

AN EXAMINATION OF LEARNER-CENTERED PROFESSIONAL
DEVELOPMENT FOR RELUCTANT TEACHERS

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DEDICATION

This study is dedicated to Abigail and Mayan, whose innocent but persistent curiosity serve as my constant inspiration. Together, they are a beautiful mirror reflecting a never-ending fascination of the wonder and mystery of the world around them.

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I want to acknowledge my dissertation supervisor, Dr. Barbara Martin, whose guidance, expertise, and encouragement led me to a higher level than I ever dreamed of reaching. She modeled the synergistic power of shared leadership, safe and open conversations, and working toward a common purpose. Once you have experienced that energy, it is never forgotten. In the same way, I appreciate the insightful guidance of the other members of my dissertation committee: Dr. Cynthia MacGregor, Dr. Diana Garland, Dr. Lonnie Barker, and Dr. David Brown.

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ABSTRACT

This study focused on professional development practices that empowered reluctant teachers to implement and sustain improved instructional practices. Constructs were viewed through the perspective of learner-centered principles in order to connect scientifically proven practices for teaching students in the classroom to effective professional development practices for teachers.

Data for this mixed-design study were gathered from the *LCPD School Practices Survey*, transcripts of follow-up interviews with once-reluctant teachers, and school documents. Statistical correlations were used to analyze the variables of the quantitative portion of the study. Findings indicated that when schools implemented learner-centered professional development practices, student achievement increased and teacher reluctance toward new practices and change decreased. The qualitative data were coded and analyzed and cross-referenced with school documents. Four themes emerged as to the types of professional development that encouraged reluctant teachers to sustain new practices: (1) *show them why and how*; (2) *empower them to safely explore*; (3) *emphasize their professional contribution*; and (4) *engage them in meaningful conversations*.

This study calls for additional research to better understand the nature of administrator reluctance toward new practices, as well as how the increased leadership

capacity for teachers engaged in learner-centered professional development impacts the roles and relationships within the traditional educational hierarchy. Another area for future research would be to look at how the restructuring of traditional schools into professional learning communities might impact the traditional job categories of public schools.

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CHAPTER ONE

Introduction to the Study

Background

The need for a better working understanding of how to overcome reluctance to make lasting, systematic instructional improvements within the K-12 educational setting was made evident in a recent congressional analysis on the impact of *No Child Left Behind* (NCLB) reforms (House Committee on Education and the Workforce & the Senate Committee on Health, Education, Labor, and Pensions, 2002). According to the report, a significant achievement gap remained between disadvantaged students and their peers, despite forty years of restructuring efforts. The findings were supported by current school reform literature that described faltering change efforts through both top-down and bottom-up professional development strategies (Fullan, 2005a; DuFour, Eaker, & DuFour, 2005).

While there were some success stories, overall large-scale school reform was slow and labored, with sustainability described by Fullan as “incremental inertia” (Fullan, 2005a, p. 1). However, Lezotte (2005) asserted that some schools were indeed making a difference, even with minority and disadvantaged children. The key seemed to lie in understanding that if schools were to change, the people working in them had to change both individually and collectively (Lezotte). Therefore, sustained school improvement required staff development through collaborative practices and collective responsibility in order to transform the culture of the school, or the “beliefs, assumptions, expectations, and habits that constitute the norm for the people throughout the organization” (DuFour et al, 2005).

Several complex roadblocks inhibited the transformation of professional development from traditional, random acts happening to teachers into a systematic and collaborative process happening through teachers (May & Zimmerman, 2003; NPEAT, 2000; Schmoker, 2005; Sparks, 2005). First, high quality job-embedded practices were expensive costing more than twice the amount of money being spent previously (Garet, Porter, Desimone, Birman, & Yoon, 2001; Sparks). Second, time and leadership were taxing and required a new way of thinking about task allocation among existing and overextended staff members (May & Zimmerman; NPEAT; Sparks).

A third major barrier to effective professional development was educator reluctance toward new practices (Fullan, 2005a; Guskey, 2000; May & Zimmerman, 2003; Sparks, 2005). The literature substantiated that individuals, and especially groups of individuals, were predictably reluctant toward change (Donaldson, 2001; Fullan, 2005a), especially when their habits, beliefs, or values were challenged (Fullan, 2003). The nature of systematic change was described as difficult and stressful (Fullan, 2005a) and educators sometimes fell into what Sparks (2005) described as a resigned state in which they felt overwhelmed and powerless to improve teaching and learning. Reluctance also occurred when teachers did not implement or act upon what they already knew, a problem described by Schmoker (2005) as a “knowing-doing gap” (p. 149) in classroom practice.

Despite higher costs and increased teacher reluctance, major school improvement initiatives continued to require high quality professional development because policy makers recognized that school reform happened primarily through teachers and administrators (Guskey, 2003). For example, researchers confirmed that student

achievement was directly impacted by the quality of teaching being provided in the classroom (Guskey; Kent, 2004; Schmoker, 2005). One study found that the top third of teachers produced as much as six times the learning growth as the bottom third for their students in one academic year (Sparks, 2005). Another study revealed a closing achievement gap between high-income and low-income students when they had a very good teacher as compared to an average teacher for four years consecutively (Sparks). Yet another study established that students receiving instruction from more-effective teachers accrued up to one additional year's worth of learning than students of least-effective teachers (Sergiovanni, 2005). Research findings clearly supported that educator reluctance toward improved practice was too costly in terms of student achievement to be left unaddressed (Sparks).

The literature also revealed a shift toward professional development practices that followed the same research-based learner-centered processes found most effective for students in the classroom (Hawley & Valli, 2000; McCombs, 2003; National Staff Development Council [NSDC], 2001). Rather than assuring that all students were *taught*, the focus shifted to assure that all students and teachers *learned* (DuFour, 2005; Fazio, Fleener, Klakamp, Linek, & Raine, 2003). Fazio et al. described the shift as an evolutionary process through which collaborative reform built on what was best for students and learning rather than maintaining the status quo, a challenge to reluctant or resistive teachers.

An extensive review of the literature confirmed that sustainable school improvement depended upon the collective commitment and buy-in of teachers and administrators who were the key instructional leaders (DuFour et al., 2005; Fisher &

Frey, 2004; Fullan, 2005a; Lezotte, 2005) through the application of learner-centered professional development practices (McCombs, 2003; National Staff Development Council, 2001). What appeared to be lacking was research on the professional development factors that contributed to sustained implementation of new practices for reluctant teachers. How might school leaders create the conditions for professional development to sustain improved instructional practices for reluctant teachers? Do learner-centered professional development practices empower reluctant teachers to move beyond their existing belief systems? Was student achievement higher in schools where learner-centered professional development practices were used? These are important questions given the necessary but resource-intensive nature of effective professional development. School leaders would benefit from a deeper understanding of teacher reluctance in order to “systematically extend and deepen quality teaching” (Fullan, p. 7).

Conceptual Underpinnings of the Study

The American Psychological Association’s basic learner-centered principles (McCombs, 2003) were used as an underlying conceptual framework for this analysis. The principles represented the most current knowledge of what supported and facilitated learning and positive change for everyone within a school system, including reluctant learners (McCombs). In addition to the learner-centered framework, three interconnected constructs emerged to provide further direction for this study. The constructs were systems theory, the change process, and teacher reluctance. While each of these constructs stood alone, they were also interrelated when considering the complex nature of the educational system in general, and more specifically, the challenge to sustain

collective improvement initiatives through isolated individual teachers in school systems across the nation.

Learner-Centered Principles

Learner-centered principles emerged from a five-year study on how to design educational systems to best support individual learning and achievement (McCombs & Whisler, 1997). These research-validated principles articulated how learning occurred, what learners needed, and what best supported “natural lifelong learning processes and positive human development and change” (McCombs, 2003, p. 100). Rooted in cognitive science, the principles focused on putting the learner first, which was a shift from “what was being taught” to “what was being learned” (Fazio et al., 2003; McCombs). For example, Perkins (2004) and others (Fullan, 2005b; Sergiovanni, 2005; Sparks, 2005) suggested that deeper learning occurred when students were immersed in the skills of what Perkins termed the “knowledge arts” (p. 14), or the “second curriculum” (p. 18). Students learned better when they were actively engaged in making knowledge more meaningful through their own strategic communication, creative and critical thinking, and real-world problem solving, regardless of the curricular content area (Perkins). Fullan (2003) and Sparks (2005) extended the application of knowledge arts to teachers and their professional development. Teachers working in professional learning communities actually created knowledge about teaching and learning, and used that knowledge to improve student learning (Fullan, 2003; Sparks).

Learner-centered practices represented the shift in focus from teaching to learning. The principles encompassed a broad but interconnected range of cognitive, emotional, and developmental factors including and building upon the challenges of

individual learner differences (McCombs, 2003). McCombs contended that the focus on learners and their needs was the key to unlocking the natural learning and motivational potential “for even the most disenfranchised and alienated of learners” (p. 96). Follow-up studies of over 25,000 students and teachers across all grade levels verified they were significantly motivated toward higher and deeper levels of learning after experiencing a learner-centered environment that encouraged positive interpersonal relationships and included the learner’s voice and active engagement throughout the planning process (McCombs).

The application of learner-centered principles yielded the most impressive results when applied to entire systems, including the professional development of teachers (Fullan, 2005b; McCombs, 2003; National Partnership for Excellence and Accountability [NPEAT], 2000). Based on the original principles, NPEAT published nine standards for professional development (NPEAT, 2000). The standards were derived from a synthesis of current learner-centered research as well as propositions by the U. S. Department of Education and the National Staff Development Council (NPEAT). Rather than random and passive staff development, learner-centered professional development was ongoing and directly embedded in the day-to-day work of teachers. Key components included peer communication through collaborative skills and processes, the development of leadership skills among teachers, enhancing teachers’ and administrators’ capacity for data analysis, and networking outside the local district. If student learning was to increase, teachers needed opportunities to “work together with colleagues, to learn more about their craft, to make important decisions about teaching, learning, and other professional matters” (Sergiovanni, 2005, p. 101). Learner-centered professional

development created the conditions for teachers to become reflective practitioners and to build upon what they knew, just like their students (NPEAT).

McCombs (2003) further suggested that learner-centered principles should become foundational for the systemic redesign of K-20 education, which was evidenced as happening. For example, the revised Standards for Staff Development from the National Staff Development Council (NSDC, 2001) included direct tenets of learner-centered theory. Researchers also supported the professional learning communities model as a way to incorporate learner-centered staff development. There was general agreement that embedding learner-centered practices in the collaborative day-to-day workings of schools through professional learning communities was a promising step toward sustaining school reform within complex educational systems (DuFour, 2005; Fullan, 2005a; Schmoker, 2005; Sergiovanni, 2005).

Systems Theory

Systems theory (Senge, 1990; Senge, Cambron-McCabe, Lucas, Smith, Dutton, & Kleiner, 2000) was another concept used to clarify the complex, interrelated yet individual workings and relationships within organizations, as well as the organization's capacity to learn and survive in changing circumstances. Senge's (1990) original idea was not to visualize organizations as conglomerates of separate individuals, but rather to emphasize the potential for an organization's members to collectively shape their corporate reality.

McCombs and Whisler (1997) used social or living systems theory as a guide for creating learner-centered principles, because living systems conformed "to the same basic psychological and sociological principles that define individuals and their interactions

with others” (p. 154). Through systems of collaborative interaction and interdependence, people within organizations learned to create and sustain continuous learning and improvement, and self-governing learning communities emerged (Hawley & Valli, 2000; McCombs & Whisler). Understanding the nature of systems and systemic change was necessary for teachers to make the shift from teacher-centered to learner-centered classrooms (McCombs, 2003).

School reform efforts were also better understood through the lens of systems theory (Fullan, 2005a). Administrators, teachers, students, and parents within a school system were all joined through interconnected and interdependent networks of relationships (McCombs, 2003). Therefore, Fullan (2001) suggested that living systems such as schools could not be directed or forced along a linear path, but rather required built-in processes to alter the mental models of teachers and other school stakeholders in order to make systemic changes. He later added that in order to change systems, one had to increase the amount of focused communication between and among individuals across the three broad levels of education: the school/community level, the district or regional level, and the state policy level (Fullan, 2003). In terms of sustainability, Fullan (2005b) called for what he termed “deep learning” (p. 220) meaning that the school system should make it a priority to address the knowledge-generating learning goals of thinking skills, problem solving skills, and teamwork.

School reform literature was clearly guided by systems theory (DuFour et al., 2005; Fullan, 2005a). However, challenges arose when moving from theory to practice, or when changing from entrenched, top-down management practices toward systems-related processes (DuFour et al.). Fullan (2005a) warned that schools had not made

measurable, significant progress toward utilizing systems thinking in over ten years, even though Senge (1990; Senge et al., 2000) had claimed the concept was critical for creating learning organizations. At the same time, Fullan also emphasized the limitless positive potential for systematic change and improvement when systems thinking pervaded organizational practice and members worked together to pursue larger and more meaningful systematic goals. Fullan clarified “I am not talking about producing armchair system thinkers. It will be ‘system thinkers in action’ who count” (p. 43).

The Change Process

Recognizing the demanding and uncomfortable nature of organizational change was another concept that informed this study in terms of understanding and working through teacher reluctance. Fullan (2001) described the process of school change as being messy and perplexingly difficult, yet necessary for large-scale educational reform. Fullan referred to the specific kind of change needed as a “reculturing” (p. 44), or a transformation of the culture of schools into communities of reciprocal learning. Sergiovanni (2005) agreed that organizational change inevitably involved collaborative learning in order to compare existing belief systems with shared corporate realities. In other words, teachers had to be actively engaged in conversations with peers inside and outside their domain to critically question why their existing practices were not getting the desired results (Sergiovanni).

Sergiovanni (2005) termed existing belief systems as mindscapes, and added that “if we are going to get anywhere in improving schools, individual and collective mindscapes have to be exposed and discussed” (p. 25). However, teachers sometimes resisted openly discussing their viewpoints, because “most of us have a great deal

invested in the way we presently do things” (Sergiovanni, p. 28). For reluctant teachers to internalize new teaching strategies, existing belief systems had to be known and understood with intended changes being at a level to challenge and intrigue without being too overwhelming (Kent, 2004).

Therefore, professional development practices for sustained systemic change needed to be reflectively focused around continuous feedback concerning the effects of new strategies on student achievement (Kent, 2004). Teachers who could see that new practices were effective and beneficial to students retained and repeated the practices (Clarke & Hollingsworth, 2002; Guskey, 2002; Klingner, Arguelles, & Hughes, 2001) especially when provided with multiple supports to encourage continuous implementation (Kent). And professional development practices that altered teachers’ mental awareness of the system as a whole contributed to changing the entire system for the better (Fullan, 2005a).

Teacher Reluctance

Barth (2005) contended that if all children could learn, so could all teachers, even those most reluctant toward change. Consistent with learner-centered theory, research determined that adult motivation for change came from the learner rather than an external source (Daresh, 2001). Guskey (2002) agreed and underscored that change was an experientially-based learning process for teachers, which was also consistent with learner-centered principles (McCombs, 2003; McCombs & Whisler, 1997; Reynolds, et. al. 2006). Therefore, teacher reluctance to new practices was conceptualized for this study through the learner-centered domains of metacognitive/cognitive, affective, developmental, and personal/social factors (McCombs & Whisler, 1997).

Meta-cognitive and cognitive factors. The first domain involved meta-cognitive and cognitive factors, or how teachers mentally reconciled new information with existing knowledge (McCombs & Whisler, 1997). Teacher dissatisfaction was often attributed to a basic psychological need to make connections between emerging structural changes and entrenched mental models of linear and top-down processes with which schools had long done business (Fullan, 2005a; Senge et al., 2000). Systemic reculturing was not linear and predictable, but rather curved and complex, “characterized more by starts and stops, messiness, and redundancy than sequential efficiency (Eaker, DuFour, & DuFour, 2002, p. 2). Fullan (2001) also pointed out that the complexity of change during school reform kept people on the “edge of chaos” (p.6). And while uncertainty and chaos often resulted in creativity and innovation, the conditions also generated reactionary “anarchy” (Fullan, 2001, p. 6), such as teacher reluctance, resentment, and even sabotage (Bolman & Deal, 2003). Thus, Daresh (2001) established that it was critical to establish staff development around learner-centered design principles to help teachers find ways to meet on common ground. Through interactions with other teachers, connections could be made between existing and changing beliefs (Daresh). Sergiovanni (2005) agreed, but warned that teachers still felt unsure as they moved both individually and collectively from “something familiar and important into an empty space” (p. 149).

Motivation and other affective factors. The second learner-centered domain involved motivation and other affective factors (McCombs & Whisler, 1997). For example, teachers had the need to feel a sense of personal accomplishment and pride in their profession (Eaker et al., 2002). However, teaching was characterized by poor working conditions, low salaries, large class sizes, decreased autonomy, and

demoralizing public reports of student achievement (Reynolds et al., 2006). Similarly, a study by Gray and Smith (2005) referred to a teacher shortage because educators “often felt like failures, embarrassed that they were unable to cope with the demands” (p. 8) of their changing profession. In their study on social trust, Bryk and Schneider (2003) stated that when teachers undertook educational reform, they assumed increased risks, extra work, and organizational conflict leaving them to reasonably ask “Why should we do this?” (p. 43).

Another affective issue that generated teacher reluctance had to do with teachers’ inherently strong commitment to student learning (Eaker et al., 2002) which was an educator’s primary psychic reward (Fullan, 2003; Guskey, 2002). Teachers were reluctant to alter or discard what they had “developed and refined in the demanding environment of their own classrooms” (Guskey, p. 386). Fullan added that when teachers risked trying something new, the losses were “immediate and practical” while the potential gains were “longer term and theoretical” (p. 34). He later warned policy makers that high-stakes testing with punitive, probationary consequences often resulted in teacher reluctance when they felt singled out “to carry the blame” (p. 150) for substandard educational outcomes. Similarly, Heifetz and Linsky (2002) suggested that teacher reluctance should be drawn upon and considered because those who felt the strongest opposition to new practices were often the ones expected to pick up the pieces of failed reform. They warned that people pushed back when you disturbed the “personal and institutional equilibrium” (p. 2) they knew especially when asked to let go of perceived certainties for nothing more than “a possibility” (Heifetz & Linsky, p. 2).

The developmental domain. The developmental domain of the learner-centered principles described the constraints and opportunities that arose as teachers passed through physical, intellectual, emotional, and social stages (McCombs & Whisler, 1997). In a study of the career cycles of teachers, Lynn (2002) affirmed that as teachers progressed and changed throughout their careers, so did their needs in regards to professional activities, relationships, and interests. Teachers at all levels needed the appropriate amount of support and assistance to realize their professional potential (Lynn; Sergiovanni, 2005). However, an environment of negative pressure and conflict could have an adverse impact on a teacher's attitude toward their career (Lynn). Reynolds, Murrill, and Whitt (2006) agreed, and added that to learn new practices, teachers needed to feel empowered and appropriately challenged.

Personal and social domain. The personal and social domain focused on how teachers learned through group interaction (McCombs & Whisler, 1997). This domain implied that teachers learned best from each other through respectful and caring relationships (McCombs & Whisler; Reynolds et al., 2006). Researchers agreed that the professional development approach most promising for sustained change involved emphasizing capacity building rather than external coercion (Fullan, 2005a; Sergiovanni, 2005). Capacity building referred to the development of collective ability in order to bring about positive change, a process Fullan warned was more than just workshops and in-service activities. Rather, it was the daily habit of working together until teamwork and evaluative inquiry became embedded in the working culture of the school.

While researchers suggested that continuous capacity building was best done within collaborative communities of practice (DuFour, 2005a; Sergiovanni, 2000; Sparks,

2005), collaboration was not a positive experience for all teachers (Johnson, 2003). Studies revealed an increase in teacher reluctance after collaborating due to increased workload, loss of autonomy, and increased interpersonal conflict (Johnson). Competition among teacher teams sometimes led to unproductive behaviors such as turning friends into enemies and undermining trust and loyalty (Fullan, Bertani, & Quinn, 2004). Gruenert (2005) suggested that part of the problem was that while collaboration made sense, the traditional educational culture still placed a strong value on autonomy and individualism. Reynolds, Murrill, and Whitt (2006) agreed and added that “educators rarely value attempts to expand their knowledge of the educational arena, because their experience, knowledge, and peers typically are ignored” (p. 130).

Statement of the Problem

Educational researchers agreed that while slow and incremental progress had been made toward closing the achievement gap between high and low performing schools (Fullan, 2003, 2005a; Sergiovanni, 2000; Sparks, 2005), teacher reluctance to improved practices often stood as a roadblock to systemic change (Fullan, 2005a; May & Zimmerman, 2003; Mizell, 2004). Fullan (2005a) also proposed that as the effort to achieve large-scale reform evolved, sustainability was fast becoming the “rallying concept” (p.13) that encompassed the range of strategies essential for on-going whole-system capacity building. School reform was only sustainable through professional communities of learning that were “intensely learner-centered, knowledge-centered, and assessment-centered” (Fullan, 2003, p. 3) which required higher levels of commitment from teachers and school leaders (Sparks).

Sustainability was found to be “resource hungry” (Fullan, 2005a, p. 25), both in terms of money and energy, but was worth the effort in terms of growing organizational capacity (Sparks, 2005) and increased educator morale (Fullan, 2003). The synergy of intellectual and moral forces that emerged from collective commitments would be powerfully regenerative, but more information was needed on how to create the right collaborative conditions for the development of teacher ownership (Fullan, 2003). Fullan also warned that while positive collaborative cultures helped to energize improvement efforts, interactive efforts also held the potential for interpersonal conflict and teacher burnout without the proper support (2003). In terms of sustained improvement efforts and teacher morale, “it is not hard work that tires us out as much as negative work” (Fullan, 2005a, p. 26).

Regardless of the working conditions of teachers, there was evidence that reluctant teachers did adopt and sustain new practices (Casey & Morrow, 2004; Klingner et al., 2001; M. E., & Hughes, 2001; May & Zimmerman, 2003). However, little was known about how to create the conditions for sustained and lasting reform efforts for all teachers, especially those most reluctant toward change (Klingner et al; National Reading Panel, 2000). Therefore, the fundamental problem being addressed through and guiding this study was: How can reluctant teachers be empowered through professional development to facilitate sustained implementation of new methods for increased student achievement?

Purpose of the Study

The purpose of this two-phased, sequential mixed methods study was to add to the body of knowledge concerning how to provide professional development for sustained

implementation of new practices for reluctant teachers. The researcher obtained statistical, quantitative results from a large representative sample of regional elementary teachers, and then followed up with four individuals to qualitatively probe or explore those results in more depth from the viewpoint of those most involved.

In the first phase, a fifty-seven item survey was used to gather quantitative data. The data were used to address research questions one and two that queried relationships between the implementation of learner-centered professional development and the following variables: (a) student achievement; (b) teacher reluctance toward improved practices; (c) teacher reluctance toward change; and (d) teacher reluctance toward systematic school improvement.

In the second phase, research questions three and four were addressed through teacher's open-ended survey responses, qualitative interviews and document analyses in an effort to share the significant personal experiences of two once-reluctant teachers. Subjects were recruited from a detached and separate invitation for a follow-up interview distributed during the teacher survey. Open-ended follow-up personal interviews were utilized to describe rather than measure the contextual perspectives of once-reluctant teachers (Merriam, 1998; Patton, 1997; Seidman, 1998), or for teachers who had at one time been actively against implementing an initiative but later adopted and sustained the improved practices.

The researcher emphasized the perceptions of the specific group of educators who identified themselves as once-reluctant. Giving voice to once-reluctant teachers shed light on the meaning they made of their experience, which in turn affected the way they carried out their transition in practice (Seidman, 1998). Understanding contextual perspectives

was suggested through the learner-centered framework to promote deeper and more meaningful learning through effective interventions for disenfranchised teachers and students (McCombs, 2003).

Research Questions

A review of literature revealed that to meet the challenging goals of the current educational system, capacity building had to occur to sustain school improvement initiatives (Fullan, 2003, 2005a; Sergiovanni, 2005). Evidence also existed that an essential component was professional development that increased the school's collective capacity to network with others in order to maximize teacher learning through both external and internal collaborative interaction (Fullan, 2003, p. 7). Mizell (2004) agreed, and expressed that school reculturing began with conversations about quality teaching. A good place to start was to explore how to explicitly embed adult learning processes into the daily routine of teachers, even those reluctant to change (DuFour et al., 2005).

Transitioning between traditional and learner-centered staff development was especially difficult because of the challenge to entrenched relationships, existing structures, and traditional resource allocation (NPEAT, 2000). Fullan (2003) warned of an inevitable decline in the morale of teachers and principals during change initiatives that were handed down from above. He attributed educator reluctance to increased workload without shared vision. However, a synthesis of the literature revealed that some teachers who were once-reluctant found ways to reconnect to their profession in meaningful ways (Casey & Morrow, 2004; May & Zimmerman, 2003). Therefore, the encompassing questions that guided this study were framed in a way to provide insight

and understanding into the perspectives of once-reluctant teachers and how they moved beyond reluctance to reemerge as contributing professionals:

1. Is there a relationship between learner-centered professional development practices and student achievement? Specifically, this question will examine communication arts achievement.
2. Is there a relationship between the level of teacher reluctance and implementation of learner-centered professional development? Specifically, this question will examine the following indicators of teacher reluctance: (a) overall; (b) toward new practices; (c) toward change; and (d) toward systematic school improvement.
3. How might reluctant teachers be supported over the long term to ensure sustained implementation of new methods or programs?
4. How might school leaders implement professional development practices that encourage sustained implementation of new methods for reluctant teachers?

