher leadership activities **focused on student needs**.

Teachers saw themselves as the unquestioned leaders in their own classrooms. They believed they had the right and the responsibility to think through and adapt curriculum, assessment, instructional practice, materials or anything else so that they best met the needs of their students. Teachers' motivation and commitment sprang largely from their sense of responsibility to students in their own classrooms. Because they were the leader in the classroom, teachers saw themselves as causing learning experiences for their students. If they were not effective in the classroom, their students learned less and were unhappy. Therefore, their personal classroom decisions were critically important to them and took precedence over institutional concerns. This belief meant that principals who helped teachers gain individual competence and supported teacher decision-making in the classroom in turn were supported. Principals who tried to mandate practice demonstrated their lack of belief in teacher classroom competence and leadership, and were not themselves supported by teachers. The implications for reform were substantial. Reforms generated by the teachers or open to adaptation by the teachers were supported. Rigid, imposed reforms were challenged.

Communication emerged as a pivotal factor for creating and sustaining a particular school culture. It also influenced the effectiveness of change processes. Teachers in schools with lateral and vertical structures for communication felt more listened to and believed they had higher levels of influence in the school as a whole. This feeling contributed to creating and sustaining a more positive school culture. In addition, change processes could tap into the existing structures and were less disruptive to the routine functioning of the school. In schools that had lateral communication structures, such as grade level teams, teachers expressed strong working relationships within those groups. If communications were mostly lateral, then implementation of reforms occurred within the teacher groups. In schools that also had vertical communication structures, working relationships between teachers and administrators were stronger. The presence of communication structures made it more likely that teachers would implement a reform similarly across classrooms. The work of implementation was perceived as being shared.

However, in schools **lacking communication structures**, working relationships and implementation of reforms tended to **depend on individual efforts and priorities**.

Reforms, in an environment lacking clear communication channels, often were perceived as disruptive and poorly implemented. No one was sure who should do what, how to prioritize, or what the ultimate goals might be. To achieve effective reform implementation, therefore, schools without communication structures had to create ways to communicate in addition to addressing the reform itself. Teachers tended to implement the reforms within their classrooms in ways that aligned with their internal purposes and reinforced the coherence of their classroom practice. Either that, or they ignored the reform. They saw themselves as being on their own to figure out the implications of the reform.

Having positive processes in place does not guarantee that teachers will support a reform. If they perceive the reform as harming students or threatening their ability to teach effectively, they will not regard it positively. The universally negative response of third through eighth grade teachers to the Montana Criterion Referenced Test (CRT) was an example of this attitude. Remember that, for the teachers, the functioning of their individual classrooms to benefit students was the primary concern guiding their thinking. The CRT took away instructional time, burned out their students, made some students cry when they could not do it, and led to test preparation activities they regarded as replacing more important learning opportunities. In terms of the classroom environment, it offered no positive contributions to balance the significant negatives. Therefore, even in schools with strong positive cultures and effective change processes, this reform lacked teacher commitment. Teachers felt coerced by the state or their administrators to give the test. They complied with the requirements, but that was it.

In contrast, if a reform was perceived to have beneficial impacts on students, and to enhance classroom instructional practice, teachers worked extremely hard to effectively implement it. They tended to feel commitment toward reforms that had positive impacts on their students and classrooms. This was especially true when the teachers generated the ideas and strategies for the reform themselves. They were able to adjust to their needs and the needs of their students through time. When they were required to comply with expectations from an external source, like Reading First Grants, commitment was less consistent. The lack of flexibility caused some dissonance, even

though all **teachers had agreed initially to the terms** of the grant. Some teachers felt the benefits to students outweighed the concerns, and continued to implement the program for the duration of the grant. Others resisted implementation. However, **none of the teachers would commit to following the rigid practices after the grant ended.**Instead, they intended to take those aspects they saw as beneficial and to use their **professional judgment to guide adaptations** in their individual classrooms.

Just as human interactions influenced teacher perceptions and practices, institutional structures also contributed to the teachers' experiences. The most significant of these structures from the teachers' perspective was the persistent lack of sufficient time and the allocation of available time. Classroom functioning was affected most directly by two kinds of time. Instructional time determined the mutual time students and teachers spent on learning activities. Study participants all noted that demands for what was expected to be taught exceeded the time available to teach it. As a consequence, they had to **make decisions about time distribution** among subject areas. Teachers resented the **intrusion of ancillary programs** into the time previously spent on core content instruction. They also worried when one subject area dominated the daily schedule, taking time from other important content. In some situations, noncritical content was taught less frequently or even eliminated by the teacher, despite institutional expectations that it be taught. Shortage of instructional time to spend with students also inhibited a teacher's ability to individualize and intervene when needed. Teachers disliked schedule fragmentation and interruptions that reduced the available instructional time.

The second critical type of time for classroom functioning was teacher preparation time. The amount of time teachers needed for planning was determined by the demands placed on them. However, the amount of time they received was not related to the demands. Rather, it was dictated by the daily schedule for the school. This mismatch between available time and classroom demands created planning and preparation dilemmas for teachers. All of the teachers attempted to resolve this dilemma by spending large amounts of time planning instruction, evaluating assessments, and preparing materials before and after school and on the weekends. None of the teachers believed this was a sufficient solution. They felt that they could

teach more effectively if they had **sufficient time for planning**. Participants experienced high levels of **internal conflict and stress** due to continually weighing the needs of their families against the needs of their students as they determined how to spend their time outside the school day.

Other relevant aspects of time included time for instructional collaboration, time for collaboration to implement school-wide programs, and time for professional development. Teachers valued time for instructional collaboration because it allowed them to share work, align their approaches, and offer more effective support for students. Effective implementation of reform also required time that teachers could work together to plan, prepare, and align their approaches to the new situation. Often time for professional development was seen as linked to one of the other types of time, in a supporting role. Overall, collaborative time of all sorts was perceived as foundational to a school's ability to achieve coherence and continuity in its programs.

Program coherence and continuity were also major structural concerns for teachers. Study participants wanted content and instruction to provide seamless learning experiences for students as they moved through the grades and between teachers. Part of their concern was with the overall impact on student learning through time. Another aspect was that a lack of programmatic coherence and continuity in the building undermined an individual teacher's ability to achieve coherence and continuity within the classroom, because students arrived with such varied learning backgrounds and skills. The more varied students' skills were, the more the teacher had to individualize instruction. Given the time constraints teachers faced with both instructional time and preparation time, individualizing every aspect of instruction was impossible. However, teachers believed that every student deserved needed supports. More programmatic coherence and continuity throughout the building reduced the extent to which students needed individual support.

Participants believed the most reasonable option for individualizing student interventions was to have more **support personnel**. That way, the teacher could ensure the integrity of classroom instruction, and the **support person could adapt the core instruction to meet the needs of individuals**. Alternatively, adults could deliver

differentiated instruction to smaller groups of students. In these ways, classroom **instructional continuity and individualized instruction could coexist**. Most of the study participants identified a **lack of sufficient support personnel** as having negative impacts on their students and on themselves. Teachers lacked the capacity to meet all the demands, for all the people with whom they worked, within the time they could muster each day.

Because the law demands proficiency for every student, in every core subject, on a schedule, teachers felt that the **demands and pressure** of their jobs had significantly **increased** over the past few years. They **did not see the structures** of their schools, in terms of time and personnel, **changing to address the new requirements**. Instead, they perceived all of the **burdens as heaped on them** with no hope of respite. In this way, the structures of their schools added to teachers' loss of enjoyment in their jobs.

One of the major factors inhibiting the ability of participants' schools to adapt to increasing demands was the **persistent lack of funding**. The most expensive resource in a school is the people, so participants identified the **lack of sufficient personnel** as a consequence of insufficient funding. Teacher time is also an expensive resource, so schools have **very little paid time outside the required instructional time** in which teachers can accomplish the varied demands of their jobs. Other areas in which insufficient funding created difficulties for teachers included their **limited access to materials for hands-on instruction, to good quality and current standardized materials, and to sufficient technology resources for themselves and their students.**

Having quality materials and access to computers and software were essential resources for effective classroom instruction. Often teachers felt they had to cobble together resources from a variety of sources, or make do with limited computer time.

Lack of materials was not perceived as a new problem, but was a persistent one.

Teachers discussed principals who spent all the school's money on workbooks, trying to dictate their teaching. In other situations, teachers were expected to follow the directions given by textbooks. Still other teachers made do with no textbooks and had to find everything themselves. Teachers saw the ideal situation, in terms of effective classroom instruction, as having quality standardized materials available that would be used in agreed-upon ways. In addition, teachers needed supplemental instructional resources

and **hands-on materials** for students to use. **Access to adequate technology** on a regular basis was also critical for teachers to successfully integrate technology skills into their regular instruction.

Teachers perceived a direct cause and effect relationship between inadequate funding and persistent shortages of time, personnel, and materials. Because time, personnel, and materials were all critical components of effective classroom instruction, lack of funding was perceived to have many direct negative effects on teachers and students. They attributed the lack of funding to a variety of factors, some political and some societal. Almost no teachers blamed their districts for the lack of funding, although they did not always agree with the distribution of the available funds. Instead, several of them discussed the hypocrisy of politicians and society for wanting to raise standards to having all children proficient while not contributing funding to make that possible.

Given that the law and society have raised expectations for what teachers should accomplish in their classrooms, participants felt there should be higher expectations from the law and society on parents. Parents should make sure their children are fed, clothed, clean, and rested as a minimal standard. Several participants thought the No Child Left Behind law should also require them to read with their children, do homework with their children, and make sure their children come to school. Several participants thought parents should be held more accountable for their children's behavior, and should have to take responsibility for making sure their children did not disrupt classes or endanger others. They discussed the difficulty of engaging some parents in their children's education, because the parents would not answer calls, letters, or meet with the teacher. In contrast, many parents do meet all of these expectations. Their children have a much higher likelihood of success in school. However the parents behaved, the study participants saw themselves as responsible for the well-being and success of all of their students. They thought it unfair that some children faced such huge challenges.