Limitations and Assumptions

Mixed-design research utilizing both quantitative and qualitative methods generates valuable information because “each has strengths and one approach can often overcome weaknesses of the other” (Patton, 1997, p. 267). Wiersma (2000) further stated that regardless of the type of research, the limitations of the design should be described so that the reader is not misinformed. Also, synthesizing qualitative and quantitative data can result in conflicts or seemingly contradictory findings due to the nature of the restrictions of both types of studies (Patton). Therefore, the following limitations were identified by the researcher and are indicated as follows:

1. The study sample was limited to a geographic region within the educational system of one Midwest state.
2. The validity of the quantitative data was limited by the degree of reliability and validity of the survey instrument.
3. The validity and reliability of qualitative data was limited by the researcher's own biases.
4. The researcher assumed that the participants were honest in their responses and interpreted the survey instrument and interview questions as intended.
5. The researcher assumed that the participants based their responses on their own experiences.
6. The study was limited in external validity or the degree to which qualitative data can be generalized to other situations.

Design Controls

An explanatory mixed-design approach was selected for this study. First, a multiple choice questionnaire was used to quantitatively measure levels of teacher reluctance in relationship to their school's implementation of learner-centered professional development. Follow-up fieldwork was conducted inductively through a purposeful and convenience sampling in the form of follow-up interviews with teachers from multiple school sites, which provided the researcher with personal insight into the participant's natural settings (Merriam, 1998). Interview questions evolved throughout the process, which supported Merriam's claim that qualitative work was "emergent and flexible" (Merriam, p. 8). Documents were also viewed and

categorized from the schools of the interviewees to include school improvement plans, professional development plans, and student assessment data.

The subjectivity of the study due to researcher bias was controlled through the use of triangulation with multiple interviews, school documents, existing databases and member checks for accuracy of interpretation. The external validity of this study was strengthened through the use of rich, thick description so that readers could determine how realistically the findings generalized into their own context. Multiple-sites were also used to allow for a greater range of situations (Merriam, 1998).

Definition of Key Terms

Commonly used terms within this study are defined as follows:

Capacity building. The development of a school's collective ability to act together to bring about positive change by giving teachers the training, resources, and opportunities to pursue complex tasks for which they are accountable (Fullan, 2003).

Collaborative practices. Professional development practices such as book studies, focus groups, team planning, reviewing student work, and developing common assessments (Garet et al., 2001).

Distributed leadership. The concept that leadership should be developed and shared as a type of organizational quality rather than being a matter of hierarchy and power distribution (Fullan, 2005a)

Knowledge-generating professional development. Ongoing collaborative professional development embedded in the day to day routine of teachers that generated learning through focused conversation (Bruffee, 1999).

Learner-centered. The perspective that coupled “a focus on individual learners (their heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs) with a focus on learning (the best available knowledge about learning and how it occurs)” (McCombs & Whisler, 1997, p. 9).

Learner-centered schools. The seven schools from the sample who were ranked highest by their teachers in terms of implementing learner-centered professional development practices.

Learner-centered principles. Principles developed through the American Psychological Association and the Mid-continent Regional Educational Laboratory (McREL) based on a century of research on learning and teaching. The fourteen principles were subdivided into five factored categories: metacognitive and cognitive; affective; developmental; personal and social; and individual differences. The principles were based on findings that all students, young and old, learned best when the focus was on the learner and the learning process (McCombs & Whisler, 1997).

Learner-centered professional development. A professional development framework based on learner-centered principles for an ongoing and systematic process that empowers teachers to collaboratively analyze the impact of their teaching on student learning (NPEAT, 2000).

Learner-Centered Professional Development School Practices Survey. A survey derived from the *School Practices Survey* developed by Mid-continent Research in Education and Learning (McREL). The *School Practices Survey* was developed in order to measure a school’s culture and climate related to seven categories of learner-centered practice: (a) Curriculum tied to high and challenging standards with ongoing assessment

for each learner, (b) enhanced motivation through challenging activities for all learners whose differences were considered and valued, (c) ongoing and collaborative staff development focused on meeting the needs of all learners, (d) shared leadership along with policies to acknowledge diversity and evaluative inquiry, (e) instructional management to address multiple academic and non-academic outcomes with avenues for student choice and input, (f) a supportive social environment infused with high standards and optimistic expectations for all, and (g) instruction presented through multiple modalities to encourage students to understand and take responsibility for their own learning (Lauer, 2000). As allowed per the user guide, the researcher altered the survey to focus on professional development (Lauer). The format of the survey was also altered in order to facilitate ease of administering (see Appendix B).

Learning organizations. Organizations with built-in processes to actively incorporate the experience and knowledge of members to set and achieve their desired goals through cooperation, innovation, and creativity (Senge, 1990).

Once-reluctant teachers. A term used to describe teachers who had at one time been actively against implementing an initiative but had later adopted and sustained the practices as indicated through their response to the invitation to a follow-up interview on the School Practices Survey.

Performance based accountability. Refers to the accountability systems built into school reform legislation tied to student achievement data that included sanctions for low performance.

Professional learning communities. A model of school practice that maximized learning through ongoing, collaborative practices that focused on a core mission that

education was not simply to ensure that students were taught, but that they learned (DuFour, 2005).

Regional staff development centers. A series of nine regional staff development centers in Missouri. The centers were developed in response to the *Outstanding Schools Act* where one percent of the school funding formula was allocated to support professional development activities statewide. The centers worked collaboratively to connect universities, the state education department, and regional school districts to inform, train, and enrich public education in Missouri.

School restructuring. The systematic transformation of the expectations and habits of teachers and principals in such a way as to improve the quality and depth of learning for all students (DuFour et al, 2005).

Student achievement. Each school's total percent of third grade students scoring in the proficient and advanced levels on the communication arts portion of the Missouri Assessment Program (MAP) as reported on the School District Report Card for 2005-2006. The performance index was used to determine Adequate Yearly Progress being monitored federally through *No Child Left Behind* legislation.

Systems thinkers. Organizational members who worked together to enact change in terms of being part of the same system with common goals and values.

Teacher reluctance toward change. When teachers either openly or subtly resisted school change efforts as measured by items 9, 11, 29, 31, 33, 35, 37, 39, and 41 from the *LCPD School Practices Survey*.

Teacher reluctance toward new practices. When teachers either openly or subtly resisted the implementation of new practices as measured by items 1, 5, 15, 17, 19, 21, 23, 25, and 27 from the *LCPD School Practices Survey*.

Teacher reluctance toward systematic school improvement. When teachers either openly or subtly resisted the implementation of systematic school improvement initiatives as measured by items 3, 7, 13, 43, 45, 47, 49, 51, and 53 from the *LCPD School Practices Survey*.

Teachers' beliefs and practices. What teachers believed and perceived about the work of teaching and how these ideas were expressed through language and action.

Summary

Throughout the literature that examined the dynamics of reluctance toward new practices, researchers agreed that systemic school restructuring was difficult and slow, and that teacher reluctance was an inevitable characteristic of change (Daresh, 2001; Fullan, 2005a; Guskey, 2000). Moreover, change without conflict and teacher reluctance indicated shallow and insignificant initiatives (DuFour & Eaker, 1998). Research findings also indicated that in order to facilitate change beyond only marginal improvements in achievement, schools must be recultured to apply systems thinking and to work collectively as professional communities of learning (Fullan; Sergiovanni, 2000) by engaging students and teachers in deeper and more lasting forms of learning and problem-solving (Fullan; Sparks, 2005).

The literature also clearly identified that the significant involvement of teachers was necessary for successful school change efforts (DuFour et al., 2005; Fisher & Frey, 2004; Schmoker, 2005). The challenge was for school leaders to understand and

overcome the inevitable reluctance that occurred when teachers' existing premises and beliefs were threatened (Fullan, 2005a):

“Resistance comes naturally; learning complicated things in a group setting does not. It is easy for people to avoid or fail to persist in the deep, cognitive, emotional, and political learning cycles that will be needed to sustain the group's focus on complex new challenges.” (p. 101).

In Chapter Two, an extensive overview of literature is presented focused on the following constructs: (a) systems theory, (b) learner-centered principles for professional development, (c) professional development and the change process, and teacher reluctance to change. Presented in Chapter Three is a description of the research design and methodology, followed by the presentation and analysis of data in Chapter Four. Chapter Five contains the findings, conclusions, and recommendations for future research.

CHAPTER TWO

Review of Related Literature

Introduction

Fisher and Frey (2004) postulated that the success of any educational improvement effort depended on the dedication and commitment of school professionals. However, critical efforts to improve instructional practices were frequently and significantly hindered by teacher reluctance to change (Daresh, 2001; Guskey, 2000; May & Zimmerman, 2003). Mizell (2004), current Distinguished Senior Fellow of the National Staff Development Council, urged educators to stop resisting and start embracing the professional development provisions of *No Child Left Behind* (NCLB) legislation as a way of improving student achievement through adult learning in schools. Instead of reluctance, what students really needed were teachers and principals “highly qualified in spirit, determination, and commitment to their own professional learning as the means to improve their students’ performance” (Mizell, p. 272). Furthermore, it was the role of educational leaders to empower teachers to aim higher in their daily practice through learner-centered professional development (NPEAT, 2000) so that the term No Child Left Behind could move “from a political slogan to a practical reality” (Mizell, p. 273).

In Chapter Two, current literature was examined to more fully inform the purpose of this study, which was to investigate how to empower reluctant teachers to try and sustain new practices. Four separate yet interrelated constructs emerged to include systems theory, learner-centered professional development, the change process, and teacher reluctance. The constructs were viewed through the perspective of learner-

centered principles (McCombs, 2003) in order to connect best practices for teaching students in the classroom to effective professional development practices for teachers, even those most reluctant to change.

Systems Theory

Systems theory (Senge, 1990; Senge et al., 2000) for organizations was a concept underlying the focus of this study with implications for professional development and school change. The theory described schools as being like complex living systems open to and influenced by the inputs and demands of the members of the organization as well as the constantly changing outside environment (Bolman & Deal, 2003). For example, NCLB and other high profile legislation challenged the traditional culture of most schools by requiring higher achievement from an increasingly diverse student population (Education Commission of the States [ECS], 2004). The levering of educational legislation created what Bolman and Deal (2003) termed a public policy ecosystem in which school districts had to adapt to a set of politically imposed mandates. The authors warned that new public policy challenged educators' entrenched and long standing beliefs about the business of education, and that professional bureaucracies like schools did not typically respond quickly or efficiently to external change. Fullan (2005a) agreed, and added that there was "a growing problem in large-scale reform; namely, the terms travel well, but the underlying conceptualization and thinking do not" (p. 10). Educators who were thrust into new practices went through the motions, but reverted to traditional thinking unless they were provided with opportunities to change their existing beliefs and practices (DuFour et al., 2005; Kent, 2004). Therefore, significant school restructuring

through professional development required a systematic transformation of the expectations and habits of teachers and principals (DuFour et al).

A viewpoint of systems theory was that organizations such as schools were open structures made up of groups of individuals whose collective success and longevity depended upon and drew from the wider environment (Bolman & Deal, 2003; Senge, 1990; Senge et al., 2000). Concerning organizational learning, new information only became valuable to school members when it was processed through social contexts (Fullan, 2001). Therefore, collaborative interactions within living systems such as schools were not only desirable but necessary for innovation and organizational knowledge creation (Fullan, 2003). Building a school's capacity for cooperative thinking and higher levels of social intelligence were essential because "problem-solving has become so complex that no one person can do it alone" (p. 204).

Professional development efforts toward large-scale systemic reform were thus described as complicated and difficult (Eaker et al., 2002; Fullan, 2001) because of the inherently emotional and sometimes volatile relationships between students, teachers, staff, parents, and community members striving to hold on to comfortable traditions and entrenched beliefs (Fullan, 2005a). Unlike mechanical systems such as car engines or computers, individual teacher's needs, both physical and psychological, had to be met for professional growth to occur (Fullan, 2003; Lewin & Regine, 2000), much the same as with students learning in the classroom (McCombs & Whisler, 1997). Living systems required "a focus on concepts of inter-connectedness, self-renewal, and interdependence because when one component of the system is 'tinkered' with, all other components are affected, too" (McCombs & Whisler, p. 153).

Consequently, school leaders planning for sustained change through professional development needed to understand the effects of social interactions between all school members (Fullan, 2003; Fullan, 2005a) including administration (DuFour et al., 2005). Professional development for systemic reform required the understanding that top-down policies and mandates were not necessarily going to result in school improvement because the affective complexities of living organizations could be “unlocked and even understood but rarely controlled” (Fullan, 2001, p. 46). Therefore, a shift was required in the traditional leadership role of principals over teachers and teachers over students (Daresh, 2000). Rather than the ruling authority, school leaders were to be architects or analysts working within living and lateral structures (Bolman & Deal, 2003) that not only accomplished collective goals, but also met individual needs (Senge, et al., 2000). Furthermore, leadership was something to be developed and widely diffused throughout the school under the premise that the principal was a leader of leaders (DuFour et al.). Youngs and Kling (2002) also found that distributed leadership enhanced school capacity and empowered teachers by establishing trust and creating structures to promote and motivate teachers to learn new practices.

In terms of systems thinking, findings from a large-scale, empirical comparison on how teachers learned through professional development emphasized the importance of teachers being engaged in active learning through collaborative practices such as observing and being observed, planning for classroom implementation, reviewing student work, and presenting to other teachers (Garet et al., 2001). The concept of the teacher as an active learner with basic psychological needs (Fullan, 2001; Lewin & Regine, 2000) was consistent with the evolution of individual learning theory and learner-centered

practices (McCombs, 2003). Casey and Morrow (2004) found that when adult learning was based on research and proven practices, teachers were empowered through feelings of self-worth and increased competence. Researchers (Casey & Morrow; Fazio et al., 2003) agreed that it was not just the active involvement of teachers in activities that improved instruction, but the application of researched learning theories that focused on how teachers learned and accepted the improved instructional practices. Thus, a new model of learner-centered professional development emerged that recognized schools as complex systems, learning as an interactive process, and teachers as proficient learners (Hawley & Valli, 2000; NPEAT, 2000).

Learner-Centered Principles for Professional Development

The learner-centered psychological principles were derived from a three-year presidential task force sponsored by the American Psychological Association (APA) under the leadership of educational psychologist, Barbara McCombs (McCombs & Whisler, 1997). The primary purpose of the task force was to integrate educational research and theory with psychological and educational principles in order to form a framework for school reform (McCombs & Whisler). An important secondary benefit was a better understanding of how to motivate even the most disenfranchised learners within the school setting including students, teachers, and administrators (McCombs & Whisler). The concept of *teachers as learners* was consistent with the fundamental tenant of systems theory that all school members should be a part of what Senge et al. (2000) earlier called a pervasive “learning orientation” (p. 5). Fullan (2005a) later described the concept of a systematic learning orientation in terms of organizational sustainability. He emphasized the need to produce greater numbers of “systems thinkers” (p. 40) by using

learning strategies that altered members' system-related experiences resulting in a better perception of the system as a whole (Fullan).

Because of the implications for deeper and more meaningful systematic knowledge creation, the learner-centered approach was applied to the learning of teachers (Daresh, 2001; Hawley & Valli, 2000; NPEAT, 2000; McCombs, 2003). Findings by NPEAT (2000) emphasized that money had not been well spent on typical, one-time staff development. A later meta-analysis conducted by Guskey (2003) of the published lists of effective professional development also revealed little evidence of a direct link between traditional professional development and improvements in student learning outcomes. Therefore, researchers (Garet et al., 2001; Guskey, 2002; Kent, 2004) endorsed an emerging model of high quality professional development that could be described through nine basic guidelines or design principles for learner-centered professional development (Hawley & Valli, 2000).

Focus on Student Learning

The first guideline was that the content of professional development should focus on what students were to learn and how to address the problems students might have in learning specific content material (Hawley & Valli, 2000). Rather than providing general information about an instructional procedure, teachers needed direct guidance in how to apply different strategies to address different student needs and learning contexts.

Professional development that focused on the content that students were to learn along with corresponding guidance on how to successfully apply different instructional strategies was in contrast to traditional fragmented and unfocused staff in-service (NPEAT, 2000). A large-scale empirical comparison of the effects of different kinds of

professional development on teachers' learning confirmed that a focus on content through opportunities for active learning yielded a positive self-report (Garet et al., 2001).

Furthermore, a meta-analysis (Marzano, Pickering, & Pollock, 2003) of current research on instructional strategies inferred that "no instructional strategy works equally well in all situations" (p. 8), so teachers needed to learn to adapt instructional strategies for variations in students' needs and learning contexts.

Use of Standards to Measure Performance

The next tenant of learner-centered professional development was that activities for teacher learning should be generated in response to analyses of the differences between the goals and standards for student learning and actual student achievement (Hawley & Valli, 2000). Again, traditional staff development involved little or only superficial consideration of the standards for students and teachers (NPEAT, 2000). In contrast, learner-centered professional development required the enhanced ability of teachers to analyze data in order to guide student progress toward clear and shared academic goals (NPEAT).

A teacher's ability to use data to measure the effectiveness of different instructional strategies is of special benefit for students with diverse learning styles who might otherwise fall behind (Hawley & Valli, 2000). In a study on factors that influenced the sustained use of new practices (Klingner et al., 2001), teachers cited the benefits of having ongoing access to the positive outcomes associated with the strategies. The teachers expressed that their confidence as teachers was deeply affirmed when they perceived that a new practice was benefiting students (Klingner et al.).

Active Learning for Teachers

The importance of teachers being active rather than passive participants in their own learning was reflected in the third principle for learner-centered professional development (Hawley & Valli, 2000). Articulated in that principle was the concept that teachers needed input in what they were to learn and how they were going to go about gaining the new information. The authors warned that to forgo teacher input often resulted in cynicism and detachment from school improvement efforts. McCombs (2003) agreed, and added that when learners felt left out, learning and motivation suffered as students and teachers alike disengaged from the learning process.

In terms of systems thinking, Senge et al. (2000) warned against the “deficit perspective” (p. 35) in which professional development was presented at the direction of someone higher up the ladder to fix teachers as if they were broken. The deficit approach undermined the self-confidence of teachers and made them reluctant toward new innovations (Senge et. al.). In the same way, Daresh (2001) suggested that staff development should be presented in congruence with cognitive and adult learning research. Professional learning should be initiated by teachers as an ongoing process that promoted professional growth without the connotation of teacher remediation (Daresh).

School-Based Professional Development

The fourth principle of learner-centered professional development referred to the embedding of learning into the day-to-day practices of teachers (Hawley & Valli, 2000). One example would be teachers engaging in an ongoing examination of their students’ performance as a way of improving their own teaching (NPEAT, 2000). This principle was supported through findings from later research that teachers needed immediate

feedback such as student achievement to decide whether or not to continue with new practices (Kent, 2004). A researched action guide from the Assessment Training Institute (Chappuis, Stiggins, Arter & Chappuis, 2005) also affirmed the need for ongoing student feedback, and provided evidence that educators needed to begin using assessment *for* learning as well as assessment *of* learning.

The advantages of teachers using ongoing assessment results to reflectively improve their instruction (Chappuis et al, 2005; Fullan, 2005a) supported findings that teachers changed their practices through a non-linear or cyclical process that depended upon perceived student benefit (Clarke & Hollingsworth, 2002; Guskey, 2002). Experienced teachers were seldom found to commit to new approaches until they saw positive results in their classrooms. Instead, teachers might agree to attempt a change in practice, whether or not they believed the change to be best. Only if and when there were positive student outcomes did the new practices become a part of the teacher's beliefs and attitudes (Guskey). Researchers agreed that in order for teachers to internalize new teaching behaviors, their existing belief systems had to be known and understood (Guskey; Kent, 2004; Klingner et al., 2001). Implications for future research included exploring the specific teacher attitudes and beliefs most crucial to professional growth and development (Guskey), and more investigation as to the beliefs and attitudes of teachers who tried but did not sustain new practices (Klingner et al.).

Use of Collaborative Problem Solving

The fifth principal proposed that learner-centered professional development needed to be primarily organized around collaborative problem solving (Hawley & Valli, 2000). A supportive school-wide condition for the implementation of learner-centered

professional development was the creation of a collaborative culture to overcome the fragmented individualism that traditionally characterized classrooms (NPEAT, 2000).

In terms of school restructuring, researchers (Eaker et al., 2002) stressed that complex and nonlinear school improvement efforts required deeply embedded collaborative practices to overcome traditional teacher isolation and entrenched beliefs. Rather than just being invited to work with colleagues, teachers must be “called upon to be contributing members of a collective effort to improve the school’s capacity to help all students learn at high levels” (p. 5). Klingner et al. (2001) described the need for teachers to become a “community of practice” (p. 11) so that experienced teachers felt empowered to help new teachers become experts. Klingner et al went on to argue “being able to learn a practice through the assistance of a peer seemed to be a non-threatening way to take risks and acquire new skills” (p. 12).

Results from a national sample of teachers revealed that collaborative practices between teachers from the same school, subject, or grade level resulted in greater teacher coherence and changes in teacher practice (Garet et al., 2001). In his studies on the change process, Fullan (2001) talked about teacher coherence in terms of systems thinking and the need for members to be involved with one another during the resolution of problems. Fullan also alleged that teacher coherence was actually strengthened through collaborative responses to roadblocks. “The most powerful coherence is a function of having worked through the ambiguities and complexities of hard-to-solve problems” (p. 116). Later, Fullan (2003) gave emphasis to the impact of collaboration by saying that the role of policymakers was not to maintain clarity, but to help people discover it themselves. “No solution for sustainability leaves out people struggling through the

anxieties of complex problem solving toward shared solutions. People's hearts and minds have to change, too" (p. 29).

Follow-Up and Support

The sixth principle for learner-centered professional development had to do with adequate follow-up and support for new practices (Hawley & Valli, 2000). The principle suggested that without adequate follow-up support, motivation for change diminished. A meta-analysis of scientific research on reading (NRP, 2000) described a tendency for teachers to revert to their original methods of teaching after support for an initiative had passed. The need for ongoing support for new practices was also revealed through input from a national sample of teachers on best practices for professional development (Garet et al., 2001). Prolonged and intensive support efforts had a significant and positive impact on sustained practices.

Daresh (2001) also reported that initiatives that were implemented without adequate training or resources were viewed negatively by teachers. In addition, Guskey's (2002) non-linear teacher change model emphasized that change was a gradual and difficult process for teachers that often added significantly to heavy workloads. Change always included the risk of failure which triggered anxiety and feelings of insecurity for even the most experienced of teachers (Guskey). What appeared to be missing in the literature was research on the types of support teachers needed to ensure implementation of new methods over the long term, especially for reluctant teachers (NRP, 2000).

Evaluation of Professional Development

Program evaluation was the topic for the seventh principle of learner-centered professional development (Hawley & Valli, 2000). Evaluation of staff development

programs was necessary for effective implementation, but several factors were to be considered (Guskey, 2000; NPEAT, 2000). For example, multiple sources of information should be used to indicate how new practices affected student learning (Guskey). These evaluations should be carried out through an embedded culture of systemic inquiry by teachers focused on student work that identified both student and teacher learning needs (NPEAT).

Furthermore, evaluations should be non-threatening if teachers were to be encouraged to think carefully about their instructional practices (Hawley & Valli, 2000). Guskey (2000) recommended a reflective evaluation of multiple cases across multiple settings so that “the dynamic influence of specific elements within a context can be better understood, and the applicability of professional development elements across contexts could also be considered” (p. 35). McCombs (2003) agreed, and stressed that as living systems, evaluation of instruction could not be negative or fear-based and must “give voice to concerns of all people in the system, and promote positive growth, development of personal and social responsibility, and learning for all” (p. 100).

Theoretical Understanding of New Practices

Principle eight was that learner-centered professional development should provide opportunities to develop a deeper theoretical understanding of new practices in order to move past teachers’ existing knowledge and beliefs (Hawley & Valli, 2000). The literature confirmed that a teacher’s existing beliefs, experiences, and habits directly impacted their willingness to apply new instructional techniques (Kent, 2004). Senge et al. (2000) referred to mental models that limited a teacher’s ability to change unless the new information was congruent with the existing mental model. Because these mental

models were usually tacit, or existing below the level of perception, they were sometimes inaccurate (Senge, 1990) and often went unchallenged (Senge et al.). Therefore, an important component of learner-centered professional development was to read, discuss, and think about current educational research (Hawley & Valli).

The practice of teachers becoming active consumers of research was in contrast to traditional staff development where they passively listened to the views of outside experts who seemed disconnected from real classroom situations (NPEAT, 2000). Responses from a national sample of teachers (Garet et al., 2001) confirmed that teachers did not actively respond to presentations about new theories, but changes were made when teachers actively sought answers for questions pertaining to problems in their own classrooms (Reynolds et al., 2006).

Comprehensive Change Process

The last principle of learner-centered professional development was that efforts should be incorporated as a part of a systemic change effort with an organizational commitment to continuous experimentation and improvement (Hawley & Valli, 2000). “Professional development must be part of the structure, culture, and reward system of the workplace” (§ 18). Researchers (NPEAT, 2000) further clarified that professional development should be correlated with and considered central to continuous school improvement.

Certain organizational and political conditions were also necessary for the implementation of learner-centered practices (NPEAT, 2000). One condition was the existence of a supportive school-wide culture that facilitated collaborative communities of learners. Another condition was systemic district support such as a focus on student

outcomes and teacher-led infrastructures. The third condition was the communication of external influences on teacher learning such as state and federal mandates, district policies, and parental expectations (NPEAT). Supovitz (2002) agreed and added that for teacher communities to focus on instructional improvement; they needed organizational structures, cultures of instructional exploration, and ongoing learning opportunities to support sustained inquiries to improve teaching and learning. Fullan (2005a) offered that structures such as teacher networks and collaboratives were important to the sustainability of improved practices in a school system. Teachers gained a sense of their part in the overall purpose of their school when they were given opportunities to interact laterally at their grade level and vertically throughout the system in alignment with state and local standards (Fullan; Fullan et al., 2004).

Because of the implications for deeper and more meaningful knowledge creation within social systems such as public schools (McCombs & Whisler, 1997), the learner-centered approach for professional development was especially relevant to the focus of this study concerning how to foster sustained instructional improvement and higher student achievement for teachers reluctant toward new practices. The concepts and practices were shown to promote both individual learning as well as organizational development for groups of teachers, which directly related to school improvement efforts (NPEAT, 2000). Consequently, learner-centered professional development was a major focus for system reform initiatives for increased student performance (Hawley & Valli, 2000). More research was needed, however, concerning how to better transform and sustain altered perspectives from entrenched models and beliefs, especially for those most reluctant to change (Klingner et al., 2001; National Reading Panel, 2000).

Professional Development and the Change Process

Since teachers played a critical role in the restructuring of schools (Fisher & Frey, 2004), their engagement in the slow and challenging process of school change was critical for true reform (Bolman & Deal, 2003; Fullan, 2001; Guskey, 2002). May and Zimmerman (2003) underscored that regardless of the difficult nature of change, teachers did change voluntarily. Therefore, school leaders needed a working knowledge of how teachers made their decisions to modify their existing beliefs and practices (Fullan; May & Zimmerman). Addressed in the following section are relevant constructs for the role of professional development for school structuring including steps in the change process and change leadership for organizational learning.

Steps in the Change Process

Bolman and Deal (2003) warned that change within a system typically generated role confusion and a loss of familiar identity that could be minimized through an understanding of the change process. The authors built on the work of Kotter and Cohen (2002) who found that change efforts failed when they relied on reason and structure and neglected human and political organizational elements. Related to learner-centered principles (McCombs, 2003), school leaders had to build bridges so that teachers made a connection between what was being introduced and prior knowledge and experience (Davis, 2003).

Change theorists (Bolman & Deal, 2003; Kotter & Cohen, 2002) offered a set of specific and sequential steps for change that would emerge, reoccur, and overlap throughout the change process. Kotter and Cohen also stressed that sustained change required a considerable length of time, and could not be rushed. The first step required

communicating and establishing a sense of urgency among teachers to overcome complacency (Kotter & Cohen). In the school setting, a sense of urgency could be established by disseminating compelling information to school shareholders, and then soliciting their input on how to act on the information (Bolman & Deal). Fullan (2005a) described this step as the conveying of a moral purpose for schools to raise the bar and close the achievement gap for struggling learners for the betterment of individual students as well as the community at large.

Once a sense of urgency was established, a guiding coalition representing all stakeholders of the school should be formed to develop an ethical shared vision of what the school could become (Kotter & Cohen, 2002). The established vision had to be communicated in numerous ways, and members had to be empowered through appropriate structures, training, and the removal of obstacles (Eaker et al., 2002). Member buy-in and support should be developed through the use of networking, coalition building and supportive policies consistent with the organization's values and ideologies (Fullan, 2003). The guiding coalition had to work as a team, and included members with credibility to the staff (Bolman & Deal, 2003). Fullan agreed and added that teachers responded to the demands of members whose motives they trusted and who they perceived were truly interested in their school's improvement.

Kotter and Cohen (2002) also emphasized that it was important for school leadership to generate short-term wins to motivate and encourage continued efforts toward the shared vision. Change was uncomfortable, and it was easy for members to slip back into old practices (Kotter & Cohen). The learner-centered approach (McCombs & Whisler, 1997) asserted that motivation for organizational change realistically began at

the individual level. By calling attention to new practices that were working, teachers felt empowered to continue the practice (Guskey, 2002). Affirmation of new practices through celebrations of increased student learning substantially increased the likelihood of a sustained change in teaching practices (Guskey).

Leaders were warned that it was important to the change process to remove obstacles and empower teachers (Kotter & Cohen, 2002) through adequate training, resources and support (Guskey, 2002). Continued follow-up was necessary because lasting change only took place when there was evidence of student benefit which was often after implementation had occurred (Guskey). Follow-up included pressure to motivate those most resistant to new ideas, and support to help teachers tolerate the anxiety of roadblocks and insecurities (Guskey). Fullan (2005) later clarified pressure and support as accountability and capacity building. He warned that leaders needed to reverse the order and emphasize capacity building ahead of pressure to increase motivation for improvement. The idea of increasing the collective capacity of the school supported findings by Fisher and Frey (2004) that school change and teacher knowledge was a reciprocal relationship where teachers were not only critical to the creation of school change, they were also essential in the more difficult work of sustaining it.

Change Leadership for Organizational Learning

Fullan (2003) described change as a learning process, first for the individual and then for the group, which was consistent with the principles of learner-centered professional development (NPEAT, 2000). Therefore, conditions to support learner-centered environments were required throughout the school change process (Kotter & Cohen, 2002) School-wide challenges for knowledge-generating professional

development included developing leadership skills for planning and problem solving, creating a collaborative culture, and enhancing teachers' and administrators' capacity for data analysis (NPEAT).

The development of teacher leaders was in contrast to the traditional top-down practice of leadership by a few (Fullan, 2005a). The notion of distributed leadership was congruent with an earlier concept that leadership was more of a quality of an organization than a particular position or title (Ogawa & Bossert, 1995; Spillane, 2005). Spillane, Halverson, and Diamond (2004) offered a perspective of distributed leadership that flowed "through the networks of roles" (Ogawa & Bossert, p. 225) of a school system and had more to do with the network of members working collaboratively to solve problems than with formal roles and titles (Scribner, Sawyer, Watson, & Meyers, 2004).

In terms of creating a collaborative culture, Spillane (2005) warned that what mattered most for instructional improvement and student achievement was not that leadership was distributed, but rather how it was distributed. Distributed leadership through multiple individuals engaging in independent managerial tasks was ineffective. Instead, it was the nature of the interactions, or the relationships, that were taking place among and between the teachers, principals, and other school members that was important (Spillane). Therefore, an aspiring leader's first priority was for the "forming of an 'us,' not a 'me and you.'" (Donaldson, 2001, p. 56). Scribner et al. (2004) agreed and added that school leaders had the responsibility to develop and support teacher leadership teams because of their potential for empowering teachers engaged in change for school improvement.

Evidence-based leadership was described by Lewis and Caldwell (2005) as the systemic capacity for teachers and administrators to analyze data through a constant, informed interchange of professional information. The practice encouraged the ongoing use of authentic performance evidence to identify areas for action and development. However, the researchers (Lewis & Caldwell) warned of serious disconnects between what was being taught and observed and what was collected and reported by the school. Prescribed requirements from government agencies required schools to gather and publish data about yearly student achievement to “inform and appease politicians and the public” (p. 182). But the essence of systemic, evidence-based leadership was to empower teachers to utilize ongoing and authentic outcome indicators to improve their own practices (Lewis & Caldwell). What was implied was that the most impacting evidence was not performance data gathered at the end of the year, but rather ongoing and collaborative observations and reflections about authentic indicators of what was going on within and among classrooms. The challenge for leaders was to “collect and report data and be able to internalize it at the right time for the right reasons for the right students” (Lewis & Caldwell, p. 182).

Practices such as shared, distributed, and evidenced-based leadership established an infrastructure for the empowerment of teachers to be leaders of their own destiny (Fullan, 2005c), and offset the demoralizing impact of imposed instructional mandates. Fullan warned against the use of “turnaround leadership” (p. 174) through imposed interventions to “right” (p. 174) low-performing schools. Rather, change efforts required learner-centered professional development that incorporated the characteristics of a learning organization (NPEAT, 2000). Through the development of leadership skills,

collaborative cultures, and effective data-handling abilities (NPEAT) school systems experienced an increase in school capacity and were less held back by reluctance to change (Reynolds et al., 2006).

Teacher Reluctance to Change

Findings from the literature supported that teacher reluctance to new practices was a natural part of the change process (May & Zimmerman, 2003), and should be expected, planned for, and utilized rather than avoided or resented (Daresh 2001; Eaker et al., 2002). In an effort to better understand and make use of what was known, the next section provided a more in-depth look at the benefit of teacher reluctance as well as more specific contributors to teacher reluctance including affective factors, collaborative challenges, and career cycles.

The Benefits of Reluctance

A study of professional development practices clarified a hierarchy of inhibiting factors that challenged school restructuring (May & Zimmerman, 2003). The two most dominant inhibitors were lack of time and money. The third most frequent hindrance was teacher reluctance or attitude. The study confirmed the importance of understanding how teachers made their decisions to change, and how to provide the support needed instead of responding negatively toward teachers with opposing views (May & Zimmerman). Researchers (Daresh 2001; Eaker et al., 2002) suggested working with resistive teachers from a standpoint of understanding rather than condemnation, which was consistent with the learner-centered perspective (McCombs, 2003).

Fullan (2001) agreed that leaders enhanced their learning environment when they took a respectful and somewhat attentive attitude toward reluctance. He further suggested

that conflict should actually be welcomed. In the same way, Bolman and Deal (2003) offered that reluctance was sometimes sensible. For example, caution on the part of teachers was sometimes a rational response to bad or injurious experiences from the past, in which case reluctance could help an organization avoid a problematic and counterproductive fad (Fullan).

However, educational jargon from school leaders within studies on change initiatives tended to include disapproving terms for resisters such as being complainers (Datnow & Castellano, 2000), having bad attitudes (Eaker et al., 2002), or being dissenters, backstabbers, and blockers (Johnson, 2003). According to Bolman and Deal (2003) the challenge for school leaders was to provide safe avenues for dissention rather than writing them off. For successful school change, leaders needed to create what Bolman and Deal termed “arenas” (p. 377) or collaborative opportunities for school members to “forge divisive issues into shared arguments” (p. 377). Fullan, Bertani, and Quinn (2004) agreed and suggested that productive conflict was essential to reform. They said that opportunities for teachers to communicate and forge ahead were hindered when the collective commitment to the purpose of the school was so inflexible as to miss valuable insights from those who questioned the status quo.

Perkins (2003) described teacher reluctance in terms of progressive and regressive interactions. When teachers participated in the social exchange of ideas, problem-solving, or long-range planning, they were participating in progressive interactions. These processes maximized quality knowledge and social cohesion. However, regressive reactions involved shallow collaboration that avoided conflict through teacher withdrawal (Perkins). Fullan (2005a) added that regressive interactions happened more frequently

because reluctance required less skill and came naturally, while working collaboratively was difficult and challenging. Fullan stated, “It is easy for people to avoid or fail to persist in the deep, cognitive, emotional, and political learning cycles that will be needed to sustain the groups’ focus on complex new challenges” (p. 101). Furthermore, under stressful conditions, such as school change, teachers were even more likely to revert to regressive behaviors (Fullan).

While teacher reluctance was frequently blamed for failed initiatives, Casey and Morrow (2004) suggested that it was often staff development methods that were at fault. Problems with restructuring efforts were found to be attributed in part to confusion or lack of agreement about what criteria to use when determining the effectiveness of professional development (Guskey, 2000). Rather than focusing on participant’s reactions to a workshop or measures of teacher commitment to an introduced innovation, professional development efforts in highly successful programs centered first and foremost on learners and learning (Hawley & Valli, 2000).

Emotional Challenges of Change

Fullan (2001) stated that emotions frequently ran high during times of change which often resulted in conflict and reluctance. Guskey (2002) concurred that change was a gradual and difficult process for teachers. In his non-linear change model for teachers, Guskey prompted that change brought about anxiety and was threatening because of the risk of failure that conflicted with teachers’ strong moral commitment to student learning. Eaker et al. (2002) referred to a teacher’s basic human need to feel a sense of personal accomplishment and connectedness, and affirmed that the most common reason teachers chose education as a career was their desire to make a positive difference. Researchers

(Fullan, 2005a; Mintrop, 2003; Williams, 2003) referred to the undermining of this most basic desire when a teacher's chosen career was publicized nationally as being deficient.

Teachers engaged in school restructuring also found themselves trying radically new practices with the threat of immediate loss and only possible long-term gain (Fullan, 2003). Bolman and Deal (2003) emphasized that people did not like feeling anxious and incompetent. When teachers felt insecure, they often resisted or interfered with change efforts in hopes of reverting back to comfortable practices (Fullan). Furthermore, Mizell (2004) proposed that discouraged teachers tended to rely on others to tell them what they needed to change, leaving them "trapped in an endless loop of passivity and resentment" (p. 38). Even when they were engaged in professional development activities, they took a passive and often resentful approach that rarely benefited their students (Mizell). Instead, Fullan, Bertani and Quinn (2004) suggested that districts would make more progress through learner-centered practices for professional development that developed leadership capacity and active teacher participation.

Researchers (Heifetz & Linsky, 2002; Reynolds et al., 2006) also warned of the emotional hazards when teachers were pushed to learn beyond their present capacities. Corresponding to learner-centered principles (McCombs, 2003), teachers had to be open and ready for learning to occur. However, in the current high-stakes educational climate, teachers often felt coerced by state mandated reform (Fullan, 2005a). Educators were also confronted with perceived loss as well as possible benefit, and they had to learn to develop new allegiances and rebuild expertise. DuFour et al. (2005) described teacher discouragement as an emotional state in which teachers and administrators gave up when overwhelmed by the profound problems they encountered. The authors alleged that

discouraged teachers carried a sense of resignation that robbed them of the energy for professional development that was “essential to the continuous improvement of teaching, learning, and relationships in school” (DuFour et al, p. 162).

Pitfalls of Collaborative Practices

Overall, the literature indicated that collaboration was necessary for school improvement, and had to be structured and purposeful and guided by goals to improve student learning (Daresh, 2001; Guskey, 2003, Hawley & Valli, 2000). Moreover, meaningful and healthy collaboration was a skill to be learned because it did not come naturally to most friendly and agreeable peer groups (Fullan & Hargreaves, 1996; Guskey, 2003). An international study on the nature of school reform also found that collaboration was comfortable for some, but not for others (Johnson, 2003). Problems included loss of autonomy, interpersonal conflict, and group divisions through factionalism (Johnson).

Loss of autonomy occurred when teachers felt they had to conform to the norms and decisions of their team (Johnson, 2003). Earlier termed as groupthink, Fullan and Hargreaves (1996) noted problems that arose when a well-intentioned group overrode or discredited the intuition or experience of one or more group members which led to poorly conceived and short-lived strategies. Contrived collegiality that was rushed or manipulated by administrators was also found to be detrimental to the improvement process (Fullan & Hargreaves). Later investigations of the characteristics of effective professional development found that collaborative efforts could turn into serious conflicts over professional beliefs and practices, and could polarize and divide if practitioners were not trained and prepared (Guskey, 2003).

Guskey (2000) described interpersonal conflicts as emotional perils of collaborative work that included negative attitudes such as suspicions that others were collaborating merely for personal gain. Disrespect for the views of others and feelings of competition were noted, as well as fears of hidden agendas. Personal barriers also emerged, such as the lack of interpersonal skills or personalities that were not conducive to group or team processes. Strong personalities dominated discussions, and structural barriers undercut collaboration. Sometimes there were irreconcilable differences in basic beliefs or goals. Johnson (2003) later documented the presence a lot of “back stabbing” (p. 348) and other negative interpersonal elements.

Factionalism, or divisive competition, was also a negative outcome of collaboration (Johnson, 2003). Fullan and Hargreaves (1996) had previously identified this phenomenon as balkanization where groups of teachers developed cliques who defensively protected their own norms. Balkanization led to poor communication and indifference, and an undermining of improvement efforts. Comfortable collaboration was equally counterproductive where members engaged only in safe and non-challenging discussions. For educators “to bite the bullet of fundamental, deep, and lasting change, improvement efforts should move beyond cooperative decision-making and planning, sharing experience and resources, and supportive interpersonal relationships into joint work, mutual observation, and focused reflective inquiry” (Fullan & Hargreaves, p. 57).

Johnson (2003) warned that educators had to be realistically aware that collaboration was a process that could be very empowering, yet held the potential for damaging emotional experiences. For example, findings from his study revealed the use of collaborative teams to silence dissent and debate in favor of the status quo.

Opinionated fighting sometimes resulted in marginal groups being silenced or dominated by those more dominant. In some cases, teachers participating in detrimental collaborative practices found their professional standing to be compromised (Johnson). The harmful effects of unhealthy collaboration could be offset by a climate of social trust, found by Bryk and Schneider (2003) to be a core resource for school reform. Relational trust was grounded in the social conversations and exchanges of teachers who truly listened to one another and considered the viewpoints of others when making decisions. Collaboration for school improvement required honest exchanges about classroom practices, and sometimes meant “exposing your own ignorance and making yourself vulnerable” (Bryk & Schneider, p. 43). Social trust provided a venue for the respectful airing of differences rather than balkanization or groupthink (Johnson).

Career Cycles of Teachers

Consistent with learner-centered principles (Hawley & Valli, 2000), Daresh (2001) emphasized the need to understand the teacher as a person whose career was intertwined with their personal life, experiences, value systems, and dominant educational beliefs. One unique and personal characteristic of teachers included how long they had been teaching, or their place in the career cycle (Daresh). Lynn (2002) referred to the career cycle of teachers as a winding path of changing attitudes, knowledge, skills, and behaviors. A description of the winding path of a teacher’s career cycle provided insight as to how years of experience and age might impact openness to change in the classroom (Lynn).

The first stage of the career cycle model described a pre-service and induction period during the first few years of teaching (Guskey & Huberman, 1995; Lynn, 2002).

Next came a period of competency building when a teacher began to try new ideas to improve their teaching skills. They attended workshops and conferences willingly, taking the initiative for improvement. Research proposed that those who were successful at this stage often continued through periods of positive growth. Teachers who struggled due to lack of ability or support often experienced career frustration and dissatisfaction. By career midpoint, teachers often felt burned out and disillusioned. Finally, the last few stages in the cycle were characterized by disengagement and preparation for career exit (Lynn).

Later research indicated that the discomfort during the early stages of a change process were described as being like the career entry stage of teacher development (Bolman & Deal, 2003). For example, even experienced teachers often encountered personal frustration with discipline and management in the first weeks of using a new method. Others adhered to new methods in a rigid or mechanical way, or only made superficial changes while continuing to teach as they had before (Guskey & Huberman, 1995). These survival methods had the effect of stripping away an experienced teacher's self-perception of expertise and efficiency (Daresh, 2001). However, the survival mode at the entry stage of a new teacher was usually followed by new and exciting discoveries (Guskey & Huberman). In the same way, experienced teachers participating in successful initiatives encountered renewed enthusiasm and pride along with the satisfaction of being a part of something good for students (Lynn, 2002). As confirmed by Klingner et al. (2001), teachers cited the number one reason they chose to learn new instructional strategies was the perception that their students would benefit. Guskey's (2002) non-linear change model acknowledged that regular feedback concerning the benefits of new

practices for students made the difference between whether or not the practices were sustained.

Regardless of a teacher's place in the career cycle, teachers needed support and assistance to reach their professional potential (Lynn, 2002). The emotional and instructional benefits of learner-centered professional development for sustained change was demonstrated through a study by Casey and Morrow (2004) who followed a partnership between a school district and a university. The partnership carefully used research on effective professional development practices to plan their project. They embedded administrative support, provision of best practices for participating teachers, freedom to set individual goals, in-class assistance from a trained reading coach, training and time for reflective practices, and time for discussion groups and collaboration. They also moved slowly understanding that change could not be rushed. Measures were used to chart how much change occurred, and what elements of the project best supported the transition. Results showed that the motivation for change was highly individual, yet despite age, experience, or initial willingness to participate, all teachers made changes in their programs. Small successes encouraged the willingness to take on another challenge, even for reluctant teachers. For example, an experienced teacher who was an initial resister, commented, "If you had told me in September that I would be working with guided reading groups and using centers for instruction, I wouldn't have believed it. It's hard to say what one thing made me do all of this. I guess in the end it was seeing the change in the kids" (p.664). Change was possible for reluctant teachers at all career stages with enough time and support (Casey & Morrow).

Researchers indicated that educators were beginning to understand the importance of systems thinking (Fullan, 2005a), learner-centered principles for adult learning (Hawley & Valli, 2000), and the role of leadership in the change process (Fullan et al., 2004) in terms of how to create highly productive learning environments (Fullan, 2003). Experts suggested that learner-centered professional development practices had the potential to move school systems beyond the restructuring of their existing beliefs and values toward systematic transformation (NPEAT, 2000). Then school restructuring and evaluative practices could become entrenched in the everyday culture of the key players in education, the teachers:

Many of us in the business of school improvement and educational change have painfully come to realize what should have been obvious over the years – that the heavy burden of responsibility for change and improvement in schools ultimately rests on the shoulders of teachers. However noble, sophisticated, or enlightened proposals for change and improvement might be, they come to nothing if teachers don't adopt them in their classrooms and if they don't translate them into effective classroom practice. (Fullan & Hargreaves, 1996, p. 13)

Summary

Presented in Chapter Two was a review of related literature concerning professional development practices for teachers engaged in systemic transformation for instructional improvement. Systems theory was discussed, along with the emerging model of learner-centered professional development for adults working within a system. The change process was examined, specifically addressing steps in the change process and change for organizational learning. Teacher reluctance to

change was also considered including the benefits of reluctance, affective challenges of change, pitfalls of collaborative practices, and the career cycles of teachers. Constructs were viewed through the perspective of learner-centered principles in order to connect scientifically proven practices for teaching students in the classroom to effective professional development practices for teachers.

In Chapter Three, a description of the research design and methodology utilized in this study is presented. The design, a mixed methods study, is described. Data collection and instrumentation are explained, along with the resulting methods of data analysis. Included in Chapter Four is the presentation of the data and analyses of the findings. In Chapter Five, the results of the study are summarized and implications for further research are presented.

CHAPTER THREE

Research Design and Methodology

Introduction

Since the publication of *A Nation at Risk* (National Commission on Excellence in Education, 1983), public education has been responding to school reform initiatives to increase student achievement (Fullan, 2005a; Sergiovanni, 2005). An accumulation of twenty-years of reform efforts generated standards, accountability measures, and reform initiatives as a way for school leaders to apply appropriate pressure and support for instructional improvement (Fullan). Reading and math performance increased, but the changes were only superficial and not at a level to close the achievement gap between high and low achieving schools (Fullan). Initiatives for change were not deeply successful when they did not include the kind of whole system capacity building required for sustainability (Fullan). School reform was costly, both financially and emotionally, and was often hindered by teacher reluctance toward new practices (May & Zimmerman, 2003; NPEAT, 2000; Sparks, 2005).

Fullan (2003) emphasized the need to decrease reluctance through practices that cultivated a “systemness quality” (p. 9) where “knowledge, ideas, and breakthroughs around fundamental cognitive and affective learning goals were constantly being pursued, scrutinized, and refined” (p. 9). For example, sustained improvements would occur through learner-centered professional development that moved away from prescribed in-service toward ongoing collaborative processes where teachers were motivated professionally and morally to contribute as part of the larger system (NPEAT, 2000).

The use of learner-centered professional development to lessen teacher reluctance toward new practices received some support from the literature, but more investigation was warranted to better understand what was occurring, as well as why. In Chapter Three, the rationale for the use of a mixed-method study design is provided, followed by a description of the population and sample. Data collection and instrumentation are explained, along with the resulting methods of data analysis. Finally, the researcher's own biases and assumptions are articulated to provide the reader insight as to the perspectives that might have influenced the study.

Research Questions

The overarching quest for this investigation was to discover if learner-centered professional development helped reluctant teachers sustain new practices. Considering the socially constructed nature of teacher reluctance, investigation for this study began with a grouped perspective of all of a school's sampled teachers and then narrowed to the personal viewpoints of a few once-reluctant teachers.

The first concept to be examined was the relationship between the level of learner-centered professional development practices used in each school and student achievement. Next, data was gathered to look at the differences between a school's implementation of learner-centered professional development and the teacher's reluctance toward new practices, change, and systematic school improvement. Then the investigation narrowed to the personal perspectives of individual teachers from different schools that had moved beyond reluctance to sustain new practices. The resulting research questions that guided this study were

1. Is there a relationship between learner-centered professional development practices and student achievement? Specifically, this question will examine communication arts achievement.
2. Is there a relationship between the level of teacher reluctance and implementation of learner-centered professional development? Specifically, this question will examine the following indicators of teacher reluctance: (a) overall; (b) toward new practices; (c) toward change; and (d) toward systematic school improvement.
3. How might reluctant teachers be supported over the long term to ensure sustained implementation of new methods or programs?
4. How might school leaders implement professional development practices that encourage sustained implementation of new methods for reluctant teachers?

Rationale for Use of a Mixed Methods Design

A mixed method design was selected for the purpose of this study (Creswell, 2003) which was to add to the body of knowledge concerning how to provide professional development for sustained implementation of new practices for reluctant teachers (see Figure 1). The concept of integrating quantitative and qualitative methods originated in 1959 when psychological researchers began using multiple methods to study the validity of psychological traits (Creswell). Researchers recognized that all methods had intrinsic limitations, and that biases within one method might offset biases of the other (Patton, 1997). Triangulating data sources through mixed designs slowly emerged as an accepted means for

bringing together qualitative and quantitative methods (Creswell; Fraenkel & Wallen, 2003; Patton).