Teachers also expected their districts to adopt **instruction and assessment structures** that promoted the well-being of students. The **ideal instructional program** provided classroom teachers with well-planned **curriculum** materials, **resources** with which to implement the curriculum, and the latitude to use their **professional judgment**

to adjust instruction for individual students. Participants strongly **supported assessments** that **tracked student progress in real time**, without consuming much time, and gave **clear instructional direction** to teachers. In addition, they believed that **student participation in meaningful assessment processes** contributed to student learning and motivation. However, when assessment was done to students in ways that pointed out student deficits, detracting from student confidence, teachers believed that was a **negative use of assessment.** Overall, when teachers could determine student needs, plan effective and interactive instruction, and help students understand their individual progress, they were supportive of the instructional and assessment programs in their schools. In contrast, when they perceived that instructional decisions were usurped by a program or a text, or thought that assessment practices did not contribute to student learning or the quality of instruction, they believed changes should be made.

Furthermore, participants were wary of repetitive change syndrome, in which similar programs cycled through over the years. District leadership was typically cited in examples of changes through the years. Typically teachers wanted to use the parts of programs that added to the quality of their existing instruction, rather than adopting whole new programs intact. Blame and credit for program decisions were allocated according to whom or what teachers perceived as the originating force. To themselves, participants attributed expertise, competence, and the role of protecting students from harmful influences. Most of the participants in this study were very experienced, grounding these attributions in years of observations.

As became clear through the course of this narrative, teachers made sense of their organizational world from the perspective how the various influences interacted with the teachers' classroom practice and leadership. Teacher sensemaking included all of the complexities discussed in the narrative. The selective coding process of articulating a storyline illuminated the interrelationships among the data and related them to the core category of Teacher Sensemaking.

Core Category

The exploration of the interrelationships of the subcategories led to identification of Teacher Sensemaking as the core category. It offers a cohesive perspective from which to offer a final examination of the interrelationships of the subcategories that emerged

during this study. The six subcategories include (a) individual influences, (b) student influences, (c) relational trust, (d) culture, (e) leadership, and (f) influences of institutional structures. Just as they relate to the core category, the subcategories relate to one another.

Subcategories

In this section, the relationships among the subcategories are explicitly discussed. Under the heading for each subcategory, its main interrelationships with the other categories are detailed.

Individual Influences. Teacher experiential background and education was related to the age and capabilities of the students. Teachers who worked with primary students focused predominantly on reading and math instruction, and pursued training to become more effective. Middle grade teachers thought about integrating experiences for their students, due to increasing subject area demands, and sought education to support their goals with students. Specialists who worked with students from many classrooms wanted more continuity of experience for the students. In these ways, the students influenced the personal development of the teachers' skills and priorities.

The individuals in the study had also been shaped by their prior experiences with relational trust among colleagues, the school cultures they had experienced, and the previous leadership they had experienced. Many of the teachers had developed an interpersonal wariness about allowing others to influence their actions and decisions. They trusted their own judgment, but not necessarily the judgment of others. Highly supportive environments could help teachers let down their guard to collaborate with others, but none of them took this situation for granted. Usually some elements in the environment were threatening at some level to the teachers or to their students. The teachers worked hard to limit the access these threats had to them or to their students.

Institutional structures directly affected teachers' personal lives. If structures supported planning and preparation time, offered classroom support, and provided needed materials, then teachers spent fewer evening, morning, and weekend hours working on school. Poor supports at school took time away from teachers' families. Teachers' home lives also affected their performance at school. If a teacher had enormous demands at

home, such as small children, then classroom concerns became secondary and received less attention outside the school day.

Student Influences. Student learning needs directed much of the activity in the classroom and defined the nature of the teachers' planning and preparation. Teachers reported the highest commitment to meeting student learning needs effectively. Learning needs also determined the level of support required, in terms of additional personnel, materials, extra instructional time, and specific adaptation of curricular goals.

Teachers worked hard to establish relational trust with their students, by taking on a somewhat collaborative leadership style in their classrooms. They often included students in assessment activities, allowed a degree of autonomy within activities, and tried to make the experiences enjoyable for the students. These strategies by the teachers promoted observable student feelings of success, which supported student motivation and participation. Teachers understood that alienated students became behavioral disruptions in the classroom and tried to avoid that situation. When difficult situations began to emerge, they tried to engage families in positive ways. Family support was also considered important for a student's success, and therefore important for the success of the classroom. When the organizational leadership required teachers to implement practices that undermined the positive relations between teachers and students, teachers became very resistant. They depended on their ability to create a positive environment as a cornerstone in their practice.

Relational Trust. Relational trust levels permeated all of the aspects of a school's functioning. The trust levels sprang primarily from the human interactions in the various contexts of the organization. Principal leadership was critical, because the other members of the school community are vulnerable to the positional power the principal holds. When the principal was perceived as using the power of the position to support teachers and to help them reach mutual goals, then relational trust grew. When the principal used the positional power to force compliance, to support factionalization, or to personally intimidate others, then trust was rarely perceived by teachers.

Teachers wanted to treat each other well and wanted positive personal relationships, and for the most part they achieved this. The nature of their professional relationships depended much more on the leadership and culture in the school. Relational

trust between teachers and students was far less affected by organizational factors.

Teachers actively excluded organizational influences that they perceived as threatening the trust they had with students.

Culture. The sort of culture a school had seemed most clearly related to three factors. These were whether a school had a clear mutual purpose, used consistent communication structures, and created regular opportunities for collaboration. Teachers perceived their principals as being in charge of these opportunities. However, they also held their peers responsible for their choices regarding participation and individual contributions. The cultural factors were also highly related to levels of relational trust and to the ways in which schools implemented reforms.

Leadership. The most important leadership, from the perspective of the teachers, was their individual leadership in the classroom. They believed that the rest of the school should function to support their capacity for effective leadership in their classrooms. However, they also understood that they comprised the school and that it could not function organizationally without their contributions. When they were provided leadership opportunities in the school, they tended to focus their organizational efforts on enhancing their ability to teach effectively. If the principal leadership also supported this classroom-centered focus, then a school achieved a positive flow of leadership among the professionals. However, when principal leadership tried to direct or failed to support teacher classroom leadership, the two forms of leadership came into conflict. The teachers in this study all remained committed to their leadership in the classroom when forced to choose.

Influences of Institutional Structures. The institutional structures form the foundation for a teacher's classroom work. When the organization worked in a unified way to use curriculum, materials, instructional practices, assessment practices, and professional development in pursuit of mutually agreed purposes, teachers appreciated the guidance and support. However, if these structures were poor quality, lacking, or contradictory to what teachers believed worked in classrooms, then they became hindrances to effective practice. They also became sources for organizational conflict. The leadership in an organization related strongly to the ways in which these particular structures were integrated into teacher practice.

Funding of support personnel, hands-on materials, and technology played a large role in what instructional strategies and activities teachers used in their classrooms. The best situations were where these resources were also focused in support of the mutually agreed purposes. Teachers wanted these resources to be available for them to use according to their professional judgment. When the resources were lacking, teachers struggled to make do with what was available. They believed the organization's level of commitment to them and to declared purposes was expressed though how well the organization actually supported their implementation with necessary resources.

The most critical resource identified by teachers was time. They expressed feeling that they were lacking sufficient time to meet complex demands placed on them. Kinds of time identified by the teachers were instructional time, planning time, materials preparation time, individualized instruction time, organizational planning collaborative time, instructional planning collaborative time, time to get to know other teachers, time for professional development, time to contact parents, time to spend with their families, time to think, time to look for real world connections such as guest speakers or field trip opportunities, time to work on the classroom environment, time to read research, time to relax, time to exercise, time to have fun with their students, and more. Obviously, the relationship of time to the individual functioning of the teacher and to the functioning of the organization is a critical one.

Summary

Using the qualitative analytical procedures recommended by Strauss and Corbin (1998), this study first examined the data for concepts, during the open coding phase. As concepts began to emerge during the first interviews, the semi-structured interview process was adapted to pursue these concepts more thoroughly. The complete body of data produced a number of concepts, which were grouped into categories called phenomena. The data from the interviews were decontextualized and analyzed in relation to the phenomena that had emerged. This axial coding process established the interrelationships among the phenomena and illustrated the characteristics of each phenomenon.

Subsequent to axial coding, the selective coding process presented the synthesis of the insights gained during the analytic processes of open and axial coding. This

synthesis brought meaning to the results through development of a grounded theory. The grounded theory related the ideas evident in the phenomena around a core category that brought power to the explanation. At this point, the phenomena were considered as subcategories of the core category. The final step in the selective coding process was creation of a narrative, titled "Teacher Sensemaking" that articulated the grounded theory.

The next step in the process is a final summary of the findings and how they answer the central question and subquestions of this study. Chapter Five engages in this holistic analysis of the study and answers the central question: How do teachers make sense of the complex personal and organizational influences affecting their individual classroom practice, especially when implementing reforms targeting student learning? The chapter then discusses propositions stating hypotheses that emerged through the course of the study and relates them to the literature. Finally, Chapter 5 explores implications for practitioners and for further research.

CHAPTER FIVE

INTERPRETIVE SUMMARY, PROPOSITIONS, AND IMPLICATIONS

Introduction

The use of the inductive qualitative research model in this study has allowed the researcher to explore the relationships among the individual responses of the interviewees. This exploratory process is a strength of the qualitative paradigm and is intended to contribute to new insights about a phenomenon. Through this inductive process, the core category "Teacher Sensemaking" emerged from the relationships among the categories evident in the data. These phenomena, now called "subcategories" of the "core category," include (a) Individual Influences, (b) Student Influences, (c) Relational Trust, (d) Culture, (e) Leadership, and (f) Influences of Institutional Structures. Chapter Five summarizes the findings from Chapter Four. The holistic perspective provided by the core category, Teacher Sensemaking, guides the analysis in Chapter Five of the interrelationships that exist among the subcategories.

Chapter Five, in a section called *Holistic Analysis*, describes the process of formulating a grounded theory through the inductive processes of first examining data for patterns, then delving into the relationships and details associated with the patterns, and finally creating a grounded theory that takes into consideration the relationships and variability that emerged through the data analysis. The second section relates the findings from the study to the central question and the three subquestions that guided this study. This section concludes by examining the interrelationships of the categories and by relating them to the literature. The third section, *Propositions*, discusses the hypotheses, or propositions, as they are called in grounded theory (Creswell, 1998), that resulted from the analysis. Relationships between the propositions and the literature are also explored in this section. Chapter Five concludes with implications for practitioners and for future research. The summary begins with the review of the qualitative procedures used during the open, axial, and selective coding processes.

Summary

Preface

It is important to remember that the relationships and variability reported in this study are based on the participation of twelve elementary school teachers. The

perceptions these teachers reported, and the relationships among the concepts that emerged, demonstrated high levels of similarity to those reported by others researching teacher perceptions in a climate of change, as detailed in the literature connections throughout Chapter Four. Although twelve teachers participated, all shared multiple instances of their perceptions during various changes. This resulted in over forty individual examples of teacher responses during change, in a wide variety of circumstances. However, the perceptual processes through which the narratives were framed were limited to twelve individuals. As noted in the literature review, individuals retroactively assign meaning to their decisions and actions. Therefore, the career narratives used in this study illustrate the attributions these twelve teachers have assigned to their variety of experiences.

It is also important to remember that the interviews and analysis were highly transactional. The researcher's familiarity with particular elements in the literature, the researcher's personal experiences, and the researcher's perceptions of the teachers' intentions during the interviews shaped the conclusions stated in this chapter. All of the participants and the researcher were female, which is typical in the elementary school environment, but not in other settings. In addition, all of the participants and the researcher have spent their careers in Montana, predominantly in smaller districts. Therefore, the situations encountered by teachers who participated in this study are likely to be more similar to one another than to those of teachers in other states or in urban settings.

Holistic Analysis

The goal of a grounded theory study is to generate a theory that explains the relationships among the categories that emerged during the coding processes. The coding process began by teasing the data apart during open coding, in pursuit of concepts that were explicit and implicit in the narratives. As the concepts began to develop, the researcher grouped them into categories and determined what properties and dimensions the data revealed about these categories. Axial coding linked explanatory bits of data with the categories they illustrated. It examined the relationships between and among human actions and circumstances, examining how "categories crosscut and link" (Strauss & Corbin, 1998, p. 125) The selective coding phase scrutinized the categories developed

during open and axial coding. This scrutiny led to an analytic integration revolving around a central category. This central category, called the core category, gave explanatory power to the relationships among the categories and provided logical connections among the variations. The holistic relationships were explored through a story that illustrated how the core category linked the other categories.

The holistic analysis led to teacher sensemaking emerging as the core category. Teacher sensemaking mediates the other categories, in terms of how they are manifested in the classroom. Teachers continually integrate the influences of students, culture, leadership, and institutional structures into their classrooms. Relational trust establishes the human environment within which teachers function. Therefore, teachers make sense of a complex environment in pursuit of coherence, creativity, and effectiveness in their individual classrooms.

Exploration of the Central Question and Subquestions

As Strauss and Corbin (1998) pointed out, the central question in a grounded study is very broad in the beginning. As analysis progresses, the central question may narrow in scope to focus more clearly on factors emerging as the critical concepts in the data. This narrowing helps the researcher focus sampling and questioning in ways that enrich and deepen the variation and saturation of the emerging categories. In this study, it became evident through the course of the interviews that all of the interviewees considered the various influences they discussed, both on a personal level and a professional level, in terms of how each influence affected their individual ability to create a coherent, creative, effective classroom in which students were happy and learned well. Therefore, the classroom emerged as the defining focus for teacher sensemaking. The central question, therefore, specifically addresses classroom practice:

How do teachers make sense of the complex personal and organizational influences affecting their individual classroom practice, especially when implementing reforms targeting student learning?

By narrowing the question in this manner, a clearer analytic focus emerged that guided the final categorization of the data and the nature of the story illustrating the relationships among the categories. The three subquestions in this study are grounded in the literature about school reform and about individual sensemaking. The purpose of this study is to explore the interactive relationship between a teacher's thinking and actions and the environment within which the teacher works. Therefore, specifically answering the subquestions clarifies the findings in this study and their relationship to the literature. Each subquestion is stated and fully explored before finally addressing the central question.

The first subquestion originated in the work of Andy Hargreaves and his colleagues (Hargreaves 1994; Hargreaves et al., 2001; Hargreaves & Fink, 2006) as they explored teacher responses to change initiatives. Hargreaves also conducted open-ended investigations into teachers' perspectives during change. This subquestion guided the analysis of whether various influences were experienced by teachers as supporting their practice or hindering their practice.

What aspects of their professional lives in the context of change initiatives do individual teachers experience as the greatest supports and hindrances to reflectively adjusting their classroom practice and pedagogy to promote student learning? The influences conceptualized by teachers as supports contributed to easing a teacher's stress and workload in the context of creating coherent and effective classroom practice. Individual influences that supported the teacher included acquired experience, an extensive repertoire of craft knowledge, and having the opportunity to use time away from school to do school work.

Human factors were very important to teachers. An environment of strong relational trust appeared to support many facets of a teacher's practice. Strong relational trust enhanced the participants' ability to interact effectively with the other influences on their practice. Student influences that made positive contributions to classroom practice were having family support, positive behavior, and being motivated to learn. Cultural influences characterized as supportive by the teachers included having a clear mutual purpose, effective processes for open and honest communication, and regular planned collaboration. Closely tied to the cultural supports were the leadership supports. Formal processes for teacher leadership that enhanced coherence in the organization and in the classroom were perceived as supportive. Principal leadership characterized as supportive was collaborative and employed formal processes to include teachers in the principal's

decision-making. District leadership that was responsive to teachers' classroom needs and pursued a steady course over many years was regarded as a supportive influence.

Finally, institutional structures perceived as supporting teachers' classroom practice included curriculum coherence and continuity, the opportunity to blend instructional practices to meet the needs of students, integrated use of standard and teacher-generated assessments, allocation of sufficient preparation and instructional time to meet demands, and adequate funding to provide support personnel, technology, and professional development. When the institution supported institutional reform priorities with sufficient resources, teachers tended to feel more supported.

In contrast with the unifying effects of the supportive influences, the hindrances tended to interfere with teachers' efforts to meet student needs, to disrupt coherence and continuity, to limit autonomy, and to contribute to stress and overload. Individual influences included a lack of experience with a particular situation, a mismatch between a teacher's craft knowledge repertoire and the situation within which she found herself, and personal demands that made contributing extra time to prepare for school difficult.

Human factors that hindered teachers' attempts to implement reforms tended to relate to the leadership style of the principal. Relational trust depended heavily on the relationships between the leader and the teachers and among the teachers. From the perspective of the interviewees, poor relational trust impeded all the interactions in the school community. Cultural influences perceived as hindrances were having unclear or conflicting purposes, lack of open communication and structures to facilitate it, and teacher isolation. A final cultural hindrance was organizational disregard for the value of instructional and preparation time to teachers. Principals who allowed the conditions described above to persist were blamed for either creating the hindrances or for allowing them to persist. These principals also tended to be described as directive, excluding teachers from decision-making processes. Teacher leadership in an environment defined by hindering factors was almost exclusively confined to the classroom. In these situations, teachers reported that few organizational processes existed to promote their effective participation. District leadership that foisted repeated changes on teachers without concern for the classroom needs of the teachers was regarded as a continual threat by many of the teachers.

Institutional structures that hindered teachers tended to be characterized by what was missing. The lack of curriculum guides, lack of curriculum implementation across the organization, and poor quality curriculum were all identified as hindrances. Having no standardized commercial materials or poor quality materials were both hindrances to teachers. However, being limited exclusively to standardized commercial materials and not having access to hands-on and supplemental materials was also perceived as a hindrance. Administrative interference with a teacher's judgment regarding instructional practices was reported as a hindrance if the principal's priorities differed from the teacher's and appeared harmful to students or disruptive to the teacher. Teachers often associated unwanted directive behavior with a perceived lack of principal integrity and competence.

One exception to a hindrance being characterized by a lack of something was the presence of the Montana Criterion Referenced Test (MCRT). It was regarded by third through eighth grade teachers in the study as a hindrance to effective use of instructional time. In addition, teachers perceived it as undermining appropriate instructional focuses and practices and as inhibiting student motivation and engagement. The ways in which districts and principals implemented responses to the testing requirements sometimes intensified the perception of the MCRT as a hindrance to effective practice. In this situation, the reform itself was perceived as a hindrance.

A final consistent hindrance identified by teachers was the lack of sufficient funding. Inadequate support personnel, limited or diminishing technology resources, and insufficient professional development were all attributed to a pervasive and persistent lack of funding. An interesting finding was that teacher salaries were not mentioned by participants as either a support or a hindrance. They did not see salary as a factor relevant to their classroom practice.

The second subquestion directly targeted the individual reflective processes used by the participants in their professional settings. This study is premised upon the belief that individuals respond differently from one another, which means that it must explore the nature of the individual responses. In addition, a major problem identified in this study is the over-reliance of reformers on technical-rational models for change. The analysis for this subquestion explored the reflective practices of the participants and the

ways in which these reflective practices interacted with participants' uses of applied science and technique. The source for the subquestion is Schon's (1987) analysis of how professionals frame and respond to the zone of practice within which they perform.