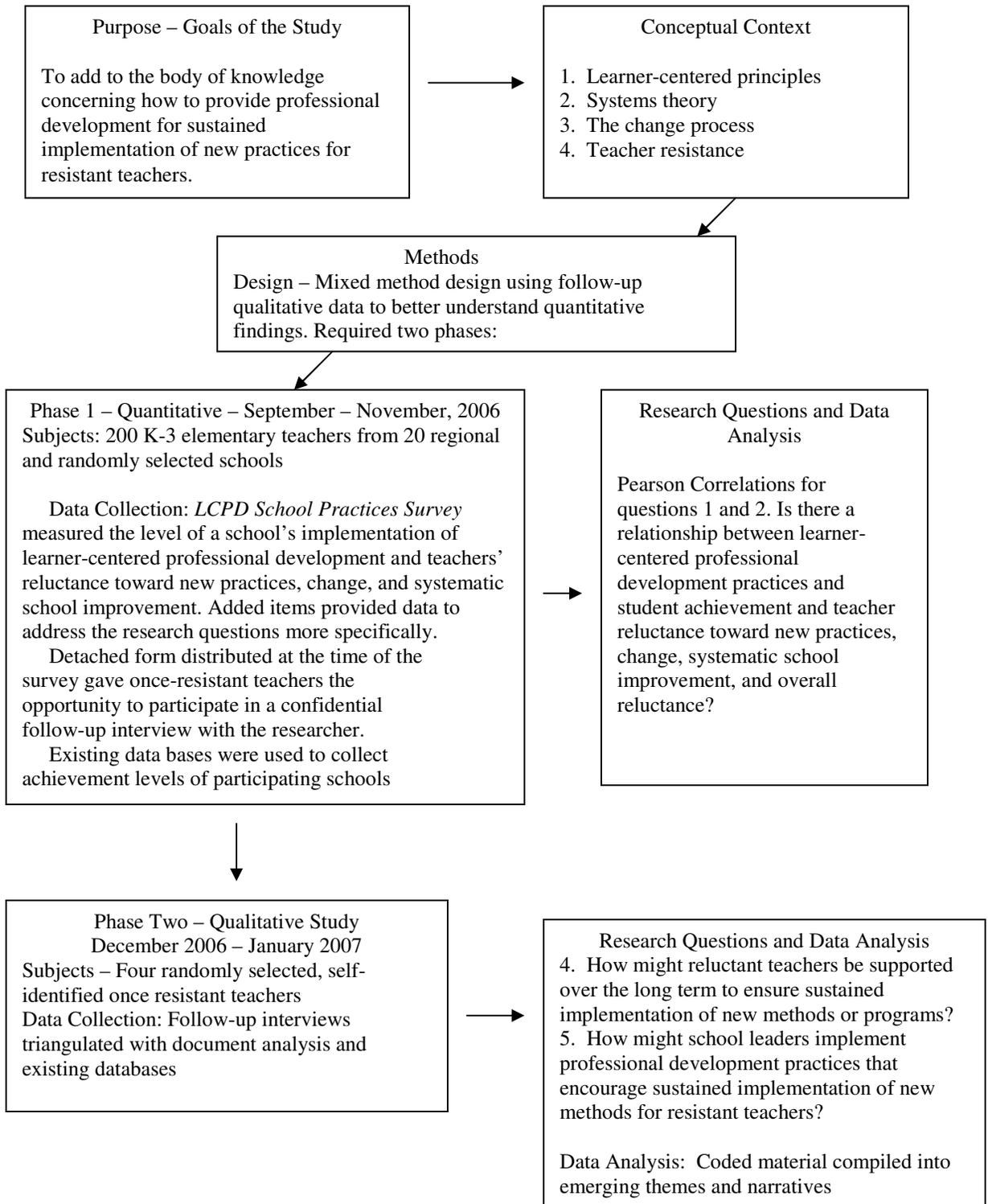


Figure 1. Mixed Design Study Schema

The mixed method design focused on collecting and analyzing both quantitative and qualitative data in a single study (Creswell, 2003; Fraenkel & Wallen, 2003). Quantitative data provided numerical representations of the differences and relationships between variables for a better understanding of certain occurrences that could also be generalized to other educational settings in predictable ways (Fraenkel & Wallen). However, statistical measures frequently failed to capture real differences among programs because data could be measured but not described (Patton, 1997). Qualitative methods of research provided richly descriptive accounts of context-specific occurrences such as how people interacted with one another, the meanings teachers gave to certain words or actions, and how their beliefs translated into actions (Bogdan & Biklen, 1998). Merriam (1998) added that qualitative case studies were especially effective when the investigator hoped to gain insight into occurrences such as teacher reluctance, when the boundaries between the phenomenon and the context were not clearly evident.

Experts agreed that mixed design studies were a way to move beyond *what* toward a better understanding of *why* through a deeper and more holistic rendering of personal experience (Creswell, 2003; Fraenkel & Wallen, 2003). Therefore, the sequential explanatory mixed design approach (Creswell) was important for the purposes of this study which examined both the quantitative comparisons of the variables related to teacher reluctance as well as the qualitative perspectives of once-reluctant teachers (see Figure 2). A detailed sequential justification for an explanatory mixed-method research design for this study was outlined in Table 1 (Creswell; Fraenkel & Wallen)

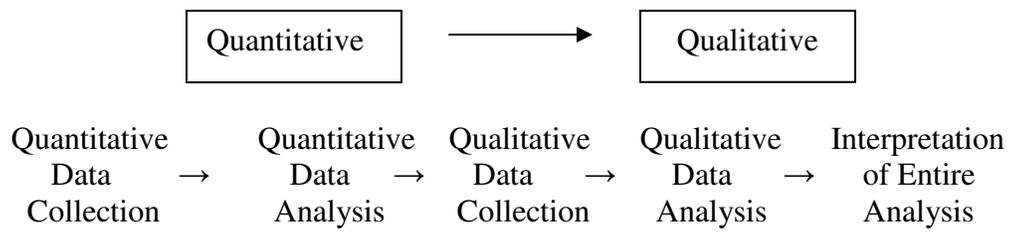


Figure 2. Sequential Explanatory Design Model (Creswell, 2003, p. 213)

Table 1

Sequential Justification for an Explanatory Mixed-Method Research Design

Quantitative Component	Qualitative Component
<p>Relationships between variables relating to teacher reluctance were statistically determined using interval data to answer “to what extent” questions.</p>	<p>In-depth follow-up interviews of once-reluctant teachers provided rich descriptions of how their beliefs and attitudes translated into action.</p>
<p>Data were analyzed inductively from survey questions to explain and predict relationships between teacher reluctance and school reform.</p>	<p>Data were analyzed deductively to uncover the essence of the experience of teachers who were once reluctant toward school reform.</p>
<p>The researcher was removed from the researched, and facts and values were distinct from one another.</p>	<p>The researcher personally spent time with the teachers being interviewed, and facts and values were intertwined.</p>
<p>Data revealed statistically generalizable statements about the current realities of teacher reluctance and school reform.</p>	<p>Data provided alternate visions of current realities based upon the multiple mental constructions of the people once reluctant toward school reform.</p>

Population and Sample

The impact of learner-centered professional development on teacher reluctance toward new practices was an important topic in terms of increasing and sustaining student achievement. Therefore, the larger population to whom the results of this study could be generalized included public school teachers and principals held accountable for federally mandated student achievement levels, regional professional development centers, and state educational agencies.

The researcher chose a sequential explanatory mixed-method design that utilized follow-up qualitative data in order to better understand quantitative findings (Creswell, 2003). Therefore, the sampling plan was two-phased. The first phase involved identifying the schools for the quantitative survey distribution. The researcher determined there were 120 schools within a twelve county region being served by a regional professional development center. The schools were numbered and a randomizer was used to select 20 elementary schools representing 262 K-3 teachers and fifteen districts. According to experts, (Creswell; Fraenkel & Wallen, 2003), this random, purposeful sample of schools being served by a regional professional development center was appropriate because of the researcher's previous knowledge about the area schools, the specific constructs developed by the literature review, and the personal judgment of the researcher that regional schools provided a representative sample of schools engaged in the school improvement process. The researcher selected the sample based on prior information to address the criteria being investigated through the study (Fraenkel & Wallen).

The second and qualitative phase of the study involved a purposeful, random sample of two once-reluctant teachers for follow-up interviews. Teachers who were surveyed in the first phase were provided with a detached form to complete if they identified themselves as being once reluctant and were willing to participate in a follow-up interview with the researcher to share their experience. The returned forms were numbered and a randomization was run to select two teachers for case studies. Merriam (1998) suggested that while random selection was not typical for qualitative research, the validity of the study was strengthened when random selection was possible.

Data Collection and Instrumentation

The researcher followed ethical principles and guidelines for the protection of human subjects of research (Creswell, 2003; Fraenkel & Wallen, 2003). Due to the nature of the research topic and the vulnerability of reluctant teachers, care was taken to explain the purpose of the study, to respect the personal beliefs of the participants, and to ensure confidentiality of the data (Creswell). The literature review revealed that disapproving and negative terms were often used for reluctance, leading to feelings of alienation and vulnerability (Johnson, 2003). As an alternative, this study was built around the learner-centered perspective that teacher reluctance was a natural part of the change process (May & Zimmerman, 2003), and the viewpoints of reluctant teachers needed to be understood rather than condemned (McCombs, 2003).

All participants were protected through the use of a signed informed consent that acknowledged their rights during data collection (Creswell, 2003). This consent

met with the approval of the Human Subjects Review Committee of the University of Missouri – Columbia (see Appendix A). No research data were collected without signed letters of informed consent from all participants. Both the survey and the follow-up interviews were conducted by the researcher in the absence of building administrators and were strictly voluntary with the option to withdraw at any time without repercussion. Contributors had the right to ask questions and obtain results, and their privacy was respected. All responses were coded for confidentiality, with the exception of the voluntary self-identification of once-reluctant teachers willing to take part in follow-up interviews. The identity of the interviewees was protected through the use of pseudonyms, the scheduling of interviews at locations suggested by the interviewees, and the filtering of identifying information from the findings (Creswell).

The *LCPD School Practices Survey* (Lauer, 2000) was used to collect the quantitative data for the first phase of this mixed-design study (see Appendix B). The multiple-choice and short answer survey was modified from McRel's *School Practices Survey* that was designed to measure a school's culture and climate related to learner-centered practices in the categories of: curriculum and assessment, motivation and expectations, professional development, leadership and policy, instructional management, social environment, and instruction (Lauer). Content validity for the *School Practices Survey* was developed through the input of experts on learner-centered principles through pilot- and field-testing phases. Samplings for survey development also included participants from different states, administration sites, and work and personal backgrounds (Lauer). The seven

categories of the instrument were composed of survey items that were internally consistent and reliable (see Appendix B).

As allowed through the user's guide (Lauer, 2000) the researcher modified the format and content of the *School Practices Survey* into the *LCPD School Practices Survey* in order to focus specifically on professional development. Item stems relating to teacher reluctance toward new practices, change, and systematic school improvement were derived from other areas of the *School Practices Survey* as well as expert findings from the field of school restructuring. Content validity for the *LCPD School Practices Survey* was developed by expert judgement and by cross-referencing the literature on learner-centered practices (McCombs & Whisler, 1997; NPEAT, 2000), professional learning communities (DuFour, DuFour, Eaker, & Many, 2006; DuFour, Eaker, & DuFour, 2005), the change process (Fullan, 2005a), and school reform (Lezotte, 2005; Sparks, 2005). The survey was also modified for ease of administration. Reliability was determined through the application of the test-retest method. Pearson correlations were calculated to determine the reliability of the subscales (see Table 3). Chronbach alpha calculations were used to check the internal consistency of the survey (see Table 4).

The *LCPD School Practices Survey* used teacher perception to differentiate schools implementing learner-centered professional development from those that were not. Participants were given closed-ended stems with continuous "strongly disagree to strongly agree" scales in order to: (1) indicate the extent to which they believed their school or district should have particular policies and practices for professional

development, and (2) assess the extent to which they perceived the policies and practices as being implemented in their schools (Lauer, 2000).

In addition to the survey, achievement data were collected from an existing Department of Elementary and Secondary Education (DESE) database in the form of the Spring 2006 third grade communication arts performance index from the Missouri Assessment Program (MAP). This score was selected as the achievement indicator because of its use to determine Adequate Yearly Progress (AYP) being monitored federally through *No Child Left Behind* legislation.

Three additional open-ended items were added to help address the qualitative portion of the study. Teachers were asked about their personal feelings toward change initiatives, and how to best help teachers implement new instructional practices. They were also asked their views on how to encourage reluctant teachers engaged in school improvement.

A separate and detached form was provided at the time of the survey to recruit once-reluctant teachers to tell their story through a separately scheduled follow up interview with the researcher. Teachers willing to participate in an interview could thus list a contact number or email that did not compromise the confidentiality of their survey responses.

Beginning the first week of September, 2006, school superintendents were contacted for permission to conduct the study within their district (see Appendix A). Once written consent was obtained from district level administration, building principals from each school were contacted by phone in order to seek permission to come to their school and administer the ten minute survey to the K-3 teachers at the

end of a faculty meeting or any other suggested and appropriate meeting time. Due to the sensitive nature of the topic of teacher reluctance, the researcher requested permission to administer the survey without the principal being present.

Once written consent from the building principal was obtained, the researcher scheduled an appointment to meet with the K-3 teachers in each school to describe the study, the need for their input, and the content of the letter for informed consent. For those teachers willing to participate, informed consents were signed and the coded surveys and detached invitations for follow-up interviews were distributed. Completed surveys and detached interview invitations were placed in two separate envelopes that were sealed at the completion of the last survey. In total, the survey administration period concluded in four weeks.

In December of 2006, the second and qualitative phase of the study was initiated. Using the self-identification form from the *LCPD School Practices Survey*, two cases were randomly selected for follow-up interviews and on-site visits. Prior to the interview dates, the researcher mailed the interview questions to the participants at the address requested by the interviewees. Early examination of the questions allowed participants time to reflect and prepare for the interviews. No interviews were conducted without signed consent. Since the nature of qualitative processes were to be flexible and emerging, the preliminary interview questions were open-ended and few in number in order to elicit evolving views and opinions from the interviewees (Creswell, 2003).

The researcher allotted an hour for each follow-up interview. The interviews were conducted off-campus at a location suggested by the interviewee. The

researcher obtained documents for analysis by contacting the schools of the two interviewed teachers requesting copies of their school improvement and professional development plans without disclosing the purpose for the request. The request for the documents did not compromise the confidentiality of the interviewees or the trust of the district because both plans were shared routinely between districts in the state. An audit trail was established for document analysis in order to record descriptive notes (see Appendix E).

The accuracy of the qualitative findings of this study occurred from the perspectives of the researcher and the participants (Creswell, 2003). Member-checking was used to assure that participants felt their stories were told as they had intended. Rich and thick description was used to help transport the reader to the setting of the experience. Researcher bias was clarified, and an external auditor was consulted to provide an assessment of the study throughout the process. Triangulation also occurred through the evaluation of interviews and school documents (Creswell; Fraenkel & Wallen, 2003; Merriam, 1998).

Data Analysis

The central premise of this mixed-design study was that the implementation of learner-centered professional development strategies would lessen teacher reluctance toward new practices. This suggestion received some support in the literature, but further empirical validation was needed.

A two-phase data analysis process was selected in order to provide both numerical findings as well as descriptive text (see Figure 1). Phase one was a quantitative study that looked at the statistical relationships between a school's

implementation of learner-centered professional development and student achievement, teacher reluctance toward new practices, teacher reluctance toward change, and teacher reluctance toward systematic school improvement. As emphasized by research experts, the purpose of examining the relationships between the variables of this study was to add to the understanding of how the variables interacted, not to determine causation (Fraenkel & Wallen, 2003; Wiersma, 2000). Information was reported concerning the numbers of the sample who did not complete the survey along with the implications for the rate of return on the external validity of the study (Creswell, 2003).

A second qualitative phase of analysis addressed the final two research questions by looking at multiple case studies of once-reluctant teachers. Follow-up interviews were conducted in order to find a deeper contextual meaning for the construct of teacher reluctance. Finally, the data from both the quantitative and qualitative phases of the study were integrated to the extent possible to provide insight concerning the impact of learner-centered professional development on teacher reluctance toward new practices (Creswell, 2003; Fraenkel & Wallen).

Phase One – Quantitative Data Analysis

The quantitative data used in this analysis were collected from two sources and entered into the *Statistical Package for the Social Sciences* (SPSS) version 13.0. The first source was the *LCPD School Practices Survey*. The school's level of implementation of learner-centered professional development practices was figured by totaling the scores of the twenty-seven even numbered items from the survey to calculate first a total score per teacher and then an average score per school. Next,

overall teacher reluctance was figured by computing the total score of the twenty-seven odd numbered reluctance items from the surveyed teachers at each school to calculate a total score per teacher and from that an average score for each school. Teacher reluctance toward new practices was figured by computing the total score of the nine teacher reluctance toward new practices items from the surveyed teachers at each school to calculate a total score per teacher and then from that an average score for each school. In the same way, teacher reluctance toward change and systematic school improvement was figured by calculating the nine reluctance items for each category for each teacher and then from that average scores for each school.

The second source, an existing DESE database, was used to gather a student achievement indicator. For this study, each school's student achievement indicator was the total percent of third grade students scoring in the proficient and advanced levels in communication arts on the Missouri Assessment Program (MAP) as reported on each school's School District Report Card for 2005-2006.

A Pearson correlation was used to evaluate the first research question that examined the relationship between the implementation of learner-centered professional development practices and student achievement. Pearson correlations were also used to assess the second research question that looked at the relationship between the implementation of learner-centered professional development practices and overall teacher reluctance, teacher reluctance toward new practices, teacher reluctance toward change, and teacher reluctance toward systematic school

improvement. For each correlation, a p value of no less than 0.05 was required for significance.

Phase Two – Qualitative Data Analysis

Research questions four and five were addressed through the second and qualitative phase of data analysis which evolved from open-ended responses from the survey, follow-up interviews and subsequent triangulation of documents. As described by research experts, data collection and analysis for the qualitative portion of this study were ongoing and simultaneous, and the researcher constantly clarified and classified emerging themes and categories (Creswell, 2003; Fraenkel & Wallen, 2003; Merriam, 1998).

Open-ended responses were typed and categorized, interviews were transcribed, and school improvement and professional development documents were explored in preparation for overall data analysis (Creswell, 2003). Next, a coding system was developed to sort the material into categories. Finally, the coded material was compiled into descriptive accounts of the major emerging themes. Narratives were used to convey the findings of the analysis within the themes, and to interpret what was learned about the essence of teacher reluctance toward new practices. The validity of the findings was frequently monitored through the use of member-checking, an external auditor, and triangulation of interviews, on-site observations, and school documents. Rich, thick description was also used to capture the full essence of each once-reluctant teacher's experience (Creswell; Merriam).

The Researcher's Biases and Assumptions

Research experts challenged that the value of a study could be undermined by the researcher's own hopes and expectations of outcomes as well as their underlying assumptions (Fraenkel & Wallen, 2003; Wiersma, 2000). Furthermore, the topics addressed in this study were socially constructed and more readily influenced by the researcher's embedded beliefs and values (Fraenkel & Wallen). Therefore, it was important for the reader to be aware of the author's implicit thoughts and perspectives (Fraenkel & Wallen).

As a result of extensive training in Rogerian humanistic theory, the researcher believed in the innate goodness of all human beings and their ability to solve their own problems in a caring and accepting environment (Davis & Palladino, 2004). Therefore, human beings, both dynamic and complex, were constantly engaged in a natural progression of self-actualization that moved from dependency to independency to interdependence (Sergiovanni & Starratt, 1983). This natural emotional, cognitive, and physical progression was directed by an emerging self-concept from the core of all individuals as they became aware of the quality and degree of freedom with which they could participate in a meaningful way with their own environment (Sergiovanni & Starratt). Therefore, all human beings deserved to be considered valuable and capable of self-actualizing given the right conditions.

The researcher also believed that learning was a natural process in which significant ways were sought to discover and construct meaning from the individual's own experiences. Learning was directly impacted by each person's

unique perceptions, thoughts, and feelings (McCombs & Whisler, 1997). Learners needed a variety of opportunities to construct meanings both individually and collectively in order to think beyond the status quo (Sergiovanni & Starrat, 1983). Each school community was a learning system that needed to interact, learn, evaluate, and adjust to the environment in order to grow and move forward (Morgan, 1997).

A final bias of the researcher was that leadership was not a position of authority, but rather a systemic characteristic flowing through the network of roles within schools (Ogawa & Bossert, 1995). Organizational leadership had less to do with power than with relationships, with an emphasis on the concept of community-building and the importance of shared meaning and values (Ogawa & Bossert). Therefore, it was important to consider diverse points of view in an effort to cultivate “both-and” rather than “either-or” thinking (Covey, 1989; Sergiovanni & Starratt, 1983).

Summary

Provided in Chapter Three is the information related to the design and methodology used to carry out this investigation of the impact of learner-centered professional development on teacher reluctance toward new practices. A rationale was provided for the use of a mixed design research method. The population and sample were described, as well as data collection and instrumentation. The two-phased data analysis was articulated, along with the researcher’s biases and assumptions. Within Chapter Four, the data analysis and research findings are

presented. Concluded within Chapter Five is a discussion of the research findings, conclusions, and recommendations for future research.

CHAPTER FOUR

Presentation and Analysis of the Data

Introduction

The intent of this study was to add to the body of knowledge concerning how to provide professional development for sustained implementation of new practices for reluctant teachers. Previous research clearly identified the real and impacting presence of teacher reluctance within every change initiative (Klingner et al., 2001; NRP, 2000). However, little research was available that revealed how to create the conditions for sustained and lasting reform efforts for all teachers, especially those most reluctant (Klingner et al.; NRP). Even teachers who were more positive toward change felt overwhelmed by the daunting task of educating a myriad of students with differing needs, abilities, and sometimes counterproductive home situations (McCombs & Whisler, 1997). When teachers were faced with change, it was “easy to hold on to old beliefs and assumptions, to stay within the comfort zone of old ways of thinking about and doing education, and to avoid the issue as long as possible” (McCombs & Whisler, p. 18).

Therefore, the purpose of this study was to examine what types of support and professional development encouraged once-reluctant teachers to engage in and sustain new practices for increased student achievement. The discussion of professional development practices was organized within a learner-centered framework in order to overlay best practices for the learning of teachers within the context of best practices for the learning of students (Hawley & Valli, 2000; McCombs & Whisler, 1997).

The questions that guided this explanatory mixed-design study were:

1. Is there a relationship between learner-centered professional development practices and student achievement? Specifically, this question will examine communication arts achievement.
2. Is there a relationship between the level of teacher reluctance and implementation of learner-centered professional development? Specifically, this question will examine the following indicators of teacher reluctance: (a) overall; (b) toward new practices; (c) toward change; and (d) toward systematic school improvement.
3. How might reluctant teachers be supported over the long term to ensure sustained implementation of new methods or programs?
4. How might school leaders implement professional development practices that encourage sustained implementation of new methods for reluctant teachers?

This chapter contains a summary of the data analysis, population and sample, collection instruments, data gathering methods for each research question, and findings. The findings were organized to first address the two quantitative research questions, and then the two qualitative questions. For the first two research questions, figures were provided to help interpret the correlational relationships between learner-centered professional development, student achievement, and decreased teacher reluctance. For the two qualitative questions, figures were also included to help the reader conceptualize the emerging themes through a synthesis of the learner-centered domains, the principles of learner-centered professional development, and the qualitative data gathered from actual practitioners including follow-up interviews with once-reluctant teachers.

Data Analysis

Population and Sample

The population for this study included all teachers of kindergarten through third grade from 20 Midwestern public schools. The schools were chosen randomly from 120 schools of varying sizes within a twelve county area. Upon receiving permission from building administrators, the researcher traveled to each school and personally administered the surveys. From the sample of 262 teachers, 244 or 93% of them actually participated. Of the uncompleted surveys, seventeen were due to teacher absence and one was a request to be excused from participation.

Data Collection Instruments

Learner-Centered Professional Development School Practices Survey

All respondents completed the *LCPD School Practices Survey* (Lauer, 2000). The multiple-choice and short answer survey was modified from McRel's *School Practices Survey* that was designed to measure a school's culture and climate related to learner-centered practices (Lauer). As allowed through the user's guide, the researcher modified the format and content of the *School Practices Survey* into the *LCPD School Practices Survey* in order to focus specifically on professional development. Item stems were used to create subscales designed to measure a school's culture and climate as related to learner-centered professional development in the categories of teacher reluctance toward new practices, change, and systematic school improvement. The item stems came from the *School Practices Survey* (Lauer) as well as expert findings from the field of school restructuring and learner-centered practices (Hawley & Valli, 2000; McCombs & Whisler, 1997; NPEAT, 2000). Content validity for the *LCPD School Practices Survey*

was developed by expert judgment and by cross-referencing the literature on learner-centered practices (McCombs & Whisler; NPEAT), professional learning communities (DuFour, DuFour, Eaker, & Many, 2006; DuFour, Eaker, & DuFour, 2005), the change process (Fullan, 2005a), and school reform (Lezotte, 2005; Sparks, 2005). The survey was also modified for ease of administration. Three open-ended items were added to help inform the qualitative portion of the study.

Reliability Analysis

Test-retest. The reliability of the *LCPD School Practices Survey* was determined through the application of the test-retest method using a focus group of twenty elementary school teachers. Two testing sessions were held six weeks apart. The teachers helped clarify survey questions and determine an approximate time for completion. Pearson correlations were calculated to determine the reliability of the subscales.

The test-retest correlations from the three subscales ranged from a low of $r = .850$, the correlation for the systematic school improvement subscale, to $r = .912$, the correlation for the new practices subscale. All of the correlations were significant at the 0.01 level (see Table 2).