What do teachers reveal about their engagement in Schon's elements of professional practice, including the "art of problem framing," the "art of implementation," the "art of improvisation," and the mediation these artistic elements provide to teacher use of applied science and technique (1987, p. 13)? Schon (1987) defined artistry as "the competence by which practitioners actually handle indeterminate zones of practice" (p.13). He characterized the "indeterminate zone of practice" as having the inherent qualities of uncertainty, uniqueness, and value conflict. For teachers in this study, the indeterminate zone of practice appeared to mostly be perceived as the classroom. The effective functioning of the classroom depended on the teachers' capacity to include complex and interactive factors into their framing of the problems. Individuals tended to perceive many of the same factors as relevant in this framing process, but they had varied priorities regarding how they set the problems to be solved in their own classrooms. The relevant factors they identified became the categories in this study. However, the thinking processes they used are inadequately described solely through analysis of the categories.

Problem framing for teachers usually came down to constructing a coherent problem, worth solving because the solution would contribute to the coherence and effectiveness of the classroom. This problem-framing process, from the teachers' perspectives, included complex factors. Consideration had to be given to the teachers' individual capabilities, to the students' needs and capabilities, to institutional resources, to human relationships, and to organizational structures.

In a reform situation, particular expectations guided the problem-setting process. However, these expectations were often not understood similarly by different individuals. In some schools, participants were left to themselves to determine how to frame the reform problem in the context of their classrooms. In other schools, collaborative processes directly addressed the aspects of the reform problem that would receive priority and offered guidance to the teacher in how to frame the problem for her classroom. In a couple schools, programs were in place that attempted to cut the teacher out of the

problem-framing process by providing scripted materials. Whatever the organizational attitude toward teacher problem framing, all of the participants felt strong commitment to being primarily responsible for framing the problem within their own classrooms.

For most of the teachers, the well-being of the students was the first consideration. Student learning and motivation were also critically important. The next consideration tended to be the practical workability of framing the problem one way as opposed to another. For example, if the problem was framed as having a deficient reading program, the teacher could not practically address the scope of the problem. In contrast, if the problem was framed as needing a better balance of instruction between phonics and literary study, the teacher could take practical steps to address the problem. To reduce their feelings of overload teachers set reasonable goals that they knew they could reach. All of the teachers emphasized the important role their knowledge of their current students played in how they determined which problems to solve in the classroom.

Teachers preferred problem-setting processes that allowed collaborative input. Collaboration affirmed the teacher's perceptions of what important elements the problem might include. They also believed they gained insight into what should be included in the scope of the problem. In contrast, if they thought that someone else's perception of the problem was being pushed on them, they tended to dismiss that input. The main reason they gave for the dismissal was that individuals outside the classroom did not know the particular students inside the classroom. Another important reason given was that people who were not teaching often seemed unaware of the complexities confronting the teacher. These two shortfalls led to others framing a problem in a way that did not address important student needs, or in a way that presented insurmountable obstacles for the teacher. The absence of collaboration also resulted at times in people perceiving different problems to be solved, which in turn led to acrimony and an inability to focus organizational effort and resources.

Once a problem is framed, the arts of implementation and improvisation are employed. The art of implementation and the art of improvisation depend upon the practitioner's relationship to a particular problem. Initially, a practitioner seeks similarities and differences with previously framed problems, because the manner in which a problem is framed guides the response. In situations with high levels of

similarity, the practitioner uses what Schon (1997) called "knowing-in-action" (p.22). This is closely related to the art of implementation; when implementing a solution to the framed problem, the practitioner's spontaneous response is characterized by intelligent action and skillful execution. The practitioner has a repertoire of previous experiences that guide the responses and allow the practitioner to address a dynamic situation through easy adjustment to variables.

In contrast, situations that are surprising and unique to the practitioner require "reflection-in-action" (Schon, 1997, p.26). The art of improvisation is employed during reflection-in-action, because a skilled practitioner does not respond randomly to a new situation. Schon drew an analogy to improvisation in music, which "consists in varying, combining, and recombining a set of figures within a schema that gives coherence to the whole piece" (p.30). The practitioner hypothesizes what approaches to the problem are likely to result in positive outcomes, and chooses which actions to experiment with based on the guiding schema.

The art of implementation and the art of improvisation are continually employed in the classroom and in the organization. The teachers in this study repeatedly talked about how their experiences had helped them become more effective and efficient in framing the instructional experiences they offered their students. When addressing an individual student's needs, experience often provided a basis from which the teacher could respond with knowing-in-action. Teachers said things like "I know what my students need" or "I've learned how kindergarteners learn." They also spoke of feeling overwhelmed and floundering early in their careers, because they did not have this repertoire of potential responses from which to draw.

Reform, because its intention was to differ from current practice, provoked reflection-in-action. The individual teachers and the organization confronted situations for which they had no spontaneous solutions. Some schools had intact collaborative structures which allowed the principals and teachers to use their cumulative knowledge and experience in determining which approaches to try. In these schools, the results were much like musical jazz, in that the guiding purposes and principles of the school informed teachers' decisions about their actions. Teachers related that organizational coherence was sustained through the improvisational phases of reform implementation,

because the reframing and redesigning of the on-going responses included all of the organizational members. Overall, many teachers regarded the exercise of creativity associated with responding to complex challenges as one of the rewards of their jobs, even though it could be difficult.

In schools teachers perceived as lacking organizational coherence and collaborative structures, reflection-in-action during reform became a matter of individual teachers trying various experiments in their classrooms. These were conducted without reference to the experiments of others. These schools lacked the underlying structures with which to improvise productively. Often these teachers voiced responses like "I don't understand what they want" or "I'm trying, but I can't seem to get it right." Additionally, the variety of teacher experiments contributed to the perception of fragmentation and discontinuity in the organization. Teachers in these situations were more likely to experience reflection-in-action in response to reform as a stressful activity than as a creative one.

An interesting pattern of teacher response was reported in situations with very strict external implementation requirements. In these situations, the problem had been framed by agents external to the school, and the reform was intended to solve the externally framed problem. Often the framing of the problem was from a perspective that viewed the teacher as part of the problem to be solved, so part of the reform was to reduce the role of teacher judgment in implementation. Reading First was one example of such a program. Even teachers who supported the goals of the program and felt they could learn from the strategies they were taught did not like the rigidity of the implementation. Teachers in Reading First schools gave examples of private experiments they conducted in their classrooms in response to student needs. The shortcoming they identified in this type of prescribed approach was that it did not flexibly include the responses of the students or the differing capacities of teachers in its procedures. Teachers were not intended to improvise, and the program assumed that no surprises would occur.

This situation with Reading First provides a relevant example of how teachers use the art of implementation and the art of improvisation "to mediate the use in practice of applied science and technique" (Schon, 1997, p.13). The stated philosophy of Reading

First is that the use of scientifically based practices and materials will result in all students learning how to read. Teachers in Reading First programs are carefully trained to understand the materials and to implement instruction in particular ways. Their implementation is expected to occur according to a timetable, with particular skills being taught on particular days. Intervention strategies are prescribed and must be followed. What the teachers in this study reported was that, in reality, the prescribed strategies might or might not meet the needs of a particular child. In addition, three of the teachers in these schools had vast experience teaching reading prior to the implementation of the program, and they felt the program limited their ability to use strategies they knew could be successful. Teachers involved with Reading First employed their own reflection-inaction to mediate between the requirements of the program and the needs of their students.

Another scientifically based reform teachers were encountering was the use of test scores to evaluate the performance of teachers and schools. Various formulas and data were employed to determine whether the test performance at a school demonstrated "adequate yearly progress" (AYP). To raise test scores, teachers were asked to implement specific instructional strategies in their classrooms. This technical approach to improving student learning was widely disapproved of by teachers. It did not, in their view, provide the desired results for students. They felt trapped by an external prescription that failed to respond flexibly to the actual performance of students. The teachers were discovering the actual consequences and implications of the imposed solutions, but had no way to communicate with or to negotiate their responses with those imposing the solution. The third through eighth grade teachers in this situation all reported that they downplayed the official technical solutions as much as possible in favor of their own implementation and improvisation strategies for improving student learning. The negative interactions between applied science and technique and the arts of implementation and improvisation were strongly linked to the lack of an interactive structure for adjusting strategies based on the actual results of implementation. Teachers perceived this disconnect as preventing teachers and schools from using the lessons they learned about the relative strengths and weaknesses of various approaches to adapt to the actual reality they experienced.

Positive interactions between applied science and technique and the arts of implementation and improvisation occurred when teachers had access to high quality commercial materials and assessments and also had the freedom to employ professional judgment. Teachers expressed a desire for materials and assessments that helped them understand and employ the structures of the discplines within which they should function. These materials helped the teachers in their quest to bring coherence and continuity to the classroom experiences of students. However, individual students needed differing instructional approaches in order to achieve similar competence. In some schools, flexible structures supporting individualization helped the teachers. Teachers had access to a variety of scientifically developed programs, but implementation and improvisation were guided by organizational and individual judgment.

Teachers identified the critical element affecting teachers' uses of the arts of implementation and improvisation as the actual response of the students in their classrooms to the teachers' strategies. When flexible organizational reform tactics supported strong student growth and students were happy, teachers in this study used these tactics. When rigid organizational reform tactics had negative results with students, these teachers abandoned them and instead used their own methods for implementation and improvisation. Teachers felt a strong individual commitment to the students in their classrooms. They regarded the creation of an effective and supportive classroom environment as a non-negotiable individual responsibility. As a consequence, their individual sensemaking activities filtered and shaped the ways in which external influences entered their classrooms.

The third subquestion drew upon the research Bryk and Schneider (2002) conducted in Chicago public schools. They discovered that schools with high levels of relational trust had a one-in-two chance of demonstrating improved student performance. Schools with the lowest levels of relational trust over time had virtually no chance of improving student performance. Relational trust, therefore, is an important consideration when exploring the perceptions and actions of teachers in an environment of change.

What levels and dimensions of relational trust, defined by Bryk and Schneider (2002) as including respect, competence, personal regard for others, and integrity, are apparent in teachers' relationships with the principal, other teachers, students, and

parents? Relational trust among professionals in the school community was strongly linked, in this study, to principal leadership. Some characteristics of relational trust were more strongly linked to the principal's behavior than were others. Personal regard between principals and teachers was essential for strong organizational levels of relational trust. However, personal regard among teachers could exist separately from organizational relational trust. Schools in which the principal demonstrated individual personal regard for others tended to have the perception of high levels of personal regard among teachers as well. Personal regard, in most schools in the study, was reported to be high between principals and teachers and among teachers. These schools, overall, had higher levels of organizational relational trust than those in which personal regard between principals and teachers was low. Even in schools reporting low levels of personal regard from the principals to the teachers, personal regard among the teachers was reported as strong. In these situations, it did not really seem to be a characteristic of organizational relational trust, but rather a social bond among the teachers.

Competence, another critical factor in relational trust, was extremely important to the teachers in the study. They held themselves to high standards of competence, and they expected their leaders and peers to do the same. Teachers reported higher levels of competence in their peers when they were in a collaborative environment with significant opportunities for communication and shared development of instructional and assessment practices. Perhaps these teachers had more opportunity to accurately evaluate the performance of their peers, or perhaps the collaborative environment enhanced the competence of the teachers. In somewhat collaborative environments, teachers reported the highest levels of competence in the teachers with whom they worked most closely. However, they also reported that they perceived some of their peers as incompetent and in need of administrative support. In most cases, it was unclear what level of information formed the basis of these perceptions. Teachers experiencing low levels of collaboration tended to avoid discussing the competence of their peers. However, they did discuss their perception that their principals were incompetent in some ways. The levels of competence attributed to principals also seemed to correlate with the levels of collaboration in the school. Moderate levels of collaboration were associated with perceptions that principals were competent in some ways and lacking in other. High

levels of collaboration were associated with perceptions that principals demonstrated strong competence. The conclusion supported by these results is that higher levels of collaboration support the relational trust levels in a school by promoting either the reality or the perception of greater competence among the members of the school community.

The third quality of relational trust, integrity, was linked by teachers to whether people met their obligations to others in the organization. In addition, individuals were expected to behave ethically according to agreed-upon or implicit principles. For teachers in this study, these behavioral and ethical obligations were considered to be owed first to students and next to other teachers. Teachers' organizational obligations were less important as a consideration for integrity. From the teachers' perspective, principal integrity was linked first to supporting teachers in their classroom practice with students, and next to whether principals upheld stated purposes in their interactions with teachers regarding organizational matters. Individuals who shirked their obligations or acted with disregard for ethical principles were regarded as having low integrity. Those who met their obligations and acted in accord with ethical principles were regarded as having high integrity. Individuals working in schools that had overtly stated expectations for teacher actions and clear mutual purposes were more likely to attribute high levels of integrity to their principals and to their peers. Individuals in schools with unclear purposes and principles tended to perceive a lack of integrity in their principals. They were also more likely to believe that their peers needed intervention from the principal to force them to meet their obligations.

The final quality of relational trust, respect, was highly dependent on the presence or absence of the other three qualities. Personal regard was a hygiene factor without which respect did not occur. If personal regard was present, the level of respect accorded was tempered by the teacher's perceptions of the other individual's competence and integrity. Some participants placed a greater emphasis on integrity as a basis for their respect; other placed more emphasis on competence. However, both were important contributors to the level of respect accorded to others. Because the attributions of competence and integrity varied according to the levels of collaboration and mutually held purposes within a school, respect also varied according to these levels. Higher levels

of respect correlated with knowing the other individuals better, unless the other individuals were lacking competence, integrity, or personal regard.

The teachers interviewed worked extremely hard to promote strong relational trust within their classroom environments. They all discussed the strategies they employed to guide student behavior, to promote positive student interactions, to help students see them as supporters, and to establish clear learning goals within the classroom. One reason for teacher rejection of some reforms was that the reform undermined elements of the relational trust between a teacher and her students. The interviewees did not phrase it that way, but they avoided being put in teaching situations that might jeopardize the trust their students felt for them.

Teachers in this study also understood that they needed to establish personal bonds of relational trust with parents. Many teachers called parents on a regular basis and tried to involve them in their children's education. A few teachers took the step of attending student activities so they could meet parents in a different setting and establish a mutual personal regard with parents. A few also made a point of contacting parents with positive news about their children's accomplishments at school. Most teachers attributed greater student success to high levels of relational trust between families and school. Teachers felt that some parents did not demonstrate appropriate levels of respect, personal regard, competence, or integrity to their own children or to the teacher. In these particular situations, relational trust was quite low. Teachers believed the law should step in and force parents to live up to their obligations. This dynamic is similar to the notion that principals, in environments of low relational trust, should enforce teacher compliance with expectations.

Taken as a whole, relational trust, as portrayed by these teachers, functioned as a filter between the individual teacher's sensemaking in the classroom and the various organizational influences. When relational trust was higher, it facilitated effective interactions between the teacher and others in the organization. In these situations, the teacher could draw from the extended wisdom, guidance, and support of the school community. Medium levels of trust usually meant that the teacher allowed ideas from a limited number of trusted colleagues to influence her classroom. Dubious influences were screened out or modified as the teacher saw fit. Low levels of trust created a barrier

effect, in that the teachers saw themselves as protecting their classroom and their students from the external influences.

Analysis of the three subquestions allowed for consideration of the data from three perspectives that influenced teacher sensemaking in the classroom in a climate of change. The next step in the analysis is a holistic examination of how the interrelationships among the teachers' perceptions and the organizational influences guide the answers to the central question. In addition, the insights gained through this study should be evaluated in relation to the literature.

Holistic Analysis Related to Literature

This section will provide a synthesis of the data and literature to serve as a basis for the propositions in which the answers to the central question are explored. The central question, "How do teachers make sense of the complex personal and organizational influences affecting their individual classroom practice, especially when implementing reforms targeting student learning?" requires a complex response. The data have made clear the complexity of the sensemaking processes used by teachers.

This study yielded some interesting insights in terms of how teachers chose to communicate their sensemaking in an interview situation. In framing this study, the hope was to obtain detailed stories of particular instances in each teacher's experiences. During the course of the interviews, the long story of each teacher's career experiences emerged. Short anecdotes illustrated particular instances of success and conflict during reforms. Despite repeated encouragement and questioning, every participant resisted telling detailed specific stories. They were insistent that the narrative they shared during the interview be guided by their overt assessments of the meanings and motives involved. However, many of them talked about getting together with other teachers at grade level meetings or lunch and sharing their stories. Furthermore, when the official interviews ended, every participant told the researcher several stories about instances with students or colleagues. This happened walking down the hall, looking at materials, or visiting the classrooms.

An inference that might be drawn from this is that detailed situational stories emerge when people are sharing meanings informally and are not highly concerned about the specific conclusions the listener might draw. In a more formal situation, the form of

the narrative is more consciously controlled, because the narrator wishes to provide direction to the interpretive processes of the listener. The form of the career stories also suggests that individuals may have meta-stories that relate the unfolding of their lives and careers, in addition to incidental stories focused on particular situations. As Weick (1995) discussed, people retroactively assign meaning, causation, and sequence to events in their lives in an effort to find meaning and reduce internal dissonance.

The career narratives told by the teachers affirmed many of the conclusions drawn about teachers and reform by other researchers in schools. According to the literature, teachers must believe the reform will benefit their students and themselves before they will invest time and energy (Barth, 2001; Fullan, 1992, 2000, 2005; Hargreaves, 1994, 2003; Hargreaves et al., 2001; Hargreaves & Fink, 2006; Sarason, 1996). In this study, the classroom efficacy and feasibility of any reform were the primary criteria through which teachers judged the quality of the reform.

Therefore, hyper-rationalization in the form of strict standards, rigid programs, strict testing policies, and other technical solutions to classroom improvement presented some major pitfalls. For teachers trying to implement the reforms, pitfalls included the differing needs of students, differing resources available to teachers, and differences between individual teachers (Fullan, 2001a; Hargreaves et al., 2001; Hargreaves & Fink, 2006). Examples of the failure of technical solutions according to teachers in this study included the difficulties with implementing Reading First programs, and the use of testing to evaluate the performance of schools and teachers. The reasons for failure of reforms or lack of commitment given by teachers in this study aligned with reasons proposed by other researchers.

Highly directive reforms and leadership behavior also undermined teacher commitment. As Darling-Hammond (1997) pointed out, people's sense of efficacy grows when they control and influence their own work. Teachers in this study identified the creative processes they used to adjust their instruction to target student needs as one of the primary joys in their jobs. Furthermore, as Fullan et al. (2001) and Hargreaves and Fink (2006) noted, sustainable reform must balance accountability and autonomy. Autonomy was very important to the teachers in this study, in terms of how they were able to apply their professional judgment in the classroom. They supported accountability

that benefited students and linked with realistic goals and processes. Reasonable accountability reinforced teachers' sense of responsibility for the accomplishments of their students.

Professional judgment is positively influenced by high quality collaborative experiences (Fullan, 2003; Hargreaves 2003; Hargreaves & Fink, 2006). The actual quality of individual and organizational work improves in a collaborative environment (Bryk & Schneider, 2004; Cohen, 2002; Darling-Hammond, 1997; Newmann et al., 2001; Sergiovanni,1992). Teachers in this study reported a collaborative environment as a critical support for the development of coherent instructional programs within their classrooms and throughout the school.

The quality and distribution of leadership emerged in this study as important factors in daily sensemaking for teachers. Fullan (2001a) discussed quality leadership as creating greater capacity in the school. He defined the role of the principal as promoting (a) teachers' knowledge, skills, and dispositions, (b) professional community, (c) program coherence, and (d) technical resources. Furthermore, the principal must facilitate a synergistic relationship among the other four factors in a school's capacity. Fullan's description was remarkably similar to the aspects of their professional lives identified by teachers in this study as important to their classroom practice. They also believed that these influences interacted in complex ways to support their practice. The following propositions further explore the insights that emerged from this study.