Table 2

Test-Retest Reliability Correlations for the LCPD School Practices Survey

	New Practices Subscale	Change Subscale	Systematic School Improvement Subscale	Overall Survey
Pearson Correlation	.912**	.865**	.850**	.900**
Significance (2-tailed)	<.001	<.001	<.001	<.001
N	20	20	20	20

Note. ** Correlation is significant at the 0.01 level (2-tailed).

Subscale reliability. Chronbach alphas were established to determine the reliability of the *LCPD School Practices* survey. The internal consistency reliability for the three survey subscales was: New Practices (.791), Change (.891), and Systematic School Improvement (.864), all of which indicated satisfactory reliability (Fraenkel & Wallen, 2003)(see Table 3).

Table 3

Subscale Reliability for the LCPD School Practices Survey

	New Practices Subscale	Change Subscale	Systematic School Improvement Subscale
Chronbach's Alpha	.791	.891	.864
Number of Items	18	18	18

Interview Protocol

Two follow-up interviews were conducted with teachers who identified themselves as being once-reluctant. The recorded interviews were conducted in person and lasted approximately an hour. Nine open-ended questions guided the interviews (see Appendix C). The questions were framed to elicit the practitioner's personal reflection concerning their experience of being once-reluctant as well as what types of professional development support helped decrease their reluctance.

Document Analysis

The researcher obtained the school improvement and professional development plans from the schools of the teachers who participated in the follow-up interviews. The documents were analyzed using a document summary form (see Appendix D) in order to compare the school's formal professional development policies and practices against the qualitative data from the teachers from the schools. Using the school documents as part

of the analysis provided data triangulation for a deeper and clearer explanation of the qualitative results (Creswell, 2003; Fraenkel & Wallen, 2003; Merriam, 1998). The documents presented an indication of the formal policies, processes, and climate of the schools to use as a comparison with the impressions and experiences of the teachers.

Research Questions

Quantitative

Research questions 1 and 2 were addressed through the use of quantitative data gathered from the use of the *LCPD School Practices Survey* and achievement data from the Department of Elementary and Secondary Education.

Research question 1. Is there a relationship between learner-centered professional development practices and student achievement? Specifically, this question will examine communication arts achievement. A Pearson correlation was used to determine the strength of the linear relationship between a school's learner-centered professional development practices and their communication arts achievement. A *p* value of less than 0.05 was required for significance.

Research questions 2a – 2d. Is there a relationship between the level of teacher reluctance and implementation of learner-centered professional development? Specifically, this question will examine the following indicators of teacher reluctance: (a) overall; (b) toward new practices; (c) toward change; and (d) toward systematic school improvement. Pearson correlations were used to determine the strength of the linear relationships between a school's learner-centered professional development practices and their reluctance overall, toward new practices, toward change, and toward systematic school improvement. A *p* value of less than 0.05 was required for significance.

Qualitative

Qualitative data were gathered to address research question 3 and 4. Seidman (1998) emphasized the importance of investigating educational organizations through the experiences of teachers who actually carry out the day-to-day instruction of students. Meriam (1998) agreed that “research focused on discovery, insight, and understanding from the perspectives of those being studied offers the greatest promise of making significant contributions to the knowledge base and practice of education” (p. 1).

Research question 3. How might reluctant teachers be supported over the long term to ensure sustained implementation of new methods or programs. The researcher examined this query through the use of qualitative data gathered through teachers’ open-ended survey responses, follow-up interviews, and the examination of school documents relating to school improvement and professional development. First, the researcher read through all the responses, interviews, and documents to gain a holistic impression of the data. An open and axial coding process was then used to establish coding categories (see Appendix E). Next, the data were sorted under the learner-centered domains of metacognitive/cognitive, motivation/affective, developmental, and personal/social (McCombs & Whisler, 1997). These domains were used because they encompass the learner-centered principle that children and adults learn best when there is a focus on the individual learner as well as on an understanding of the learning process. After sorting and analyzing the data from all sources within each domain the following four themes emerged regarding how to encourage sustained implementation of new practices for

reluctant teachers: *show them why and how; empower them to safely explore; emphasize their professional contribution; and engage them in meaningful conversations.*

Research question 4. How might school leaders implement professional development practices that encourage sustained implementation of new methods for reluctant teachers? Again, qualitative data were gathered to address this reflective research question. Data sources included teachers' open-ended survey responses, follow-up interviews, and the examination of school documents relating to school improvement and professional development. The same four emerging themes of *show them why and how, empower them to safely explore, emphasize their professional contribution, and engage them in meaningful conversations* were examined in relationship to learner-centered domains (McCombs & Whisler, 1997). To address the professional development component of the research question, the emerging themes were further framed through the principles for learner-centered professional development (Hawley & Valli, 2000) in order to clarify professional development practices that encouraged sustained implementation of new practices for reluctant teachers.

Findings

Quantitative

The findings of the Pearson correlations used to address research questions one and two are illustrated in Table 4. Correlates from the study and their statistical relationships are denoted to compare the level of implementation of learner-centered professional development practices and decreased teacher reluctance overall, toward new practices, toward change, and toward systematic school improvement. The following subsections go into greater depth concerning the data analysis.

Table 4

Correlations for LCPD, Achievement, and Decreased Teacher Reluctance (N = 20)

		Implementation of Learner-Centered Professional Development
Research Question 1	Pearson Correlation	.729**
<i>Achievement</i>	Significance (2-tailed)	<.001
Research Question 2a	Pearson Correlation	.541*
<i>Decreased Teacher Reluctance</i>	Significance (2- tailed)	.014
<i>Overall</i>		
Research Question 2b	Pearson Correlation	.564**
<i>Decreased Teacher Reluctance</i>	Significance (2- tailed)	.010
<i>Toward New Practices</i>		
Research Question 2c	Pearson Correlation	.608**
<i>Decreased Teacher Reluctance</i>	Significance (2- tailed)	.004
<i>Toward Change</i>		
Research Question 2d	Pearson Correlation	.370
<i>Decreased Teacher Reluctance</i>	Significance (2- tailed)	.108
<i>Toward Systematic School</i>		
<i>Improvement</i>		

Note. ** Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).

Research question 1. A Pearson correlation was used to examine the relationship between the implementation of learner-centered professional development practices and student achievement (see Figure 3). The results of the correlational analysis indicated a moderate positive relationship ($r = .729$) with statistical significance at the 0.01 level. In general, the results suggested that schools with higher levels of implemented learner-centered professional development practices also demonstrated increased levels of communication arts achievement.

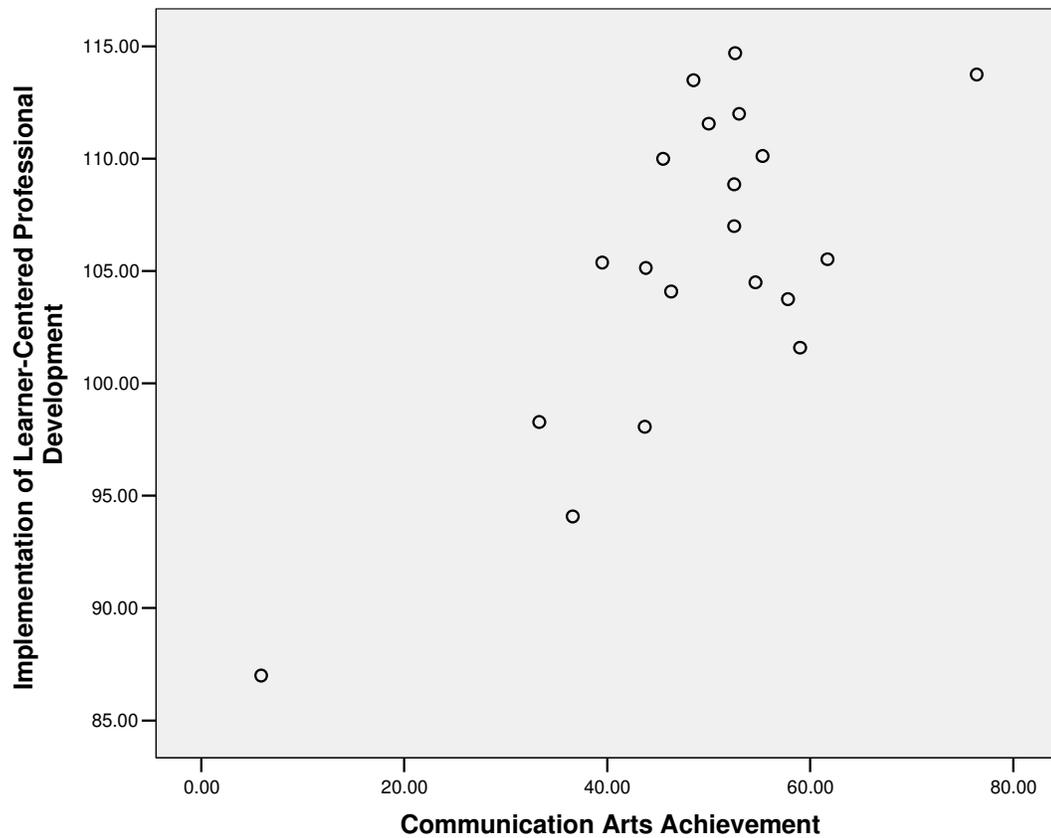


Figure 3. Correlation between Implementation of LCPD and Communication Arts Achievement

Research question 2a. A Pearson correlation was used to examine the relationship between the implementation of learner-centered professional development practices and decreased teacher reluctance overall (see Figure 4). The results of the correlational analysis indicated a positive relationship ($r = .541$) with statistical significance at the 0.05 level. The results suggested that schools with a higher implementation of learner-centered professional development also had higher decreases in teacher reluctance toward new practices.

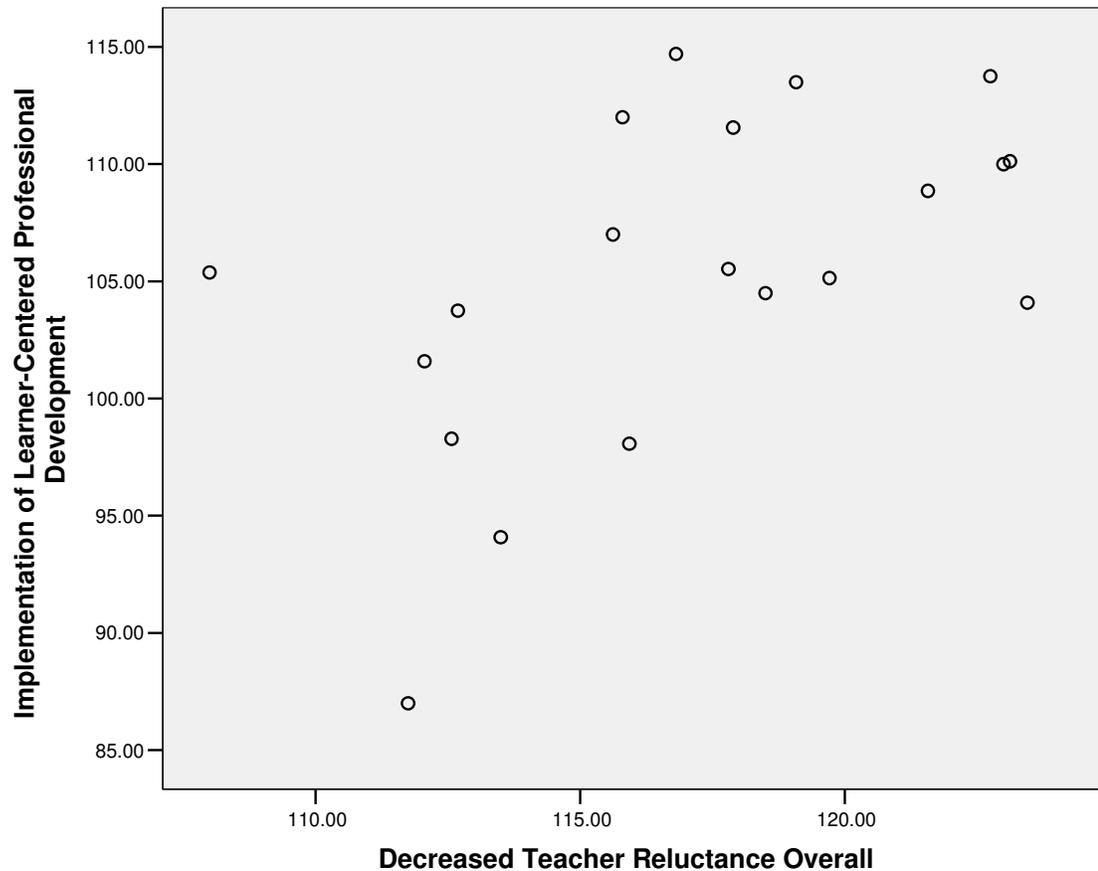


Figure 4. Correlation between Implementation of Learner-Centered Professional Development and Decreased Teacher Reluctance

Research question 2b. A Pearson correlation was used to examine the relationship between the implementation of learner-centered professional development practices and decreased teacher reluctance toward new practices. The results of the correlational analysis indicated a moderate statistical significance at the 0.01 level. In general, the results suggested that when schools implemented learner-centered professional development practices, teachers' reluctance toward new practices tended to decrease.

Research question 2c. A Pearson correlation was used to examine the relationship between the implementation of learner-centered professional development practices and decreased teacher reluctance toward change. The results of the correlational analysis indicated a moderate positive relationship ($r = .608$) with statistical significance at the 0.01 level. The results suggested that schools with higher implemented levels of learner-centered professional development also had decreased levels of teacher reluctance toward change.

Research question 2d. A Pearson correlation was used to examine the relationship between the implementation of learner-centered professional development practices and decreased teacher reluctance toward systematic school improvement. The results of the correlational analysis indicated a weak, positive ($r = .370$), non-significant relationship. In general, the results suggested that schools with higher levels of implemented learner-centered professional development did not show decreased levels of teacher reluctance toward systematic school improvement.

Qualitative

The iterative process of examining and re-examining the emerging categories from the qualitative data through the framework of learner-centered theory allowed for

the development of theoretical indications of causal relationships (Yin, 2003) within this study. The following subsections describe the themes that emerged from the data concerning how to encourage reluctant teachers to try and sustain new practices: show them why and how; empower them to safely explore; emphasize their professional contribution; and engage them in meaningful conversations. Figure 5 illustrates the four themes along with the supporting data sources to illustrate triangulation.

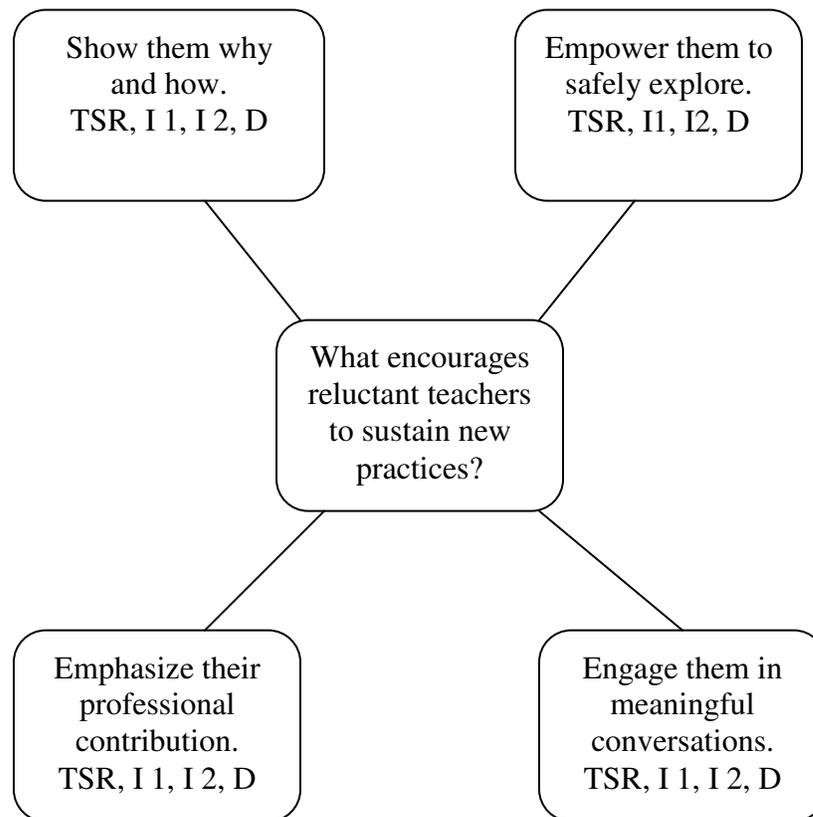


Figure 5. Emerging Themes for Decreasing Teacher Reluctance with Data Sources (see Appendix E for an explanation of the data codes).

Research question 3: Show them why and how. This emerging theme was guided under the learner-centered metacognitive and cognitive domain that describes how a

learner thinks and remembers (McCombs & Whisler, 1997). The learner-centered metacognitive and cognitive domain emphasized that the “mind works to create sensible and organized views of the world and to fit new information into the structure of what is already known” (McCombs & Whisler, p. 7). Evidence of this domain was found in data from the open-ended survey responses, interviews, and school documents.

Data indicated that teachers wanted to be provided with the evidence of why a new practice should be implemented as well as how to successfully make the change without lessening the quality of their current classroom instruction. Common participant responses included references to providing research with verification of success as well as the pros and cons of the initiative. “If it benefits student achievement – I welcome it! If it’s not researched, I don’t support being a guinea pig for every new teaching method out there” (TRS-11-445). “Show me the benefits and how to include it in my daily teaching easily and effectively” (TRS-13-536). “Show me statistics and success!” (TRS-14-563).

When asked how to help a reluctant group member, comments were made such as, “Give them opportunities to voice their reluctance and concern. Show them proof of the strategies working. Give reasons for the change. Show relevance” (TRS-32-1374). A once-reluctant teacher commented, “Sometimes forcing new ideas can be harmful in transition. Sometimes people come up with new ideas that are not necessarily proven, and sometimes in education it’s an experiment” (I2-2-11). When discussing how one teacher had worked with others to recommend a reading program, a once-reluctant interviewee commented, “We wrote up the pros and cons for each program. Not that any one of us wanted our own program; we were just doing all this work trying to find the best one to use, the one that was viable for each grade level K-4” (I1-1-29).

Respondents also wanted logical information as well as theoretical. “Show them the research and make it doable. If the instructional practices are not doable, they will not happen” (TRS-19-816). Concerning the training received for a new initiative, a once-reluctant teacher described her frustration.

When we started the program, we were trained two days in the middle of the summer and we didn't have a clue as to what the people were really talking about. Maybe if we had taught it a week or two, and then been trained on it, we would have had a little better idea of the wording and what she was talking about. It would have helped to just have a practice week and then go back and been trained. Literally, when we took the training, we didn't have a clue. Well, we learned the cheers and we learned how to do listening comprehension, and it was in the book and told us how to do it. But it didn't make any sense to use because we didn't know how it played out (I1-2-18).

To understand how, teachers wanted hands-on training and time to observe classrooms using the practice, as well as detailed guidelines and direct training. “Provide time for role play situations, hands-on training, even if we are trying it out with each other” (TRS-16-650). “Teachers need to visit other classrooms within their district as well as outside the district. If you are a visual learner, you need to see it in action” (TRS-18-763). A once-reluctant teacher described her dissatisfaction during a text book adoption. The teachers were not given in-service from the company until well after the beginning of the school year. “Once we had more information, some guidelines, what was important, information on where to find certain things, then it sure did go a lot better” (I2-1-3).

Teachers wanted clear examples, and they asked for someone to guide them and answer questions. “Give lots of examples of how this change is implemented into the classroom, routinely used in the classroom, and positive outcomes as a result of the change” (TRS-15-624). “They need to be provided with good professional development and the ability to contact an expert as they begin implementation” (TRS-18-759).

School documents indicated whether or not the school provided teachers with research and evidence of student benefit when initiating a school improvement initiative. Teacher comments indicated their corresponding reactions in terms of feeling reluctant. One school improvement goal was to enhance the school’s communication process by adopting the student-led conference model (Doc2-6-2). Another goal was to develop and implement plans to strengthen the life skills of each student (Doc2-46-1). For both goals, the first action steps involved helping teachers research the pros and cons of the practices by examining literature sources and visiting schools who were using the models (Doc2-6-3; Doc2-46-3). The once-reluctant teacher from this school validated that they were provided input and collaborative time to work together as they implemented new programs. She felt less reluctant than at her previous school because of these practices (I2-1-10). School documents from the other school did not show evidence of providing the why and how before implementing new programs. For example, several goals indicated the implementation of initiatives such as a writing program (Doc1-8-4) and the use of effective constructive response and performance questions in the classroom (Doc1-6-3). In each case, the document indicated that initiatives were chosen at the district level and then training was offered. Indicators of how this school’s practice impacted teachers was evidenced by a once-reluctant teacher during an interview.

We started having all these meetings our principal wanted us to have so we could put together a spiral-type school-wide program (I1-1-16). As the different programs were presented at our meetings, I personally felt like the principal had her own agenda and wanted a certain program, because anytime anyone brought in their research for these other programs, it was down-played (I1-1-22).

An analysis of the data from teacher survey responses, teacher interviews, and school documents offered direction concerning how to encourage reluctant teachers to sustain new practices by showing them why and how. A summary of the teachers' feedback is offered in Figure 6.

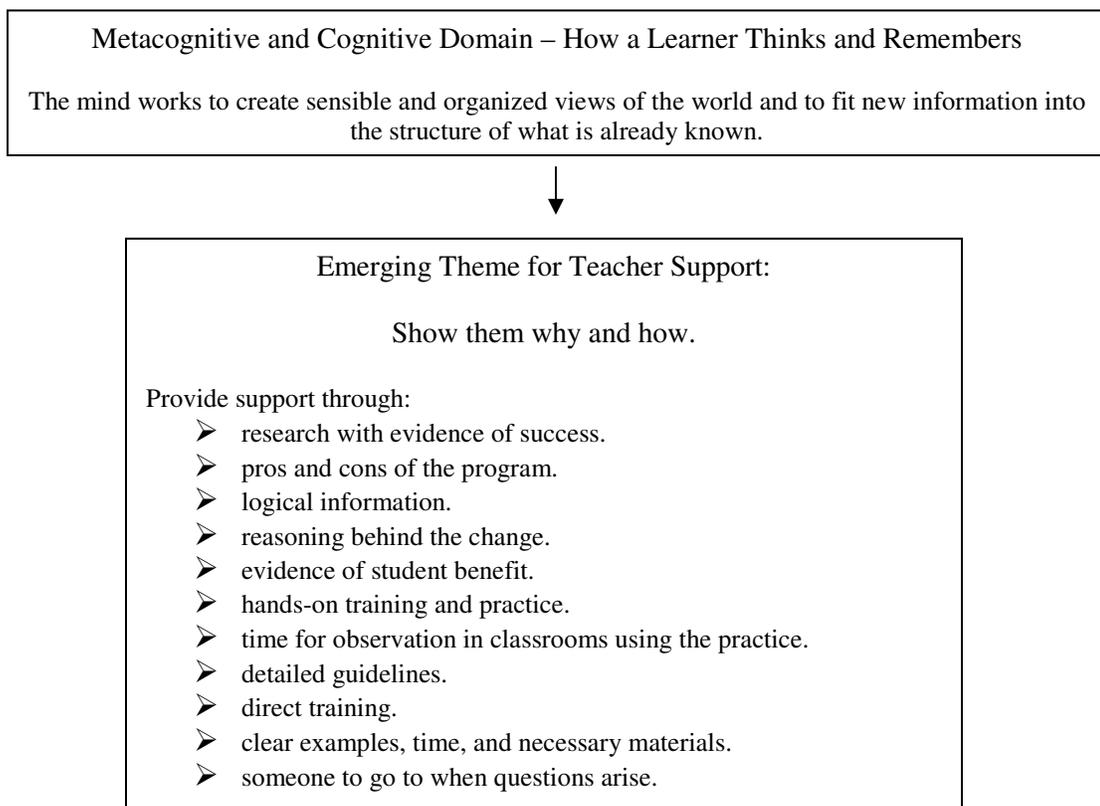


Figure 6. Synthesis of Qualitative Data with the Learner-Centered Metacognitive/Cognitive Domain.

Research question 3: Empower them to safely explore. The learner-centered motivation and affective domain described the impact of the learner's beliefs and emotions (McCombs & Whisler, 1997) and was evidenced in the qualitative data of this study. For all learners, their "emotional state of mind, beliefs about personal competence, expectations about success, and personal interests and goals all influence how motivated they are to learn" (McCombs & Whisler, p. 7).

Teachers frequently commented on the importance of providing encouragement, trust, and understanding for teachers implementing new practices. "Nurture and encourage and provide structural supports until changes are made and teachers feel comfortable with the change" (TRS-13-506). "The best way to help teachers make changes is to provide necessary information, materials, and support!" (TRS-15-608). When teachers were asked how to encourage a reluctant group member, they often cited encouragement and support. "Encourage them by letting them know we are in this together. Offer support in implementing the change. Have enough training so that when they implement they are completely comfortable and confident in their abilities" (TRS-25-1073). Help them by "doing things together so they are not alone. Help them so they can complete the tasks with whatever that entails, or by offering handouts to websites, workshops, or individual contact names that would be beneficial to that person" (TRS-27-1145). "Encourage, share, help, continue to share, encourage and help. Sometimes this person may have prior knowledge that causes them to lose interest in the new technique" (TRS-34-1490).

An interview with a once-reluctant teacher emphasized the importance of encouragement.

What would have helped me, and the whole third grade, and maybe the whole building was if we had always had the supportive principal and assistant principal we have now. They are supportive of teachers. If you have a problem, you feel you can communicate with them, even if they do not agree with you. You can let them know what's bothering you, and what's not working for you. If you ask for advice, they will give it to you in such a positive way you don't mind asking for help. They're very encouraging, and we are proud to work with them" (I1-5-7).

Another frequently cited response referred to the need for extra time when implementing something new. "I feel like I have more work to do than I can get done. I would like to do things differently, but I just don't have time" (TRS-13-527). "Support them and allow them time off to prepare for the new changes. Don't expect them to add it to their already stressful load" (TRS-16-647). "Time. The first thing I think about is time. I feel concerned that there will not be enough time to do what's required during my normal planning time" (TRS-5-200). "I feel worried that I will work hard to make the changes and they won't be successful and then I will have to change again. Time is always an issue" (TRS-4-175). "There is always the issue of time. As a mother of two young children, I wonder how much time outside of school I will have to commit to the change" (TRS-9-384).

When asked what school leaders could do to encourage implementation of new practices, a once-reluctant teacher also revealed that a lack of time had increased her reluctance. She said, "The biggest roadblock in going along with the change was time" (I1-4-8). "We were not allowed extra time to make our materials for the program" (I1-4-15). "If we had been given more time to make the reading materials, we would not have

resented it so much. It was so time consuming! We asked for time to work on this, and were denied” (I1-6-32). Concerning how to decrease teacher’s stress during time of change, this once reluctant teacher again cited the need for encouragement and time.

If something is presented in a positive way and you are given encouragement and time, it will work. Not a lot of time, but some, because most teachers don’t mind using their own time. If you are made to feel valued and trusted, I believe that is one of the most wonderful things there is for a teacher who might be reluctant (I1-8-24).

Other responses referred to the need for support such as materials and supplements. “I feel okay as long as we have the proper training and materials to back it up” (TRS-2-60). “The first thing that comes to mind is, ‘Am I going to have the materials and support I need?’ It kind of makes me nervous” (TRS-3-135). “Good training and needed materials are essential!” (TRS-17-706). Interviews with once-reluctant teachers were in agreement. One teacher was frustrated when expected to implement a new math program without training or supplemental materials. “In-service and supplemental materials would have helped for sure” (I2-1-17). Another once-reluctant teacher expressed a similar annoyance.

That first year there was no teacher’s manual, only an outline to be filled in for every story, every time, for every day. It would take you a long time to write that outline, plus making your own materials and running off your own materials (I1-3-79).

Shared decision-making was frequently cited as one of the best ways to help teachers make changes in their instructional practices, especially for reluctant teachers.

“Let them be a part of the process from the beginning. Provide support. Allow them to see the process in action from others. Offer encouragement and compassion when all doesn’t go right. Help them see the need and develop the desire” (TRS-13-538). “It is best to approach teachers with options. I think if you put anyone, including teachers, on the spot with no choices, feathers get ruffled” (TRS-18-741). “When someone comes in with a very authoritative, better than thou attitude, it makes me not want to be supportive” (TRS-7-290). “Give them some power to make decisions and make them part of the group. Give them ownership” (TRS-31-1353).

Data from interviews with once-reluctant teachers confirmed the need for shared decision making. “This reminds me of another time when we had a math text book to choose and I was given a copy of that book along with student copies to try out before the actual adoption, and I liked that” (I2-1-20). The other interviewee described the practice of shared-decision making in terms of trust. “Trust is a good word for this new administrator. We were entrusted to come up with our own [parent involvement] programs, and the only criteria we were given was it should be something about MAP” (I1-5-39).

Teachers emphasized the value of teamwork for decreasing reluctance toward new practices. “The best way to help teachers make changes is to not leave them alone with the practices, but to pair that person up with another person or persons to help in collaboration of the instructional practices” (TRS-14-582.) “Have them work together through the changes instead of feeling alone” (TRS-17-719). “Do it as a team. Make it a positive and fun change. If you work together, it makes it easier and the end product will be more successful and every teacher should want this!” (TRS-35-1514). An interview

with a once-reluctant teacher confirmed the value of teamwork for reducing teacher reluctance. She said, “Team support helped me get through this bad time” (I1-7-7). She added that it would have helped if they could have “gotten together and worked as a team. We could have been on different stories and everything, but working on different things together in one great big room makes it more enjoyable” (I1-7-29). “Yes, there’s energy there, especially if you’re given time to do that” (I1-7-31).

Training, coaching, and modeling until the change is well-learned is another support requested by teachers to lessen reluctance. “Give models and time to work on new practices without students” (TRS-16-642). “Give them training. You won’t use what you don’t know” (TRS-16-680). “I feel teachers benefit from trying new instructional practices by observing another teacher and modeling new materials” (TRS-17-731). “Provide effective and ongoing training with coaching and collaboration” (TRS-18-774). “I believe having a peer coach or star teacher is the best” (TRS-13-542). An interview with a once-reluctant teacher revealed a higher comfort level with peer interaction through coaching and modeling.

The reading coach is a very up person, especially under our present administration. She is excellent” (I1-6-14). Working together and sharing is good, and she’s hired for that position and works very hard at her job and we all appreciate her to the utmost (I1-6-19). We didn’t mind the reading coach coming in, because she had been a classroom teacher. Our principal had been a classroom teacher, but we minded her coming in because she never made me feel personally, like I was a good teacher, even though she might tell me to my face that I’d done really, really well (I1-2-37).

Finally, teachers suggested that reluctance was decreased when opportunities were provided for feedback and questions without critical comments. “Provide modeling, peer observations, constructive feedback, and sharing” (TRS-19-783). “Allow them to learn it and completely understand it before they are judged if they’re doing it correctly” (TRS-13-546). “Be an encourager, not a disciplinarian” (TRS-25-1097). “Use the gift of time with gentle humor. Peers working together will come up with answers” (TRS-26-1122). An interview with a once-reluctant teacher revealed a similar perspective. She attributed part of her reluctance to feeling criticized in a demeaning way.

Our principal would come in and give two stars and a wish. The stars were very complimentary and the wish was what was done wrong. Literally, what was wrong. One teacher went over her allotted two minutes, and that was written down. One teacher’s bulletin board was not done in the right manner, and it was written down. It made us feel we were not valued as a teacher, even if they mentioned certain things that were done well. We always take the negative part more to heart than the positive. That’s human nature (I1-2-28).

The once-reluctant teacher also provided insight into how feeling trusted and encouraged made a difference in her ability to listen to and act on feedback. She described her current administration as positive and non-threatening.

The administration I have right now lifts us up and we feel worthy and trusted, even though this administration comes into our rooms much more often than the past administration. If they have anything to say, it isn’t done in a negative way, so I take it as a way to improve (I1-6-38).

School documents provided evidence of whether or not each school's policies and programs held provisions for the support needed for implementing new programs in terms of providing materials, time, and other affective reinforcement. The school improvement plan from one school determined the costs and benefits for each improvement strategy in terms of tangible costs as well as intangible costs. For example, the tangible costs for implementing student led conferences included money for teachers to spend time researching, materials to research, training costs, and presentation costs. Intangible costs were also listed such as time to improve each conference (Doc2-7-3). An intangible cost for implementing the looping program was extra time needed to study the literature on implementing the program as well as time to later evaluate the impact of looping on student achievement (Doc2-47-4). The once-reluctant teacher from this school district indicated she felt comfortable with the emotional and material support offered during change initiatives (I2-1-27). However, the school improvement plan of the other once-reluctant teacher planned only for tangible costs like paid stipends, materials, and inservice costs. This was reflected in comments from the teacher such as "I don't think they realized how much time it would take until we got into the program. I had really researched it and talked to individuals and knew" (I1-8-20). "My husband and I kept track, and I worked an average of 70 hours a week for school, except for Thanksgiving, Christmas, and the last week of school" (I1-3-50).

Data from teacher survey responses, teacher interviews, and school documents offered insight as to how to sustain new practices for reluctant teachers by empowering them to safely explore. Depicted in Figure 7 are the outcomes of the data analysis.

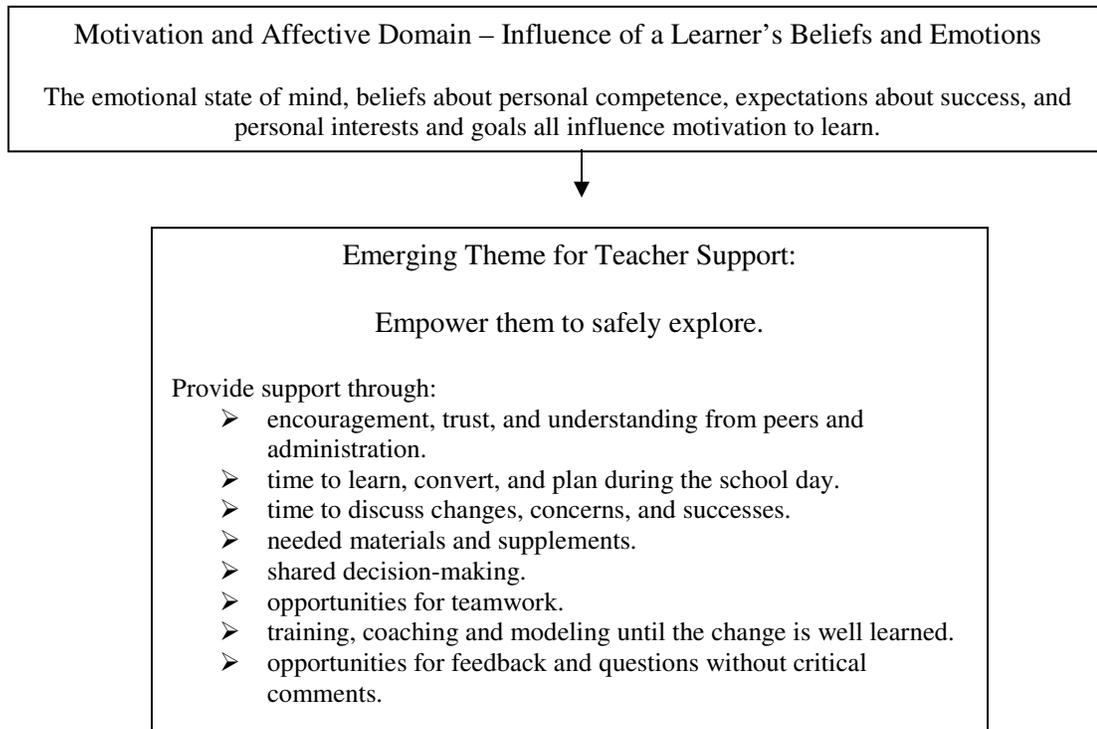


Figure 7. Synthesis of Qualitative Data with the Learner-Centered Motivation and Affective Domain.

Research question 3: Emphasize their professional contribution. The learner-centered developmental domain was used to frame this emerging theme (McCombs & Whisler, 1997). The developmental domain describes that individuals learn best when “material is appropriate to their developmental level and presented in an enjoyable, interesting, and challenging way” (p. 7).

Teachers suggested emphasizing how a teacher’s efforts contributed to the collective goals of the school as a way to lessen teacher reluctance to improvement efforts. For example, “Provide vertical teaming and grade level collaborations” (TRS-21-911) so teachers can see how they fit into the larger picture. Teachers should talk to

reluctant teachers and listen to their side and then “tell the person why the change would be a great improvement for the school and students” (TRS-25-1078). “Talk with that person and try to understand his/her point of view. Encourage that person to listen to why the changes are necessary and assure them this is for school improvement” (TRS-28-1203). A once-reluctant teacher commented, “Every quarter we have vertical meetings. Most of the time it’s with our peer group here, but also with other schools every so often. It’s so effective” (I2-1-14).

Teachers suggested that reluctance decreased when student benefit was realized. “Have a system in place to check data for improvements stemming from the change” (TRS-14-578). A once-reluctant teacher commented on the value of seeing the benefit to student achievement.

The good thing was the students in my low group were the ones who needed organization and that was a benefit and it did help them. On the test scores, after the first year of the reading program, the lower group moved up, even though the top group did not. That made me feel good about the program (I1-3-67). That’s why I changed my mind, even though I voted no for the reading program (I1-4-5). “Provide data that shows the success. Then collaboration and follow-up support are essential” (TRS-15-618).

Teachers also indicated that school-wide professional development efforts helped reduce teacher reluctance. “Use good and continuous professional development” (TRS-16-672). “Professional development is a must. To be a teacher you have to be a learner” (TRS-18-769). “Provide opportunities to attend professional development and allow time in the school day to share what has been learned” (TRS-20-828). “Use more school-wide

instructional professional development” (TRS-20-869). “Provide professional development to let teachers become more knowledgeable and part of new transitions” (TRS-15-611).

School documents supported that each teacher’s contribution became a part of the overall success of the school. The school improvement plans (Doc1; Doc2) and professional development plans for each building emphasized collective goals for instructional improvement (Doc3; Doc4).

An analysis of the data offered direction for creating conditions for sustained implementation of new practices, even for reluctant teachers by emphasizing their professional contribution. Listed in Figure 8 is a summary of the feedback.

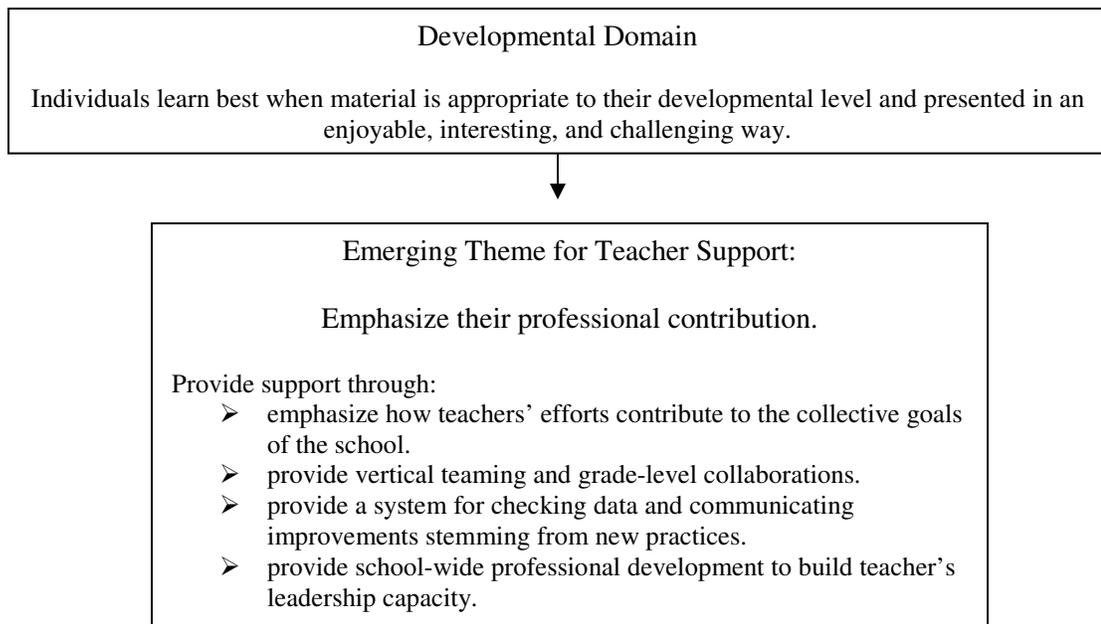


Figure 8. Synthesis of Qualitative Data with the Learner-Centered Developmental Domain.

Research question 3: Engage them in meaningful conversations. This emerging theme centered on the learner-centered personal and social domain in which “people learn from each other and can help each other learn through the sharing of their individual perspectives” (McCombs & Whisler, 1997, p. 8). Evidence of this theme was present in survey responses, interviews, and school documents.

Teacher responses that fell within this domain suggested the value of collaborative time with peers and teamwork for lowering teacher reluctance to new practices. Teachers benefited from time spent together discussing changes, solving problems, evaluating results, and planning for the next change. “I feel collaboration among staff is very important. Then we should be given time to discuss changes, concerns, and successes” (TRS-14-567). “Provide collaboration release time so teachers within their grade level can work on ways to implement change and give each other support” (TRS-15-621). “Team teaching always helps” (TRS-30-1316). “We do a lot with team teaching which makes it easier” (TRS-30-1318). An interview with a once-reluctant teacher indicated stressed teachers in her building found collaboration so valuable, they did it on their own time.

We didn’t have a lot of time for collaboration given to us, but our team of teachers always tried to eat lunch together and we used that time every day to bounce off the good things and talk about things that maybe we could change.

Our focus was to try and make this program a positive thing (I1-4-36).

Teachers also ask for opportunities to interact with other professionals outside their school who are engaged in change initiatives. “We need time to work with teachers in other schools to share ideas” (TRS-18-746).

Modeling and peer coaching were also cited as ways to reduce reluctance. “I feel a teacher would benefit trying new instructional practices by observing another teacher and modeling new materials” (TRS-17-731). “Offer modeling, peer observations, and constructive feedback and sharing” (TRS-19-783). “I believe having a peer coach or star teacher is the best” (TRS-13-542). “I like to see how others are using new strategies and techniques. I wish we had more opportunities to observe how others are using different strategies and also more collaborative time to share with co-workers” (TRS-15-638). A once-reluctant teacher described the value of peer modeling. “These are fellow teachers and it is well-received. When your own school has the presenters, maybe you are more receptive. They have earned your respect” (I2-2-3).

Documents indicated that both schools included the use of collaborative practices in their professional development plans (Doc3-12-14; Doc4-2-30). However, only one of the schools included the provision of collaborative time in their school improvement plan (Doc2-24-5). This corresponded with the teacher interviews that indicated one school provided time for collaboration, but the other did not. “Every Friday the kids are released an hour early and we meet. Yes, we have early release weekly. We meet mainly with our own grade levels” (I2-1-12). The other teacher reported, “We have this afternoon, but we haven’t always had that once a month. Back when we first started our reading program, if we’d had that, it would have helped” (I1-7-25).

Analyses of the data from teacher survey responses, interviews, and school documents reveal insight as to how to help reluctant teachers implement and sustain new practices by engaging them in meaningful conversations. A visual representation of the results is offered in Figure 9.

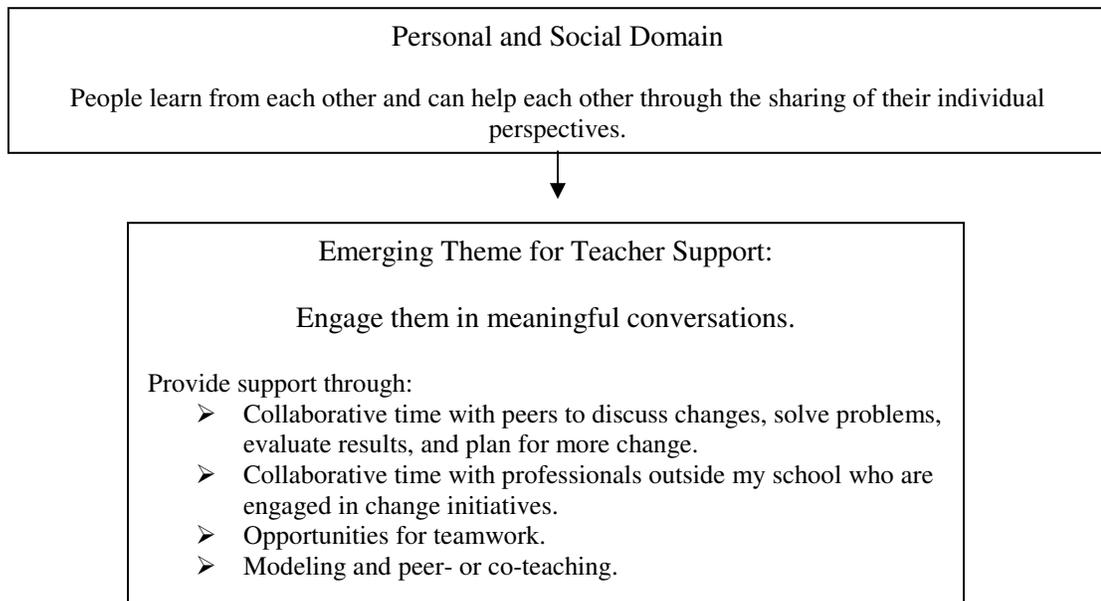


Figure 9. Synthesis of Qualitative Data with the Learner-Centered Personal and Social Domain.

Research question 4. Two learner-centered concepts were used to analyze the data on how to implement professional development practices to encourage sustained implementation of new methods for reluctant teachers. First, the learner-centered domains were used to help categorize the data around how learners learn (McCombs & Whisler, 1997). Next, the principles of learner-centered professional development (Hawley & Valli, 2000) were added to further clarify the qualitative data as queried by research question 4. Finally, the emerging themes of show them why and how, empower them to safely explore, emphasize their professional contribution, and engage them in meaningful conversations were used to make meaning from the different sources of feedback.

Show them why and how. Two learner-centered professional development principles (Hawley & Valli, 2000) surfaced as the theme of show them why and how emerged. Principle #1 suggested that the content of professional development should focus on student learning. Teachers needed direct guidance rather than general information. Principle #8 described the benefits of helping teachers develop deeper theoretical understandings because a teachers' existing beliefs, experiences, and habits directly impacted their willingness to apply new instructional strategies.

Feedback from teachers provided insight into the types of professional development provided teachers with the why and how which was considered helpful in reducing reluctance to new practices. Teachers asked for activities like book studies and investigative teams that helped teachers become informed practitioners of current research. "I think knowledge is power and if we want someone to change, we need to prove to them why. This can happen with professional development, although we are always told we don't have enough money for this" (TRS-32-1386).

Hands-on training and modeling followed by long-term collaborative support were other examples of professional development activities that helped reluctant teachers understand the why and the how. "Give detailed ways teachers can help their students. Give all teachers a chance at the training instead of information filtering down from someone else who got the training" (TRS-17-715). "I need time to research the new practice. I also like to be in-serviced on how the practice would look like in a classroom. I need guidelines to follow" (TRS-14-557). "Give teachers the information and continued support and materials needed until the changes are fully integrated" (TRS-20-841).

“Provide ongoing support and open discussion to solve problems that come up” (TRS-212-876).

School documents indicated that professional development practices to show the how and why were present in the school’s planning documents. A school improvement goal for one school broadly planned to purchase books on instructional strategies to be used with study groups (Doc1-6-5). Another school improvement goal was to use study groups and peer coaching to expand knowledge of instructional strategies (Doc1-6-7). However, the school’s professional development plan (Doc3) did not include the study group on instructional strategies or peer coaching as a scheduled activity. The lack of specific planning was evident in aggravated comments from a once-reluctant teacher from that school.

We started having a weekly meeting on dealing with behavior. We had a new behavior program, and they decided we would have weekly meetings. That changed my tutoring days, and when I asked the principal if we could do it at so and so time because we had like ten teachers who tutored after school, she just said we would have to change our tutoring time. When we started the reading meetings, we still had the behavior meetings and the tutoring (I1-2-44).

A school improvement goal for the other school was that all classrooms would use cooperative learning structures (Doc2-16-3). The professional development plan included an action plan to implement the goal (Doc4-1-29) that included study groups and modeling. The alignment between the district’s improvement goal and professional development plan elicited a positive comment from the teacher interviewed from that school. “We’ve had book studies and speakers. I’m thinking of inservices we’ve had on

cooperative learning and brain-based learning, which were relatively new methods. In the process of offering those, it helps overcome problems when trying something new” (I2-2-8).

Data from teacher survey responses, interviews, and school documents provides insight into professional development practices that help teachers sustain new practices by showing them why and how. The findings from the data are depicted in Figure 10.

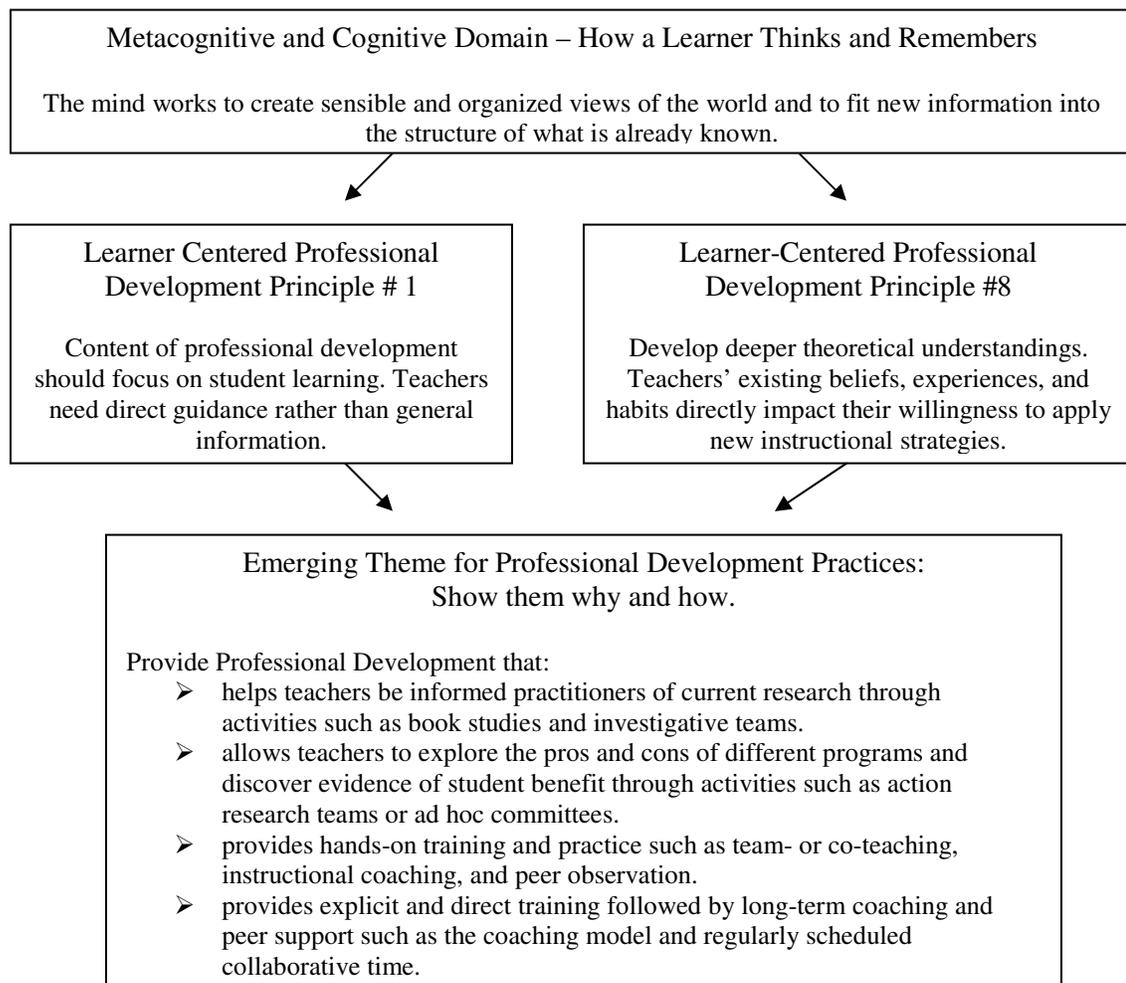


Figure 10. Synthesis of Qualitative Data with the Learner-Centered Metacognitive/ Cognitive Domain and the Principles of LCPD.