Propositions

Primary Commitment to Classroom Leadership

Teachers were firmly committed to creating for students in their classrooms a motivating and engaging blend of learning experiences. They believed that these experiences should balance pursuit of coherence and continuity with creativity and experimentation. This balance contributed to joy and success for students, by helping them learn fundamentals and then use them creatively and with some autonomy. Teacher joy and success flourished in this environment as well, because teachers experienced fulfillment when they employed their expertise and creativity while contributing to the learning and success of their students. Teachers in this study believed that creation of this

positive classroom environment was their personal non-negotiable right and responsibility as the classroom leader.

The career stories of the teachers revealed their individual paths toward developing the individual capacity to successfully create the environment described above. These paths included formal education, professional development, and collaboration with others. In addition, their responses in different situations, with different principal leadership and organizational culture and structure, also strove toward finding their individual continuity in pursuing their visions of the ideal classroom. Thus, the same teacher, at different points in her career, may have worked closely with a principal, closed her door and avoided a different principal, and worked collaboratively with teams of teachers in a third situation. Sometimes teachers changed jobs when a situation inhibited their ability to lead in their own classrooms. In each case, the clear guiding principle for the teachers' decisions through time remained creation and protection of an effective, engaging classroom in which students and teacher experienced success, as determined by the teacher's professional judgment.

Weick (1995) discussed how individuals create strong retrospective patterns of cause and effect in their sensemaking when they describe their past decisions and actions. An important factor in the retrospective cause and effect thinking of the teachers was that they attributed many of their decisions as having been made to benefit their students and classrooms. White and Epston (1989) related our sensemaking activities to internal plots we have in our minds that guide our actions and perceptions in accordance with the storying of our lives. These teachers appeared to make sense of their past careers in terms of how they had pursued becoming the effective teachers they envisioned in their career stories.

The career stories focused mostly on the classroom experiences of teachers and students. This focus relates to Schon's (1987) discussion of how practitioners frame their zone of practice. He conceptualized practitioners as setting the boundaries of their attention within the larger situation, and imposing on the larger situation a coherence that allows the individual to decide what the problems are and how they might be solved. For teachers, the functioning of the organization is outside their control in most ways. Within the classroom, however, they can effect coherence and problem-solving.

Barth (2001) and Hargreaves et al. (2001) confirmed that teachers first focus their efforts and energy on their own students and classrooms. One practical aspect of that focus, according to Barth, is that they have more time and energy to spend on their teaching, individual students, and personal responsibilities. Another is that they can avoid demands with which they may not agree (Sarason, 1996). However, as Hargreaves (1994) noted about the teachers in a study he conducted:

The time and effort these teachers commit to their preparation and teaching comes not so much from grudging compliance with external demands as from dedication to doing a good job and providing effective care within a work context that is diffusely defined and has no clear criteria for successful completion. (p.127)

This description by Hargreaves accurately depicts the mindsets of the teachers that emerged during the course of this study. It summarizes their motives for working hard to create an effective classroom environment, and notes the limitless nature of the demands they experienced.

A further insight gained from this study is that teachers are remarkably aware of the organizational factors that contribute to their success or failure in the classroom. Analysis of the interviews in this study resulted in the identification of phenomena that included the major components identified throughout the change literature as critical supports for effective change, or as major obstacles to effective change.

Interpersonal Basis for Organizational Commitment

The organizational commitment of participants in this study through their careers was linked to the interpersonal aspects of a particular situation. These included the principal leadership, relational trust within the organization, and the levels of collaboration available. In their career stories, teachers compared various situations they had experienced. In general, they remained in situations in which they regarded the principal and other teachers as demonstrating personal regard, respect, and integrity. They often left organizations which lacked these elements. However, strong commitment to the organizational priorities also required the existence of collaborative work structures and strong communication. In addition, the teachers had to perceive the organizational work as contributing to their ability to teach effectively. When these elements were lacking, commitment to students and the classroom superseded commitment to

organizational priorities. Through the years, then, a teacher might remain in the same district that met base level needs, but her commitment to the organization might vary depending on the leadership, collaborative opportunities, and organizational priorities.

The insights regarding teacher commitment that emerged in this study are well-supported in the literature. Sergiovanni (1992) noted that positive interpersonal relationships are a baseline factor that teachers expect as a condition of employment. The interactive teacher and principal leadership associated with strong collaborative structures and clear communication is in itself a motivating factor for teachers (Darling-Hammond, 1997; Hargreaves, 2003; Sergiovanni, 1992). A common purpose is critical for teacher commitment to organizational work (Collins, 2001; Fullan, 2001; Hargreaves et al., 2001). The collaborative structures and clear purpose must combine for reform to be implemented over time with sustained teacher commitment (Hargreaves et al., 2001). Without collaborative support, conditions may drain teacher energy and capacity, leading to an eventual drag on the teacher's ability to teach effectively. When teachers feel that occurring, they are likely to withdraw from the reform and to guard their remaining energies by focusing on the classroom (Hargreaves et al., 2001).

Structural Conditions Influence Teacher Perceptions of Challenge vs. Overload

Structural conditions, including curriculum, materials, expected instructional and assessment practices, support personnel, funding, technology resources, professional development, preparation time, and instructional time could either support or hinder a teacher's quest for effective classroom practice. A teacher in a supportive interpersonal environment, who also had sufficient structural supports, was likely to perceive her job as challenging and rewarding. Insufficient structural supports, in a positive interpersonal environment, changed the perception. These teachers felt overwhelmed, but also compelled to keep trying to meet organizational expectations, due to their desire to sustain the interpersonal relationships. In both of these situations, the district's choices in how resources were allocated influenced teachers' perceptions of what was worth committing to, because they interpreted structural supports as an indicator of the organization's commitments.

Environments lacking both interpersonal and structural supports led to teachers who felt overwhelmed and isolated within their classrooms. Teachers also perceived the

lack of structural supports as a lack of commitment to them from the district. When the balance tipped toward teachers having to create their own direction and materials with limited time and funding, they felt the district was dumping the success of the organization on their backs. They chose to define their role as seeking success with their own students, while actively disclaiming responsibility for the operations of the organization.

Fullan (2001a, 2001b) and Hargreaves et al. (2001) noted that when structures work in support of teacher efforts and reduce the effort required for effective classroom practice, teachers are more likely to initially support a reform and then to sustain it through time. Structures that conflict with the requirements of reform tend to create frustration for teachers (Hargreaves et al., 2001). Insufficient structural support and lacking resources will erode both teachers' ability to effectively implement reform and their commitment to sustaining their efforts (Fullan, 2001b).

Overall, the ways in which a district supported a teacher's classroom preparation and instruction played a significant role in teacher fulfillment, teacher classroom effectiveness, and teacher commitment to the organization. The focus of the teachers on creating an interesting and motivating classroom environment for their students and themselves provided the perspective through which structural supports were evaluated. Feeling overwhelmed reduced teacher feelings of competence and efficacy, and increased guilt. Feeling supported enhanced feelings of competence and efficacy and led more often to perceiving the situation as intellectually and emotionally stimulating.

The most important resource, from teachers' perspectives, was time. Hargreaves (1994) in his studies of time in schools, noted that elementary school teachers overwhelmingly operate from what he called a "polychronic" (p.104) time frame, in which many things must be attended to at once. In contrast, school administrators and business leaders often operate from a "monochronic" (p.102) time frame, which assumes "linear progression through a set of discrete stages" (p.102). The teachers in this study experienced a clash between the expectations and controls over what and how much they should do and the time available within which to accomplish the expectations. Their own primary focus was on successful completion of the day's learning activities with every student, which to them was an incredibly complex and demanding job.

The schools in this study in which teachers perceived reform to be more successful gave teachers more control over the conceptualization of the tasks and of the time needed to accomplish these tasks. Hargreaves (1994) noted that this collaborative allocation of time may be a necessary component for any successful reform. Higher levels of collaboration and teacher leadership related in this study to teachers reporting greater commitment to reforms and experiencing pressure more as a challenge than as a crushing negative influence. Hargreaves (1994) also discussed the need for teachers to have flexible jurisdiction over their use of time during the day. In a particular day, a teacher might choose to work through lunch, and then eat during prep time, due to the unique demands of that day. If an administrator were to insist that time be used according to its title, it might lose its practical value for the teacher, in terms of using it efficiently for a specific teacher purpose. Teachers in this study reported just such flexible uses of their time. They called parents during prep time, met with colleagues at lunch, and prepared on their own time. Clearly, then, the results of this study support Hargreaves' (1994) assertions that teacher control over their non-classroom time is as important as having more time available outside the classroom.

Teacher Sensemaking

The following explanation of *Teacher Sensemaking* represents the priorities teachers in this study used to make sense of the complex personal and organizational influences affecting their individual classroom practice. This discussion presents the answer to the central question in this study: **How do teachers make sense of the complex personal and organizational influences affecting their individual classroom practice, especially when implementing reforms targeting student learning?**

The teacher's classroom zone of practice is central to the teacher's sensemaking. The teacher exercises constant classroom leadership to mediate and to determine the ways in which other influences enter the classroom. Acting as an encompassing environment within which the teacher and classroom exist, relational trust can either facilitate the integration by the teacher of other influences into the classroom, or form a barrier between the teacher and other influences. High relational trust facilitates teacher integration of the other influences; medium levels of relational trust cause teachers to

pick and choose acceptable influences; low levels of relational trust cause teachers to protect themselves and their classrooms from outside influences.

The four phenomena of **leadership**, **culture**, **student influences**, and **institutional structures** represent the human and structural elements that interact with and influence the teacher's classroom sensemaking processes. These influences, aided or impeded by relational trust levels, are shaped by the teacher's sensemaking processes as they enter the classroom zone. The complex interplay among these phenomena requires teachers to continually mediate and orchestrate the impacts of these influences on students in the classroom. Teachers make sense of a complex environment in pursuit of coherence, creativity, and effectiveness in their individual classrooms.