Empower them to safely explore. Two learner-centered professional development principles were found to exist within the data that produced the emerging theme of empower them to safely explore. Principle #6 proposed providing adequate follow-up and support for new practices. Principle #7 emphasized using non-threatening evaluations of how new practices are affecting student learning.

Teacher's survey responses and interview responses provided insight into the types of professional development practices empowered them to safely explore new practices. For example, teachers cited the need to have input into staff development before and during program implementation. Needs assessments and other venues for teacher input were cited as being important for teacher buy-in. "Allow teachers to be involved in choosing new practices and have ongoing professional development" (TRS-14-572). When asked how to help reluctant teachers in their group, teachers cited allowing them to express their thoughts and concerns and being part of the decision-making process. "Sometimes allowing them a chance to be part of the change engine helps" (TRS-24-1040). "To get teachers on board, involve them in the changes. Let the teachers share in the decision making" (TRS-16-658). The importance of respecting teachers' input was made evident in a comment from a once-reluctant teacher who had spent time researching before giving her suggestions for a new reading program. "It was very discouraging to find that all the work we had done [looking into reading programs] was not valued. And it was not" (I1-1-32).

Another implication under this theme was the need for professional development activities such as regularly scheduled release time during the work day to learn, convert, and plan. Teachers frequently cited lack of time as a major roadblock for change

implementation. “My first thought is, I won’t be given enough extra paid time to effectively make the change. I will have to use my own personal and family time. This is frustrating” (TRS-11-436). When describing roadblocks that had discouraged a once-reluctant teacher, she emphasized the lack of time. “We were told to use our own time to make and put together our materials after we adopted the program in the fall” (I1-4-18). “I already put in much extra time, and didn’t feel I could give any more. Maybe an extra hour here and there, but I didn’t feel I could put in what would be required of me” (I1-2-9).

Teachers also asked for instructional coaches and peer modeling so that new practices could be implemented and observed without fear of poor teacher evaluations. “Guide them through modeling” (TRS-20-864) and “give lots of education, discussion and support” (TRS-20-859). “The situation should be non-threatening. It helps to visit other classrooms and schools and to receive PD training from a dynamic instructor” (TRS-24-1042). “Allow time and respond positively whether the practice works or doesn’t work. Relate that we are all learning together” (TRS-29-1239). A once-reluctant teacher validated the need for non-threatening feedback through peers and instructional coaches (I1-6-14), as well as the need for understanding and trusting administrators (I1-6-38). She said of her current administration “Before, we felt we were being looked down on and criticized. Now it’s more like, ‘Hey, let’s do this together. We’re all in this together and we can do it!’ It’s okay to make mistakes” (I1-7-4).

Training was also suggested for professional development activities to lessen teacher reluctance. Most of the responses indicated the need for hands-on active training rather than passive in-services (TRS-16-650; TRS-17-706; TRS-17-715; TRS-18-774; I1-

2-12). Activities that provided opportunities for teamwork and collaborative problem-solving were also suggested to encourage trust, synergy, and collective buy-in (TRS-14-582; TRS-17-719; I1-7-7; I1-7-31). Teachers also asked for training in the use of technology to effectively sort and report assessment data information for teacher collaborations (TRS 14-578; TRS-15-618; I1-3-67; I1-4-5) as well as regularly scheduled collaborative time to evaluate results and make changes (TRS-15-621; TRS-14-567; I1-7-25). Implied but not explicitly stated was the need for training in the areas of collaborative processes, dealing with conflict, and coming to consensus. Teachers made comments alluding to the avoidance of addressing group member reluctance. “Try not to bring up sore issues with them” (TRS-29-1281). “Their way may still work best for them” (TRS-25-1097). “This is very challenging. Sometimes a reluctant or negative co-worker can pull you down. I try to stay positive about the change but yet empathize with their reluctance” (TRS-26-1132). “I don’t have much tolerance. Get rid of them” (TRS-33-1445).

Teacher’s responses from open-ended survey questions and interviews provide valuable insight into professional development practices that might help reluctant teachers implement and sustain new instructional practices. A synthesis of learner-centered perspectives with the qualitative data to support the emerging theme of empower them to safely explore is illustrated in Figure 11.

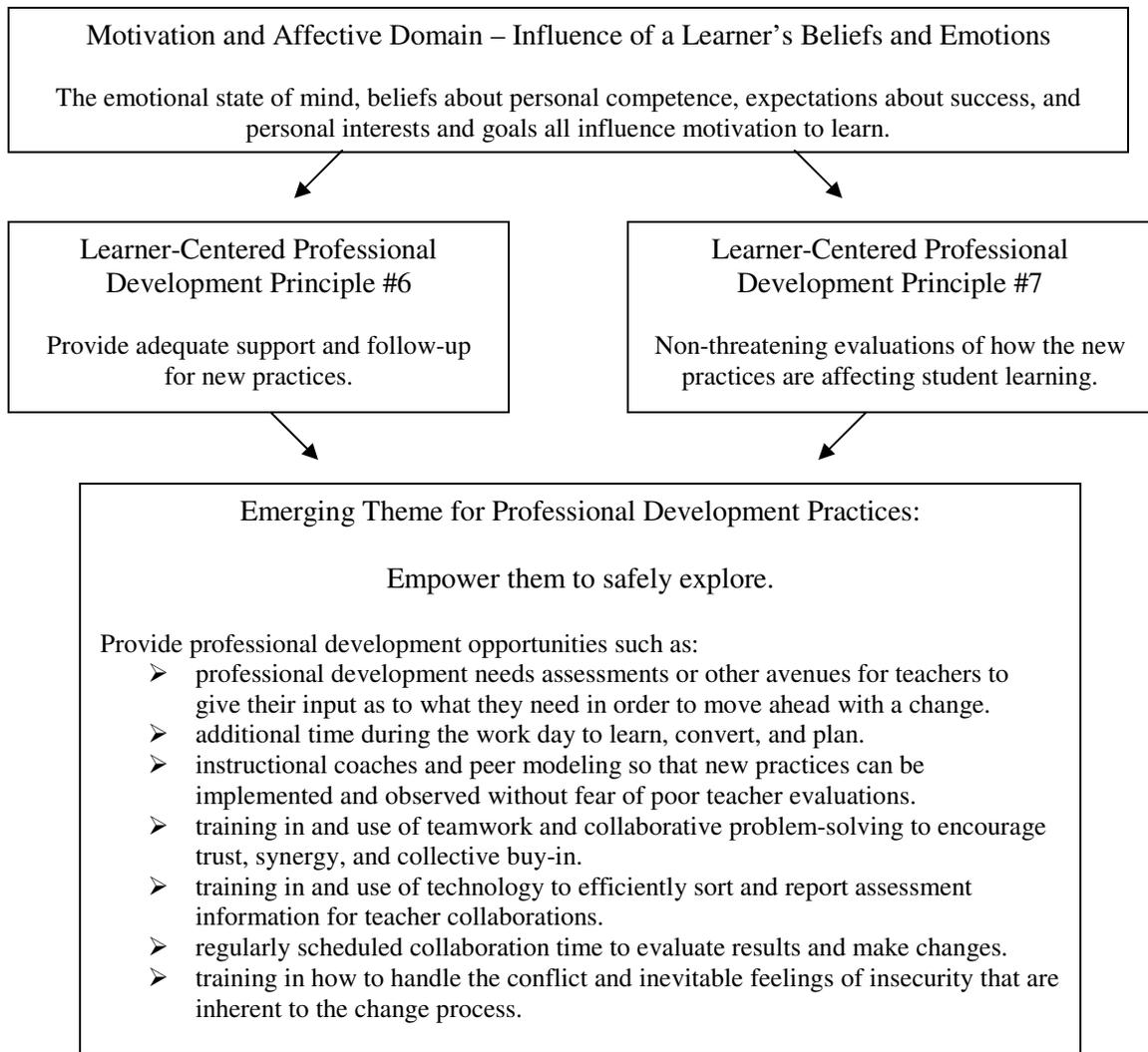


Figure 11. Synthesis of Qualitative Data with the Learner-Centered Motivation and Affective Domain and the Principles of LCPD.

Emphasize their professional contribution. Two learner-centered professional development principles were evident in the data that formed this emerging theme. Principle #2 stated that professional development activities should be generated in response to analyses of how well students are learning goals and standards (Hawley & Valli, 2000). Principle #9 proposed that professional development efforts should facilitate

systemic change through continuous experimentation and improvement and should be part of the structure, culture, and reward system of the workplace (Hawley & Valli).

Teachers asked for professional development activities that communicated and celebrated the school-wide instructional improvements stemming from an implemented change. “Show proof the strategies are working” (TRS-21-903). “Show the positive results of the change” (TRS-25-1055). “Show and celebrate successful outcomes” (TRS-25-1061). “Show us statistics and success!” (TRS-14-563). “Share the positive results that you have seen from the change” (TRS-28-1226). “Share the positive outcomes from your room!” (TRS-32-1418). “Allow them to see student successes. Take baby steps, implement change slowly. They must see the need for the change” (TRS-33-1431). “Show the evidence of an improvement because of the change” (TRS-34-1506).

Teachers also recommended that professional development activities be coordinated across the school and district to establish a sense of professional interconnectedness. There were recurring suggestions to build upon the feeling that everyone is working towards the same goal (TRS-25-1073; I1-7-4). “Make them feel part of the process” (TRS-25-1083). This is for our school’s improvement (TRS-28-1203). “Make it a group effort, and maybe add some incentives to help encourage. Show how the change will benefit everyone” (TRS-30-1326). “Show them how the change benefits our students and school” (TRS-34-1501).

Reluctant teachers also benefit from professional development activities that recognize the professional contributions already being made by the teachers. “Validate what they have been doing. Incorporate the new things methodically, one step at a time” (TRS-22-917). “Praise what they are doing, but show studies and new ideas that reinforce

why they should make a change (TRS-32-1410). “Point out things they are doing well, and ask them how to do the items that are working” (TRS-30-1293). When discussing her experience as a once-reluctant teacher, an interviewee talked about how unmotivated she felt when professional development responsibilities were pushed upon her without considering what she was already contributing.

I was already doing the math curriculum for the elementary, and was the representative at all the meetings we had to do for that. Plus, I coordinated and collected all the materials for each grade level and turned them in. So here was another responsibility on top of the many, many ones I already had (I1-1-8).

Data from school documents indicated that systems were already in place for the two schools to measure and celebrate school improvement successes. Professional development plans included evaluation methods for each activity such as parent and teacher surveys (Doc 4-3-22) and MAP index levels from computer generated performance reports from DESE (Doc.3-11-23).

An analysis of the perspectives of the teachers participating in this study resulted in implications for professional development activities that helped overcome reluctance to new practices by emphasizing professional contributions. Provided in Figure 12 is a visual representation of the feedback.

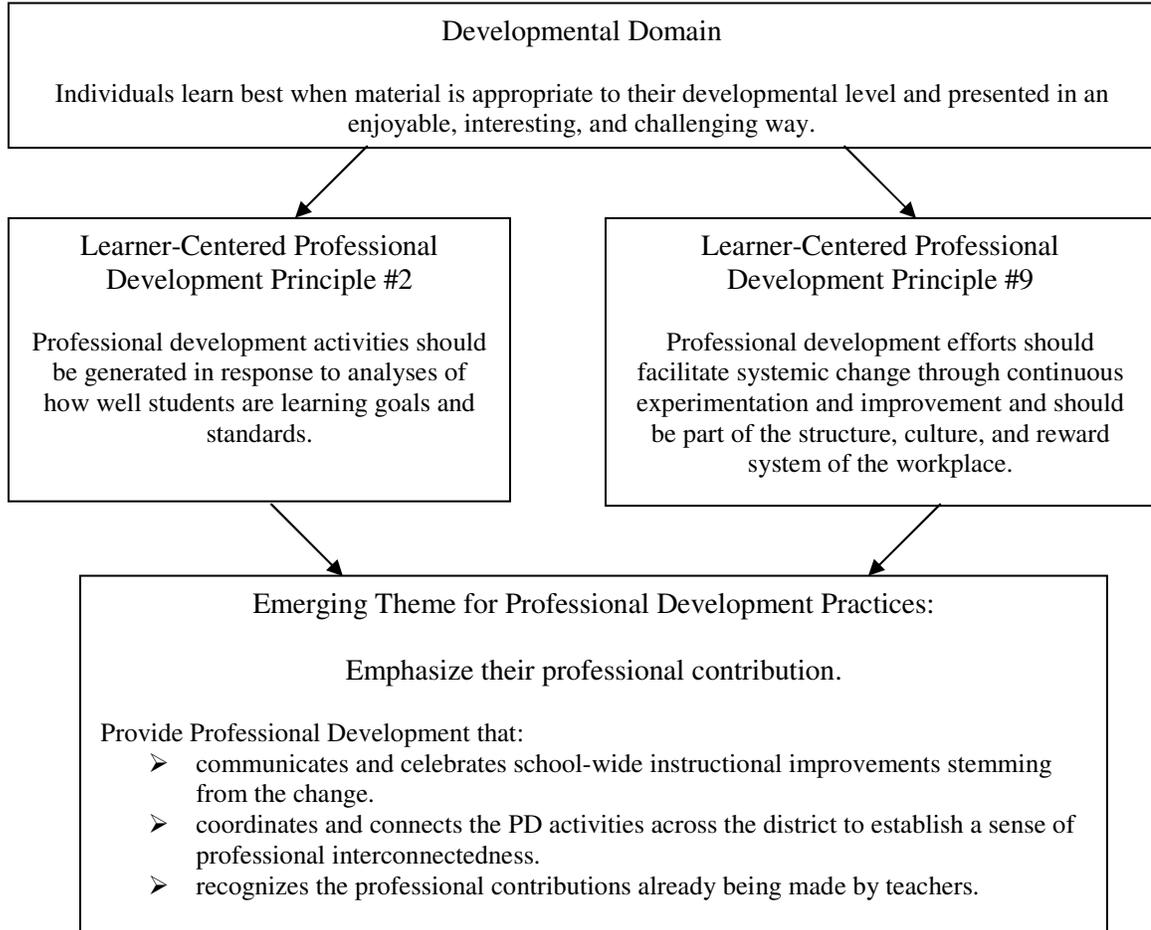


Figure 12. Synthesis of Qualitative Data with the Learner-Centered Developmental Domain and the Principles of LCPD.

Engage them in meaningful conversations. Learner-centered professional development principle #5 was reflected in the data that formed this theme. The principle stated that professional development should be organized around collaborative problem solving.

Many participant responses referred to the need for professional development that brought peers together to discuss, evaluate, compare, and plan. Regularly scheduled collaborations during the school day and other opportunities for peer discussion were recommended. “Tell them or show them your ideas in a different way or mind set. It’s easier to want to change when you can see it from a different point of view and if it will dramatically effect their students” (TRS-24-1036). “Talk about it together. What are their fears and feelings? Again, collaboration time together is key. I don’t feel we get nearly enough” (TRS-32-1390). “Provide small group meetings to share information on what is working in your class” (TRS-32-1400). “Volunteer to spend time working together in planning and observing each other teach” (TRS-33-1424).

Teachers also suggested the value of professional development activities that connected teachers with professionals outside their own school who are trying to address the same issues or implement the same initiatives. Venues included workshops, web-based educational sites, or visits to other schools (TRS-16-651; TRS-18-763). “Teachers need time to work with other teachers in other schools to share ideas” (TRS-18-746). “Teachers should be able to observe the change in practice from another teacher or school” (TRS-18-746). “Provide them time to meet with other teachers, principals, and attend seminars” (TRS-20-854). “Offer teachers handouts to websites, workshops, or individual contact names. That would be beneficial” (TRS-27-1145).

Teacher’s feedback on how to implement professional development activities to encourage sustained use of new practices resulted in implications for engaging them in meaningful conversations. In Figure 13 a summary of the data is presented.

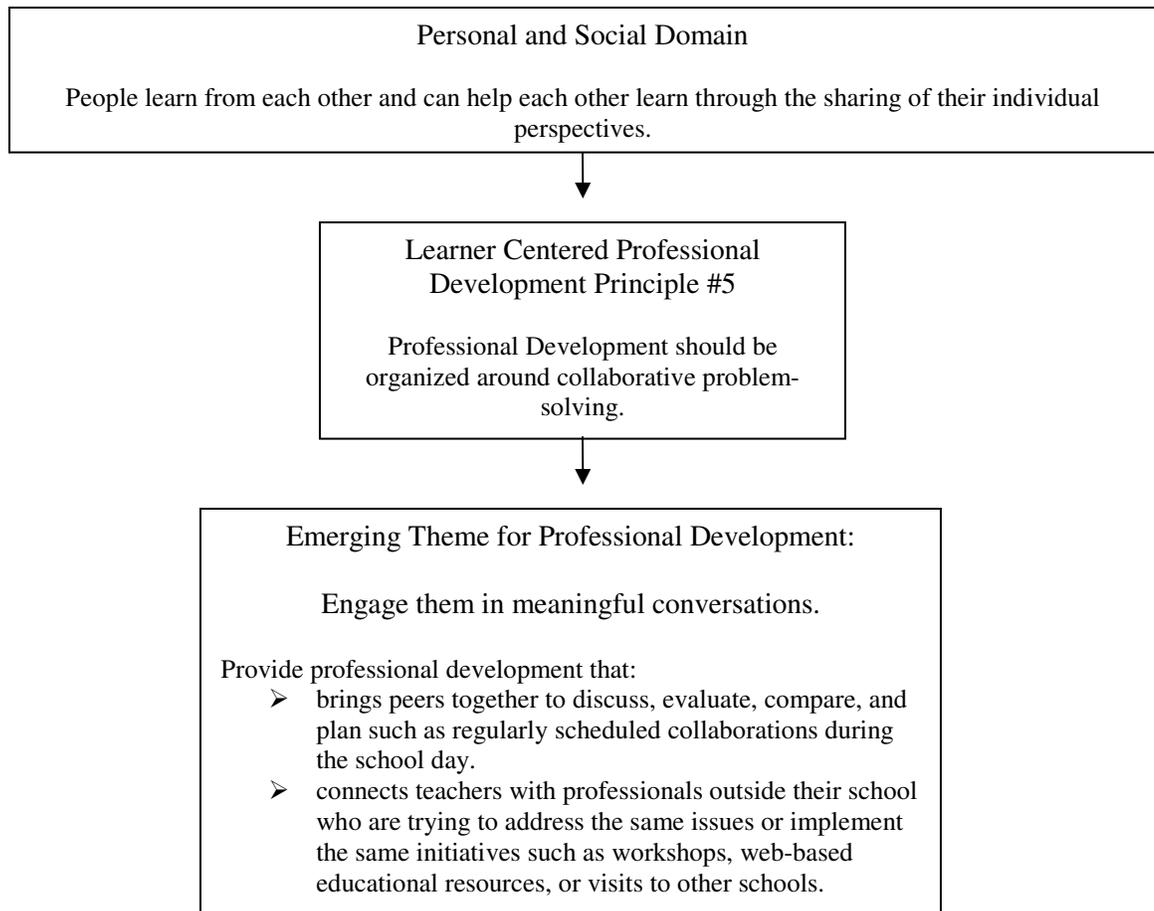


Figure 13. Synthesis of Qualitative Data with the Learner-Centered Personal and Social Domain and the Principles of LCPD.

Summary

Presented in Chapter Four were the demographic data for the study, along with a description of the data collection instruments. The *LCPD School Practices Survey* and an existing DESE database were used to collect the data from 244 kindergarten through third grade teachers from twenty schools for the quantitative portion of the query. An analysis of the data revealed significant positive relationships between the implementation of

learner-centered professional development, increased achievement, and decreased teacher reluctance toward new practices, change, and overall.

Teacher's responses to open-ended survey questions revealed that learner-centered professional development practices helped teachers implement and sustain new practices and overcome reluctance. Four emerging themes emerged that were used to make meaning of the teacher's responses concerning how to provide the support needed for successful change initiatives: (1) show them why and how; (2) empower them to safely explore; (2) emphasize their professional contribution; and (4) engage them in meaningful conversations.

In the final chapter, the researcher will present an overview of the study including the purpose, the design and procedures, chosen research questions, and a review of the research findings. Additionally, the chapter will include a discussion of the findings, the limitations and design control, implications for practice, and recommendations for future research.

CHAPTER FIVE

Summary and Recommendations

Introduction

The American Psychological Association's basic learner-centered principles (McCombs, 2003) were used as an underlying conceptual framework for this study of how to empower reluctant teachers through professional development to sustain implementation of new methods for increased student achievement. Learner-centered principles were used in order to overlay best practices for the learning of teachers within the context of best practices for the learning of all students (Hawley & Valli, 2000; McCombs & Whisler, 1997). The additional and interconnected constructs of systems theory, the change process, and teacher reluctance were also used to help provide structure to the queries. Found within this chapter are the purpose of the study, the design and procedures, findings, a discussion of the findings, limitations and design control, implications, and recommendations.

Purpose of the Study

The purpose of this mixed-design study was to examine what types of support and professional development encouraged once-reluctant teachers to engage in and sustain new practices for increased student achievement.

The questions that guided this explanatory mixed-design study were:

1. Is there a relationship between learner-centered professional development practices and student achievement? Specifically, this question will examine communication arts achievement.

2. Is there a relationship between the level of teacher reluctance and implementation of learner-centered professional development? Specifically, this question will examine the following indicators of teacher reluctance: (a) overall; (b) toward new practices; (c) toward change; and (d) toward systematic school improvement.
3. How might reluctant teachers be supported over the long term to ensure sustained implementation of new methods or programs?
4. How might school leaders implement professional development practices that encourage sustained implementation of new methods for reluctant teachers?

Design and Procedures

The population for this mixed-design study was kindergarten through third grade teachers from twenty schools selected randomly from a twelve county Midwestern region. The twenty surveyed schools represented fifteen districts and a total of 262 K-3 teachers.

Quantitative data were gathered through the administration of the *LCPD School Practices Survey*. Achievement data were collected from an existing DESE database in the form of the Spring 2006 third grade communication arts MAP performance index.

The subscales of the *LCPD School Practices Survey* were: (a) New Practices; (b) Change; and (c) Systematic School Improvement. The survey consisted of fifty-four scaled items, nine for each subtest. The internal consistency reliability for the three survey subscales was: New Practices (.791), Change (.891), and Systematic School Improvement (.864). Test-retest correlations from the three subscales were: New Practices (.912), Change (.865), Systematic School Improvement (.850, and Overall (.900). All of the correlations were significant at the 0.01 level.

The surveys were completed after obtaining written gatekeeper permission from the gatekeepers from each of the twenty schools. Each school's building administrator helped set up a faculty meeting so that the researcher could personally give out and collect the surveys. Due to the sensitive nature of the study of teacher reluctance, administrators were not in attendance during survey completion.

Pearson correlations was used to determine the strength of the linear relationship between a school's learner-centered professional development practices and their communication arts achievement, reluctance toward new practices, reluctance toward change, reluctance toward systematic school improvement, and reluctance overall. A *p* value of less than 0.05 was required for significance.

Qualitative data were partially garnered from the open-ended survey responses and personal interviews. The open-ended survey items asked teachers about their personal feelings toward change initiatives, and how to best help teachers implement new instructional practices. They were also asked the best way to encourage group members who were reluctant toward school improvement changes. Qualitative data were also obtained through the use of two follow-up interviews of teachers who identified themselves as being once-reluctant. The one-hour semi-structured interviews were comprised of open-ended questions at a location chosen by the interviewee.

Triangulation for the qualitative data was obtained through an analysis of documents in the form of school improvement and professional development plans from the schools of the interviewed teachers. The contents of the school documents were used to compare the school's formal policies and practices against the qualitative data from the teachers. Using the school documents as part of the analysis provided data triangulation

for a deeper and clearer explanation of the qualitative results (Creswell, 2003; Fraenkel & Wallen, 2003; Merriam, 1998).

Qualitative data were analyzed using an open and axial coding process to establish coding categories. Next, the data were sorted under the learner-centered domains of metacognitive/cognitive, motivation/affective, developmental, and personal/social (McCombs & Whisler, 1997). Finally, learner-centered professional development principles (Hawley & Valli, 2000) were used to help align the teacher's responses within a known model.