Implications

The implications generated by the findings from this study are divided into two sections (a) "Implications for Practitioners," and (b) "Implications for Further Study." The first sections details implications for practitioners who would like to apply the insights from this study to their own school situations.

Implications for School Leaders

Consumers of this study can reflect on the relationships among the various influences on teacher sensemaking in their own settings. A foundational attitude that emerged strongly was the desire of teachers to create the most effective and fulfilling classroom environment they could, preferably one that supported the purposes of the school. One could examine one's own environment to see whether teachers are succeeding in this endeavor. If they are not succeeding, or feel frustrated, consideration of the following factors would be warranted.

The repertoire of craft knowledge and professional training of the teacher must be appropriate to the expectations placed on the teacher. Individuals have different capacities and do best in situations well-suited to their strengths. If a teacher lacks experience in a particular situation, even if the teacher has taught for a long time, his or her repertoire of craft knowledge may need time to grow in the new situation.

Collaboration with other teachers who have the appropriate craft knowledge would help the teacher. Reforms requiring new knowledge of instruction, assessment, and materials

should be accompanied by in-depth professional development until teachers communicate confidence in their competence.

If reform is being considered, clear structures for teacher collaboration, teacher leadership, and lateral and vertical communication should be developed prior to implementation. These structures should be used to support mutual development by the principal and teachers of the specific purposes of the reform, the shape it will take in classrooms, and implementation activities. During implementation, collaboration among teachers and with the principal is more likely to result in teachers valuing the reform and integrating it into their classroom practice. The collaborative, leadership, and communication structures should be maintained through time as part of the school's culture and organizational functioning. If they are allowed to lapse, the institutional bases for the reform will slowly erode and tend toward greater divergence in classroom practice. Changes in principal leadership can cause this erosion to occur quite quickly, if previously existing structures are eliminated.

Autonomy and the ability to exercise professional judgment in the classroom are essential components for teacher commitment to a reform. Teachers in this study felt strongly that they had the right and responsibility to adjust their practices to meet the needs of the students in their rooms. They were much more likely to support a reform when they could adjust the implementation based on the results they were seeing. Even when told they were not supposed to adjust on their own, they still did it when they saw the need. Arriving at mutual agreements about purposes, content, materials, and general implementation were viewed positively as providing guidance to the teacher's judgment.

Relational trust should be considered an essential factor for teacher satisfaction in their jobs and for organizational effectiveness. This study confirmed the insights Bryck and Schneider (2002) discovered in their studies of schools in Chicago. A baseline of personal regard is a necessary prerequisite among all people in the school community, including students and parents. For professional respect and trust to develop, individuals should demonstrate competence in their jobs and communicate respect for the competence of others. Furthermore, they should act with integrity to fulfill their obligations. Higher levels of collaboration among teachers and principals were associated with the development of higher levels of relational trust.

Finally, institutional structures and resources should be targeted to support teachers in achieving the stated purposes of the school. Purposes undertaken with insufficient support quickly lose teacher participation. The lack of support makes implementation much more difficult and detracts from a teacher's ability to meet the complex demands of his or her classroom. Lack of structural supports and resources is also interpreted by teachers as a lack of commitment on the part of the organization. The supports offered should be the ones teachers ask for, not the ones someone else thinks they need.

Implications for Future Studies

Researchers interested in how to pursue effective organizational reforms should continue to pursue the complex relationship between the teacher's role as the classroom leader and teachers' involvement as organizational leaders and members. Areas for further research include:

- Understanding organizational dynamics that promote teachers' seeking organizational leadership roles.
- Understanding teacher thinking in more depth in terms of how teachers conceptualize their leadership responsibilities within the classroom, especially regarding the relationship of the classroom to the school as a whole.
- Investigating in much more depth what teachers' conceptions of time are, how
 these are shaped, and how these conceptions shape the teachers' attitudes and
 practice.
- Investigating thoroughly situations in which teachers do feel they have sufficient time to meet the multiple demands and determining what makes these situations different from the typical school.
- Investigating the perceptions of time held by school leaders and the relationships between time perceptions of leaders and those of teachers in the same schools.
- Understanding how some schools accomplish the flow necessary to create and sustain continual reflection-in-action in response to student needs. How does this differ from implementation of programs and strategic plans?

- Discovery of the influences story has on teacher thinking and on organizational understandings.
- Classroom observation and teacher reporting of perceptions to compare observations with self-perceptions.
- Investigating the possible influences of gender on the behavior and perceptions of teachers and leaders.
- Investigating the similarities and differences between the perceptions of elementary school teachers and high school teachers.

School researchers are slowly moving toward deeper understandings of who teachers are, how they think, why they think as they do, and how their thinking shapes their practice. Future reform efforts should take full note of the emerging insights in an effort to move toward effective and sustainable improvement of education for our students. Improving the conditions under which teachers work will enhance their commitment, competence, and efficacy. Emphasis should be placed on the human experiences of change, rather than on the technical plans and strategies, because technical models have a very poor record of success and sustainability. According to the results of this study, that record is not likely to improve. More flexible reforms that develop the strengths and judgment of the individuals involved hold more promise.

In conclusion, this study supported the premise that development of professional judgment is essential for teachers to successfully negotiate and make sense of the complexities of their jobs. Teachers continually seek and act upon multiple sources of information. They sustain a complex web of relationships, each requiring different responses from the teacher. The environment within which teachers work is continually changing, as their students change, peers change, leaders change, and policies change. Even when no formal change initiatives exist, teachers must sustain flexibility due to the daily unpredictability and complexity of the demands they face. Support systems for teachers become especially critical when formal change initiatives are added to the existing complex demands. The teachers' successful integration of complexity determines the nature of the classroom environment and the learning opportunities that students experience. Therefore, this study upholds Darling-Hammond's (1997) statement that,

"What matters most for students' learning are the commitments and capacities of their teachers."

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Appendix A

Letters to Principals and Superintendents

Dear Principal:

I am a doctoral candidate in educational leadership at the University of Montana, exploring teachers' perceptions of their experiences with school change. My dissertation project investigates how teachers think about and respond to the situations they are experiencing during this time of school reform.

My purpose in writing to you is to request permission to contact the teachers in your school. I am seeking teacher volunteers to participate in a two hour interview process. The interviews would be scheduled at a time and place convenient for the teacher. No research would be conducted in your school, beyond making initial contact with the teachers. If you and the teachers preferred, however, the interviews could occur in the teachers' classroom or other school setting, outside regular school hours. The identities of the schools and of the teachers will be confidential and will not be published in the dissertation.

My initial contact with teachers could either be in person or through a letter. Ideally, I would appreciate the opportunity to present the study at a staff meeting. This would afford teachers a chance to ask me questions directly if they so chose. I would distribute materials to interested teachers and they could contact me subsequently to let me know if they would like to participate. No pressure will be placed on any teacher to participate if he or she is not interested. Alternatively, I could mail information packets and response cards to teachers at your school explaining the specifics of the study and providing contact information.

Thank you for taking the time to read this letter and to consider my request. I understand how busy we all are as we strive to meet multiple levels of expectations. I will contact you within the next two weeks to see if you are interested in granting me access to your teaching staff. If you prefer to contact me, my phone and e-mail addressed are listed below.

Dot Wood

Home: (406) 844-3894 dorotheawood@centurytel.net Work: (406) 892-6539 dwood@sd6.k12.mt.us Glacier Gateway Elementary School

Sincerely yours,

Dot Wood

Dear Superintendent (name here):

I am a doctoral candidate in educational leadership at the University of Montana. My purpose in writing you is to determine whether you would permit me to interview teachers who work in your district's elementary schools as part of my dissertation research. No research would be conducted in your schools, beyond making initial contact with the teachers. My study investigates how teachers think about and respond to the changes and requirements they are experiencing.

With permission from you and the principal, I would ask for teacher volunteers to participate in a two hour interview about their individual experiences with school reform. Ideally, I would appreciate the opportunity to present the study at a staff meeting. This would afford teachers a chance to ask me questions directly if they so chose. I would distribute materials to interested teachers and they could contact me subsequently to let me know if they would like to participate. No pressure will be placed on any teacher to participate if he or she is not interested. Alternatively, I could mail information packets and response cards to teachers at your school explaining the specifics of the study and providing contact information.

Teacher interviews will be audiotaped. When preliminary analysis has been completed with the data collected, each teacher will have the opportunity to review the researcher's conclusions to verify that the interpretations are consistent with the teacher's intent. Access to the original tapes and interview transcripts will be limited to the researcher and the faculty advisor. The identities of the schools and of the teachers will be confidential and will not be published in the dissertation.

I will follow this letter with a call to determine your interest in being included as a potential study site. Should you prefer to call me, I can be reached at Glacier Gateway Elementary School in Columbia Falls during the day. In the evening, I can be reached at home. Contact information:

Work:
Dot Wood
(406) 892-6539
dwood@sd6.k12.mt.us

Home: (406) 844-3894 dorotheawood@centurytel.net

Thank you for considering this request.

Sincerely yours,

Dot Wood

Appendix B

Initial Teacher Contact Letter and Informational Materials

Dear Teacher:

Teachers in Montana are experiencing a time of intense pressure for change. School reform requirements place huge expectations on teachers as learners, instructors, and leaders. My purpose in writing to you is to ask for your help in understanding what it means to be a teacher working in this time of change. I am a doctoral candidate in educational leadership at the University of Montana, studying school change. In the professional literature addressing school reform, teachers' voices are difficult to find.

Teachers are the foundation of school reform efforts. Therefore, this study will investigate your experiences during school reform and how you have responded to these experiences in your thinking and in your practice. You will be asked to relate four stories that show specific experiences you have had. In addition, I will ask follow-up questions to clarify the context for the stories and your thoughts about them. Please see the following pages for specific guidelines regarding the stories and follow-up questions. Ideally, three teachers from your elementary school will be interviewed. Four schools will be included in the study. The identities of the schools and of the teachers will be confidential and will not be published in the dissertation.

If you are interested in participating in this study, or in finding out more about it, please respond in one of the following ways: E-mail me at either address below, mail the response card in the prepaid envelope, or call either contact number below. I can be reached at the work number listed below during the day. In the evening, I can be reached at home. If I do not receive a response from you, I will contact you within two weeks to make sure you have received the materials and to answer questions.

Contact information:

Dot Wood

Work: (406) 892-6539 dwood@sd6.k12.mt.us Glacier Gateway Elementary School P.O. Box 1259 Columbia Falls, MT 59912 Home: (406) 844-3894 dorotheawood@centurytel.net P.O. Box 408 Lakeside, MT 59922

Thank you for considering this request for your participation!

Sincerely yours,

Dot Wood

Grounded Theory Research Study Information

This study is a qualitative inquiry into how individual teachers are making sense of school reform in their pedagogy and professional lives. An important and complex way people think through experiences is by creating stories about those experiences. This study will ask you to respond to four general prompts by telling a story in response to each one, illustrating a particular aspect of your experiences. After you tell each story, the researcher will ask some additional questions to make sure she accurately understands the context and meaning of the story. The story prompts and potential follow-up questions are listed on the following page.

Three aspects of your experiences are of particular interest in this study. The first is what things you perceive as supports for and hindrances to your ability to reflect on and to adjust your pedagogy to promote student learning. The second is how you think about the demands you face and draw from various resources to address those demands. The third is the levels and dimensions of relational trust that you and others in your school community experience.

Possible benefits to teachers who choose to be interviewed include:

- A chance to contribute your insights about school change to the research community;
- A chance to reflect on your own experiences;
- A chance to see how your thoughts and perceptions relate to those of other teachers in Montana;
- An enhanced understanding of the value of the stories you and others have created based on your experiences.

Possible risks to teachers who choose to be interviewed include:

- A supervisor wanting to know what you have said to the researcher;
- A supervisor wanting to influence the nature of your participation in the study;
- Other unforeseen circumstances particular to your situation.

The entire interview will be recorded on audio tape to ensure that the researcher has accurate, detailed records of what you say. You may choose the location for the interview, so that you feel comfortable with the surroundings. It can be at school or away from school.

You have the right to withdraw from the study at any time, with no pressure from anyone to do otherwise. No one except the researcher and the faculty advisor will have access to any of the taped material, unless you give explicit written permission for that to happen. False names will be assigned to each teacher and to every school participating in the study to ensure confidentiality. No information about the content of your interviews will be shared with your supervisors or with other interviewees. The only information that will be shared with supervisors is the general information about the study and the dates and times I will be interviewing staff members, if that occurs at school. If you have other concerns, they can be addressed individually with you to ensure that you experience no negative consequences due to your participation in this study.

Story Prompts

- 1. Please tell a story that illustrates your initial responses to and/or involvement in the change initiatives in your school that target teacher instructional and/or assessment practices. Responses can include thoughts, feelings, and actions.
- 2. Please tell a story that illustrates how you have responded through time to the change initiatives through your own instructional and/or assessment practices.
- 3. Please tell a story that illustrates your current thoughts and feelings regarding your relationship to the requirements and implementation of the change initiative.
- 4. Please tell a story that illustrates your personal ideal of the perfect relationship among leaders, teachers, students, and instructional practices.

Potential Follow-up Questions

Many of these questions may be answered by the story itself. The researcher will ask only questions to which the answers seem unclear after listening to the story. Not all of these questions will be relevant in every situation. These questions originate in the research of Andy Hargreaves and his associates from their studies of teachers' responses during times of change¹.

- why the teacher selected this story as an important one to share;
- how the teacher felt about the experience;
- why the teacher acted or responded as she did;
- what effect this experience has had on the teacher's thinking;
- to what extent the teacher's responses to this experience are typical of the teacher;
- to what extent the experience has affected the teacher's pedagogy;
- how this experience relates to the change initiatives in the school;
- to what extent the teacher believes others share her perceptions;
- what this experience reveals about the relational situations of the teacher and others in the story;
- how the leadership of the teacher and/or others were relevant in this situation;
- to what extent the experience has influenced the teacher's relations with her students;
- to what extent the experience has affected the level of joy or fun the teacher has in her job.
- to what extent the teacher is experiencing her ideal teaching situation currently
- to what extent you believe the changes you've been involved in have been successful.
- 1. Hargreaves, A., Earl, L., Moore, H, and Manning, S. (2001). *Learning to change: Teaching beyond subjects and standards*. San Francisco, CA: Jossey-Bass.

Interest Response Letter

Glacier Gateway Elementary

If you are interested in participating in this study or in more information, please fill out this page. Just place it in the prepaid addressed envelope, and mail it directly to Dot Wood. Upon receipt of this form, I will call you immediately. If you prefer, you may also contact me through any of the means listed at the bottom of this sheet. _____ I would like to participate in this study. Please contact me. I am considering participation, and would like more information. I especially want to know: Your Contact Information: (Please fill out before returning this card.) Your name: _____ Phone Number: Thank you very much for your interest in this project. It depends on the willing participation of practicing teachers. I look forward to speaking with you! Sincerely yours, Dot Wood Evening and Weekend Contact (Home) Daytime Contact (Work) (406) 892-6539 P.O. Box 408 dwood@sd6.k12.mt.us Lakeside, MT 59922

(406) 844-3894

dorotheawood@centurytel.net

Participant Information and Consent Form

Title: A Grounded Theory of Teacher Sensemaking Processes in a Climate of Change: Teachers' Perceptions of Relational Trust, Professional Practice, and Supports for Strong Pedagogy as Experienced by Individuals in Montana Schools

Project Director:

Dot Wood

<u>Home</u>

Leadership

P.O. Box 408 Lakeside, MT 59922 (406) 844-3894

dorotheawood@centurytel.net

Work (406) 892-6539 dwood@sd6.k12.mt.us Faculty Advisor: Bill McCaw

Department of Educational

School of Education The University of Montana Missoula, MT 59812-6356 (406) 243-5395

bill.mccaw@mso.umt.edu

Purpose:

The purpose of this research study is to investigate how teachers make sense of school reform initiatives in their professional lives. This may include how you think, feel, and act in response to the reforms going on in your school. The specific reforms targeted by this study are those involving changes in classroom instruction and assessment. Understanding how teachers are affected by and think about the specific reforms they are experiencing is important for schools as they attempt to improve student learning.

Procedures:

If you agree to participate in this research study, you will be asked to respond to four prompts. Each prompt asks you to tell a story about a facet of your experiences during school reform efforts at your school. After you relate the story, the researcher will ask some follow-up questions to make sure she understands your full meaning.

After the researcher has gathered interview material from a number of participants, she will analyze it for categories of ideas.

Possible benefits to teachers who choose to be interviewed include:

- A chance to contribute your insights about school change to the research community;
- A chance to reflect on your own experiences;
- A chance to see how your thoughts and perceptions relate to those of other teachers in Montana;
- An enhanced understanding of the value of the stories you and others have created based on your experiences.

Possible risks to teachers who choose to be interviewed include:

- A supervisor wanting to know what you have said to the researcher;
- A supervisor wanting to influence the nature of your participation in the study;
- An environment in a particular school that makes answering questions about school reform potentially controversial;
- Other unforeseen circumstances particular to your situation.

To minimize the risk of supervisory interference or conflict with other coworkers, the interview may be held at a location of the subject's choosing. If the interview is held away from the school, there is no opportunity for direct interference by a supervisor. In addition, strict confidentiality will be observed. No teacher or school will be identified by name. Access to taped material will be restricted to the researcher and the faculty supervisor. When the member checks are complete, the transcriptions are finalized, data categories are saturated, and analysis is complete, all taped material will be erased. Unforeseen risks will be addressed immediately with high regard for the needs of the subject.

Confidentiality:

Strict confidentiality will be enforced. No teacher or school will be identified by name. A list of false names for teacher subjects, individuals in their stories, and schools will be created, to which only the researcher and the faculty supervisor have access. Access to taped material will be restricted to the researcher and the faculty supervisor. When the member checks are complete, the transcriptions are finalized, data categories are saturated, and analysis is complete, all taped material will be erased. The keys noting which subjects have which false names will also be destroyed. Transcriptions of the stories will not include information that can lead directly back to an individual. If any such information does exist in a story, it will also be destroyed. Any direct quotations from stories or narrative will employ false names to obscure the identities of the teller and of the characters in the stories.

A second way in which privacy will be ensured is by allowing the teacher to choose the location for the interview. If the teacher does not want to have this conversation at school in order to sustain privacy, another location will be chosen by the teacher.

Compensation for Injury:

Although we do not foresee any physical risk in taking part in this study, the following statement is required in all University of Montana consent forms:

In the event that you are injured as a result of this research, you should individually seek appropriate medical treatment. If the injury is caused by the negligence of the University or any of its employees, you may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of Administration under the authority of M.C.A., Title 2, Chapter 9. In the event of a claim for such injury, further information may obtained from the University's Claims representative or University Legal Counsel.

Voluntary Participation/Withdrawal:

Your decision to participate in this research project is entirely voluntary. You may choose to withdraw at any time, with no pressure from anyone to do otherwise. No adverse consequences will occur if you exercise your right to withdraw.

Questions:

If you have any questions now or during the study, please contact Dot Wood, Project Director. The contact information is at the beginning of this form. You may also contact the Faculty Advisor, Bill McCaw with questions or concerns.

If you have any questions regarding your rights as a research participant, you may contact the Chair of the Institutional Review Board through the University of Montana Research Office at (406) 243-6670.

Participant's Statement of Consent:

I have read the above description and supplemental materials explaining this research study. I have been informed of the risks and benefits involved, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that any future questions I may have will also be answered by the researcher. I voluntarily agree to take part in this study. I understand I will receive a copy of this consent form.

(Printed Name of Participant)	<u> </u>	
(Signature of Participant)	(Date)	