Findings of the Study

Quantitative

Research questions one and two were answered from the data gathered from the administration of the *LCPD School Practices Survey* and MAP achievement data. The survey data for each school was first averaged per teacher and then averaged by school ($n = 20$). Correlations were calculated using the *Statistical Package for the Social Sciences* (SPSS) version 13.0.

Question 1 examined the relationship between each school's implementation of learner-centered professional development practices and the students' communication arts achievement. The correlation resulted in a moderate positive statistical significance at the 0.01 level. In general, the results suggested that when primary schools implemented learner-centered professional development practices, their third grade communication art achievement tended to increase.

Question 2a through 2d investigated the relationship between each school's implementation of learner-centered professional development practices and the level of

teacher reluctance overall, toward new practices, toward change, and toward systematic school improvement. This data set analysis indicated that when schools implemented learner-centered professional development practices there were significant reductions in overall teacher reluctance, teacher reluctance toward new practices, and teacher reluctance toward change. However, teachers' reluctance toward systematic school improvement was not significantly impacted.

Qualitative

Questions 3 and 4 were investigated using qualitative data from open-ended survey responses and teacher interviews to determine how to support reluctant teachers to ensure sustained implementation of new methods. School documents were also examined to provide triangulation by comparing the school's formal policies and practices against the qualitative data from the teachers. After sorting and analyzing the data from all sources within the learner-centered domains and professional development principles, the following four themes emerged regarding how to encourage sustained implementation of new practices for reluctant teachers: *show me why and how; empower me to safely explore; emphasize my professional contribution; and engage me in meaningful conversations.*

Show me why and how. For question 3, open-ended survey responses and teacher interviews revealed that teachers were less reluctant when they were provided with information on why the initiative was important followed by explicit and sustained support while implementing. Teachers asked for support in the form of research that evidenced success, pros and cons of the program, logical information, and the reasoning behind the change. Reluctance was also lowered when there was evidence of student

benefit. Teachers also wanted hands-on training and practice as well as time for observations in classrooms using the practice. They asked for detailed guidelines and direct training. Additional support to lower the stress of change included the provision of clear examples, extra time, necessary materials, and someone to go to when questions arose.

For question 4, teachers suggested professional development activities that helped deepen their theoretical understandings about why and how to increase student learning followed by direct guidance rather than general information. Book studies and investigative teams were suggested as well as action research teams and ad hoc committees. They asked for hands-on training and practice through team- or co-teaching, instructional coaching, and peer observations. Sustained professional development support was also requested such as the coaching model and regularly scheduled collaborative time.

Empower me to safely explore. For question 3, teachers suggested that teacher reluctance was decreased when support was offered that helped them feel motivated, safe, and optimistic. Encouragement, trust, and understanding were important both from their peers and their administration. It helped to have time to learn, convert and plan during the school day rather than reducing their home and family time. Teachers asked for the materials and supplements needed to make the program work rather than cutting back to save money. Shared-decision making was a powerful tool for building consensus. Even reluctant teachers were motivated to try new things when allowed input into decisions that impacted their classroom. Opportunities for teamwork were suggested, as well as

training, coaching, and modeling until the change was well learned. An emphasis was placed on being provided a venue for feedback and questions without critical comments.

For question 4, the data revealed professional development activities that encouraged and supported reluctant teachers. An important venue was a good professional development needs assessment process so that teachers could give their input as to what they needed in order to move ahead with a change. Again, teachers asked for additional time during the day to learn, convert, and plan rather than giving up their personal time. Instructional coaches and peer modeling were suggested as a way for teachers to receive feedback as they implemented new practices without the fear of poor teacher evaluations. Training was also implied to handle the conflict and inevitable feelings of insecurity that are inherent to the change process.

Emphasize my professional contribution. For question 3, the data suggested that teachers felt less reluctant when provided supports that helped them feel positive about their contributions to the collective goals of the school. Responses suggested the need for systems for checking data and communicating and celebrating improvements stemming from new practices. Teachers also asked for more school-wide professional development to build leadership capacity within the school.

For question 4, professional development activities that facilitated systematic change were suggested. Teachers asked for school-wide celebrations to communicate gains in student achievement and other measures of improvement. They talked about the need for PD activities that were coordinated across the district to establish a sense of interconnectedness. Teachers were also more motivated to face change when the professional contributions they were already making were validated and recognized.

Engage me in meaningful conversations. For question 3, teachers confirmed they were less reluctant toward change when they were supported with ways to learn from each other through the sharing of their individual perspectives. Responses indicated a need for more collaborative time to spend with peers to discuss changes, solve problems, evaluate results, and plan for more changes. They also asked for venues to interact with professionals engaged in change initiatives outside their school in order to gain a wider perspective of the educational vocation. Teamwork was suggested along with modeling and peer- or co-teaching.

For question 4, teachers suggested that professional development activities organized around collaborative problem-solving helped reduce teacher reluctance toward new practices. Regularly scheduled collaborations during the school day were requested that would bring peers together to discuss, evaluate, compare, and plan. It was also suggested that teachers be trained to network with professionals outside their school who are trying to address similar issues or initiatives through workshops, web-based educational resources, or visits to other schools.

Discussion of the Findings

The following section examines the results of this study in relation to the current literature on learner-centered principles, systems theory, the change process, and teacher reluctance. Presented in Table 5 is a summary of this information which includes the current findings.

Table 5

Selected Literature

Researcher(s)	Learner-Centered Principles	Systems Theory	Change Process	Teacher Reluctance
McCombs and Whisler, 1997	X	X		
Hawley & Valli, 2000	X	X		
Fullan, 2003, 2005, 2005a	X	X	X	X
Kotter & Cohen, 2002			X	X
Senge, 1990		X	X	
DuFour et al., 2005	X	X	X	X
Sergiovanni, 2005		X	X	X
Guskey, 2003		X	X	X
Schmoker, 2005	X	X	X	X
Sparks, 2005	X	X	X	X
Kent, 2004		X	X	X
Orchard, 2007	X	X	X	X

Quantitative Findings

A significant relationship was found between the implementation of learner-centered professional development and increased student achievement. This supported the literature on systems theory and the change process concerning how to implement successful school improvement initiatives through effective professional development

practices. Researchers contended that school reform occurred first and foremost through the actions and beliefs of teachers, and that student achievement was directly impacted, either positively or negatively, by the quality of teaching being provided in the classroom (Guskey, 2003; Schmoker, 2005; Sparks, 2005). Therefore, the findings of this study supported current literature claiming that professional development practices would increase a teacher's instructional effectiveness when delivered through the same research-based learner-centered processes found most effective for students in the classroom (Hawley & Valli, 2000; McCombs, 2003; NSDC, 2001).

A significant relationship was also found between the implementation of learner-centered professional development practices and decreased teacher reluctance toward new practices, toward change, and overall. These findings supported the research of McCombs (2003) who contended that the use of learner-centered principles focusing on learners and their psychological needs was the key to unlocking the natural learning and motivational potential for even the most reluctant and estranged of learners. Researchers agreed and added that the application of learner-centered principles yielded the most impressive results when applied to entire systems, including the professional development of teachers (Fullan, 2005b; NPEAT, 2000).

The least impressive finding of this study was the lack of a significant relationship between the implementation of learner-centered professional development and decreased teacher reluctance toward systematic school improvement. A possible explanation might be informed through systems theory and the change process. Researchers found that living systems such as schools did not change effectively in response to top-down mandates and directives, but rather required built-in processes to alter the mental models

of teachers and other stakeholders in order to make systemic changes (Fullan, 2003). School systems tend to maintain entrenched, top-down management practices toward systems-related processes (DuFour et al., 2005). Fullan (2005a) agreed and warned that schools had not made measurable, significant progress toward utilizing systems thinking in over ten years.

Accordingly, the findings of this study seem to support Fullan's (2003) belief that in order to sustain systemic change, there had to be an increase in the amount of focused communication between and among individuals from the local school level, to the district or regional level, and to the state policy level. Meaningful communication and understanding between classroom teachers and the latter two levels, regional and state policy levels, may be slower to evolve than at the local school level. For example, teachers' comments from the open-ended survey questions indicated a general feeling of disconnection between the state policy level and their classrooms. "It would help if DESE first knew where they were going!" (TRS-14-590). "DESE doesn't know exactly what the finished result is going to look like, yet they ask us to follow along for the ride! This is what makes me a little uncomfortable about change" (TRS-15-595). "Over the years I have found these trends to be short on common sense and long on the extreme which causes them to be short lived. As a result, we are left in a constant state of flux" (TRS-4-145).

Qualitative Findings

The qualitative findings of this study informed the research questions concerning how to support reluctant teachers to ensure sustained implementation of new practices, and what types of professional development practices best provided the support. This

section will be discussed in order of the four themes that emerged during the analysis of the data: (1) show them why and how; (2) empower them to safely explore; (3) emphasize their professional contribution; and (4) engage them in meaningful conversations.

Show me why and how. The results of this study indicated that teachers were less reluctant when they were provided with information on why the initiative was important followed by direct and sustained support while implementing. This finding supports the learner-centered literature that suggested that a learner's mind works to make sense of new information by connecting it and applying it to their existing beliefs (McCombs & Whisler, 1997). Systems theorists also suggested that for reluctant teachers to internalize new teaching strategies, existing belief systems had to be known and understood (Fullan, 2001; Kent, 2004; Sergiovanni, 2005). This was congruent with change theorist who proposed the need for collaborative learning in order to compare existing belief systems with shared corporate realities (Fullan, 2001; Sergiovanni, 2005) because change was a learning process, first for the individual and then for the group (Fullan, 2003).

Therefore, effective professional development practices for sustained systemic change provided ways for teachers to make connections between emerging structural changes and entrenched mental models (Fullan, 2005a; Senge et al., 2000). Traditional passive staff development was not indicated to be effective when teachers passively listened to the views of outside experts (NPEAT, 2000). And while teacher reluctance was frequently used to explain failed initiatives, researchers suggested that it was often passive and ineffective staff development methods that were at fault (Casey & Morrow, 2004). Instead, learner-centered professional development (Hawley & Valli, 2000)

focused on activities that allowed teachers to process research by reading, discussing, and actively seeking answers for questions pertaining to problems in their own classrooms (Garet et al., 2001; NPEAT, 2000; Reynolds et al., 2006). Teachers involved in this study agreed, and suggested learner-centered activities such as book studies, investigative or action research teams, instructional coaching, co-teaching, peer observation, and regularly scheduled collaborations during the regular day.

Empower them to safely explore. The qualitative data from this study provided evidence that teacher reluctance was decreased when support was offered that helped them feel motivated, safe, and optimistic about the changes they were experiencing. Teachers indicated that when faced with change, they felt nervous and anxious, and frustrated. “I feel nervous and unsure until it is a proven practice” (TRS-8-323). “My first thought is that I won’t be given enough extra but paid time to effectively make the change. I will use my own personal and family time. This is frustrating” (TRS-11-436). This was in agreement with findings from change theorists who clearly acknowledged the emotionally charged and insecure nature of change implementation (Fullan, 2001; Guskey, 2002; Kotter & Cohen, 2002). Findings from this study also supported the learner-centered view that teachers’ feelings and expectations of success directly influenced their willingness to learn (McCombs & Whisler, 1997). Bolman and Deal (2003) reiterated that teachers did not like feeling anxious and incompetent, especially when their greatest basic desire was to make a positive difference in their students’ learning (Eaker et al., 2002; Fullan, 2003; Guskey, 2002). Yet teachers engaged in new practices often feel they were faced with real and immediate loss with only a hypothetical promise of long-term gain (Fullan, 2003).

Implications for professional development activities to lower teacher reluctance were found within the theme of empower them to safely explore. Adequate support and follow-up were recommended, especially in the area of freeing up time during the work day for collaborations and peer observations. Teachers also felt less threatened when they were provided feedback from peers and instructional coaches while they were learning new practices. They wanted to avoid criticisms and feelings of reduced worth through negative administrative evaluations. This agreed with research on systems thinking that living systems such as schools had to offer built-in processes to alter the mental models of teachers and other school stakeholders in order to make systemic changes (Fullan, 2001). Theorists warned against the deficit approach in which teachers felt professional development was planned by someone above them to fix what they were doing wrong (Senge et al., 2000). The deficit approach undermined the self-confidence of teachers and made them reluctant toward new practices. Professional development should be initiated by teachers as a non-threatening and ongoing process promoting professional growth without the connotation of teacher remediation (Bolman & Deal, 2003; Daresh, 2001; DuFour et al., 2005).

Emphasize their professional contribution. The data from this study revealed that teachers were motivated by a feeling of professional contribution toward the collective goals of their school. This was in agreement with systems theory that emphasized the powerful potential for educational gains when individual teachers realized their potential to collectively improve their school (Senge, 1990). Change theorists refer to teachers' need for feeling a part of a larger moral purpose, such as raising academic quality and closing the achievement gap for struggling learners (Fullan, 2005a; Kotter & Cohen,

2002). Change theorists also emphasized the importance of motivating teachers through short-term wins that affirmed new practices and increased the likelihood of sustained practices (Guskey, 2002; Kotter & Cohen).

The motivational importance of emphasizing teachers' professional contributions found in this study was in agreement with learner-centered professional development principles (Hawley & Valli, 2000). Researchers suggested that the application of learner-centered professional development principles yielded the most impressive results when applied to entire systems (Fullan, 2005b; McCombs, 2003; NPEAT, 2000). For example, teachers gained a sense of their part in the overall purpose of the school when they were given professional development opportunities to interact laterally and vertically throughout their system (Fullan, 2005a; Fullen et al., 2004). Other studies of factors that influenced the sustained use of new practices indicated the benefit of teachers having an ongoing process for seeing and celebrating the positive outcomes of applied strategies (Klingner et al., 2001). Teachers expressed that their confidence as teachers was deeply affirmed when they perceived that a new practice was benefiting students (Klingner et al.).

Engage them in meaningful conversations. The results of this study confirmed that teachers were able to overcome reluctance toward change by learning from each other through collaborative opportunities. This supported change and systems research that for systematic school improvement to occur, a collaborative culture must exist to overcome the fragmented individualism that traditionally characterized classrooms (Eaker et al., 2002; NPEAT, 2000). Fullan (2003) added that another role of collaboration was not to tell teachers what was best for students, but to provide a way for them to

discover it for themselves. For teacher communities to focus on and sustain instructional improvement, they needed cultures of instructional exploration and ongoing collaborative opportunities (Fullan, 2005a; Supovitz, 2002).

Systems and change theorists agreed that the professional development approach most promising for sustained change involved building the collective capacity of teachers to bring about positive change (Fullan, 2005a; Sergiovanni, 2005). Fullan warned that building collective ability required more than workshops and in-service activities. Rather, it required embedded processes of teamwork, evaluative inquiry, and other types of teacher collaboration (DuFour, 2005a; Sergiovanni, 2000; Sparks, 2005). Fullan (2001) emphasized the importance of teachers being able to collaboratively problem solve when faced with frustrating or challenging instructional roadblocks. Studies indicated that collaborative practices between teachers from the same school, subject, or grade level resulted in greater teacher coherence and changes in teacher practice (Garet et al., 2001).

Implications for Practice

The results of this study supported the value of implementing learner-centered professional development practices in order to encourage reluctant teachers to engage in and sustain new practices for increased student achievement. Quantitative results showed a statistically significant relationship between a school's level of implementation of learner-centered professional development, increased student achievement, and decreased teacher reluctance toward new practices and change. Qualitative results indicated that teacher reluctance was lowered in accordance with support and professional development practices that showed them how and why changes were necessary, empowered them to safely explore to find their own new meanings, emphasized or validated their

professional contribution as a result of the change, and engaged them in meaningful collaborative conversations.

The results of this study were consistent with other research that school leaders should learn about, apply, and support learner-centered professional development practices in order to bring about lasting school improvement (DuFour et al., 2005; Fullan, 2005; McCombs & Whisler, 1997). Understanding the transformational benefits of learner-centered practices should help overcome the pragmatic roadblocks of implementation such as the increased expense, time constraints, and the taxing reallocation of tasks among staff members (May & Zimmerman, 2003; NPEAT, 2000; Schmoker, 2005; Sparks, 2005). However, the trade off in terms of lost instructional potential should be considered (Sparks, 2004). This implies that traditional school schedules and allocation of time and funding may need to be reconsidered to better support the work of teachers as learners (May & Zimmerman; NPEAT; Schmoker; Sparks).

Another implication for schools is to consider learner-centered school initiatives such as Professional Learning Communities (PLC) (DuFour, DuFour, Eaker, & Many, 2006) which offers a model for developing a learning culture through a systematic set of collaborative processes. Teachers at PLC schools learn how to work together towards a common vision of improved learning for all school members – students and teachers. The model provides training and processes to develop the leadership capacity of all school members for a learning environment in which “innovation and experimentation are not viewed as tasks to be accomplished or projects to be completed but as ways of conducting day-to-day business, forever” (Dufour et al., p. 5). The PLC model contains

many of the supports found in this and other studies to support the sustained implementation of new practices and is supported by leading educational theorists such as Michael Fullan, Rick Stiggins, Mike Schmoker, Dennis Sparks, and Lawrence Lezotte (DuFour et al., 2005).

If collaborative practices are necessary for sustained school improvement, school leaders need to train teachers how to work together to avoid negative pitfalls (Guskey, 2003; Johnson, 2003). Collaboration is a learned skill that must move beyond comfortable conversations if belief systems and mental models are to be challenged and changed (Eaker et al., 2002; Schmoker, 2005; Sparks, 2005). This implies the need for explicit training in collaborative practices including conflict management and consensus-building.

A final implication from this study is the need to build connections between the individual practitioner and leaders at the regional and state policy levels (Fullan, 2003) to decrease teacher reluctance toward systematic school improvement. This implies the benefit of educating teachers about their venues for contributing input towards educational policies both locally and at the state level (Fullan). Participation in state and national teacher organizations would be another way to encourage teacher interaction with those making educational policy.

Limitations and Design Control

As with any research project, this study was subject to limitations. Through input and guidance from expert researchers throughout the course of this query, every effort was made to minimize the effects of the limitations on the findings. As listed below, the

limitations to this study were relative to the geographical area and the mixed-method research design:

7. The study sample was limited to a geographic region within the educational system of one Midwest state.
8. The validity of the quantitative data was limited by the degree of reliability and validity of the survey instrument.
9. The validity and reliability of qualitative data was limited by the researcher's own biases.
10. The researcher assumed that the participants were honest in their responses and interpreted the survey instrument and interview questions as intended.
11. The researcher assumed that the participants based their responses on their own experiences.
12. The study was limited in external validity or the degree to which qualitative data can be generalized to other situations.

The schools for this study were selected randomly to minimize geographic limitations. The validity of the *LCPD School Practices Survey* was strengthened through item stems that were derived from expert findings from the field of school restructuring and learner-centered practices (Hawley & Valli, 2000; McCombs & Whisler, 1997; NPEAT, 2000). The test-retest correlations from the three subscales of the survey were high ranging from an r of .850 to an r of .912. The internal consistency reliability for the three survey subscales was also high as indicated through the calculation of Chronbach's alpha.

The validity of the qualitative data was strengthened through the use of triangulation with interviews from different sites, school documents, existing databases, and member checks for accuracy of interpretation. The external validity was strengthened through the use of rich, thick description allowing readers to determine if the findings generalized into their own context.

Field testing using the test-retest method increased the clarity of the items to minimize interpretation errors by respondents and maximized the probability of valid responses. Furthermore, the researcher personally administered the surveys in the absence of building administrators in order to provide a safe setting for more accurate self-reporting on the sensitive topic of teacher reluctance.

Recommendations for Future Research

Findings from this study as well as expert research (Fullan, 2005b; McCombs, 2003; NPEAT, 2000) indicated that the systematic application of learner-centered professional development practices were beneficial in terms of implementing and sustaining instructional improvements. Yet this study evidenced that traditional, top-down practices were still the norm for some schools. Further research is needed to look at administrator reluctance toward new practices. What types of support are needed for administrators to make the commitment to create the conditions for sustained implementation of learner-centered professional development in their schools?

Furthermore, more needs to be known about how the increased leadership capacity for teachers engaged in learner-centered professional development impacts the roles and relationships up and down the traditional school hierarchy (DuFour et al., 2005). School improvement literature suggested an impending shift in the traditional

leadership role of administrators over teachers who were over students (Daresh, 2000). For learner-centered schools, school leaders are less of an authority figure as they became facilitators for teachers working together to reach collective goals (Bolman & Deal, 2003). Also implied is the need for more research on the impact to a school's learning community when distributed leadership is discontinued after an administrative change.

Continued research is also indicated in the area of student learning. If learner-centered professional development helps teachers become more accountable for their own learning, what types of learner-centered classroom practices have the same effect on students? Stiggins (2005) suggested that the traditional ranking that occurred with the assignment of grades was like a monetary reward system. If you received a high grade, you won. If you received a low grade, you lost. "Grades became the monetary system used to trigger what was believed to be the proper emotions associated with learning" (Stiggins, p. 70). Stiggins proposed a system of student self-assessment coupled with teacher support as a positive alternative to more traditional grading methods. Analyses of how learner-centered classroom practices impact sustained learning for students would be beneficial for improving student achievement. Also, if learner-centered classroom practices entrust more leadership to students, what happens when students move to a new setting that does not provide the same ownership motivation?

Another area for further research would be to look at how the restructuring of traditional schools into professional learning communities will impact the traditional job categories of public schools. Is teacher tenure a healthy component for a professional learning community? If time and support are critical for sustained implementation of new practices, how important will it be to hire instructional coaches and curriculum directors?

Preparing reports and organizing data for ongoing collaborations is time-consuming and requires the use of technological skills in order to be easily accessible and accurate. What new types of jobs will emerge, and what jobs will become obsolete or in need of redefinition?

Summary

The purpose of this study was to examine what types of learner-centered support and professional development encouraged once-reluctant teachers to engage in and sustain new practices for increased student achievement. A statistically significant relationship was discovered between the implementation of learner-centered professional development, increased student achievement, and decreased teacher reluctance to new practices, change, and overall.

Evidence of the need for and benefits of learner-centered professional development was also found in the qualitative data. Emerging themes concerning how to support reluctant teachers over the long term to ensure sustained implementation of new practices resulted in four categories: (1) show them why and how; (2) empower them to safely explore; (3) emphasize their professional contribution; and (4) engage them in meaningful conversations. The emerging categories were supported in the literature on learner-centered principles, systems theory, the change process, and teacher reluctance. Research, as suggested, could serve to further inform how to implement learner-centered practices for sustained school reform.

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Appendix A

Informed Consent

1. Informed Consent – Permission from District Administrator
2. Informed Consent Form – Building Principal
3. Informed Consent Form – Survey - Teacher
4. Informed Consent Form – Interview – Teacher

**Informed Consent
District Administrator**

Dear <Title> <First Name> <Last Name>,

I am seeking your permission for your elementary school(s)' participation in a research study entitled, An Examination of Learner-Centered Professional Development for Reluctant Teachers. I am examining the professional development practices that empowered reluctant teachers to implement and sustain improved instructional practices. The study will provide insight on how to better connect scientifically proven learner-centered practices for teaching students in the classroom to effective professional development practices for teachers. This project is part of my dissertation research for a doctoral degree in Educational Leadership and Policy Analysis from the University of Missouri-Columbia and may be published. Participants must be 18 years of age to participate.

Researcher: Patricia Orchard, University of Missouri-Columbia Doctoral Candidate, pdohc8@mizzou.edu, (417) 934-1174.

Dissertation Supervisor: Dr. Barbara Martin, 4105 Lovinger Hall, Central Missouri State University, (660) 543- 8823.

Purpose of the Study: The purpose of the study is to provide insight and understanding into the perspectives of teachers who are or who once were reluctant toward new practices. The study will address the following:

1. Is there a relationship between learner-centered professional development practices and student achievement? Specifically, this question will examine the following achievement indicators: (a) communication arts; (b) math; and (c) total communication arts and math.
2. Is there a relationship between the level of teacher reluctance and implementation of learner-centered professional development? Specifically, this question will examine the following indicators of teacher reluctance: (a) overall; (b) toward new practices; (c) toward change; and (d) toward systematic school improvement.
3. How might reluctant teachers be supported over the long term to ensure sustained implementation of new methods or programs?
4. How might school leaders implement professional development practices that encourage sustained implementation of new methods for reluctant teachers?

Procedures: With your permission, I will contact the elementary principal(s) seeking consent to meet with and administer a ten-minute, 57 item survey to the K-3 teachers. Due to the sensitive nature of teacher reluctance toward new practices, the principal will not be present during survey completion. An optional and detached form will also be distributed with the survey. The form is to recruit once-reluctant teachers who are willing

to participate in a follow-up interview to share their story. At any time, participants may withdraw without risk or penalty whether during or at the conclusion of the survey.

Confidentiality: The data from this survey will be coded and retained in a locked cabinet accessible only to the researcher. The surveys will be retained for a period of three years in a locked cabinet following the completion of the dissertation process and will then be shredded. The anonymity of participants will be protected as no names or identifying information will be used at any point in time including the published study itself.

Risks and Benefits: The risk of your school(s)' participation in this study is minimal. All names and sites will be coded or issued a pseudonym. The study is built around the learner-centered perspective that teacher reluctance is a natural part of the change process, and that the viewpoints of reluctant teachers should be better understood. The research gathered can provide insight into how to create the best conditions to reduce teacher reluctance toward new practices.

Injuries: It is not the policy of the University of Missouri to compensate human subjects in the event the research results in injury. The University of Missouri does have medical, professional, and general liability self-insurance coverage for any injury caused by the negligence of its faculty and staff. Within the limitations of the laws of the State of Missouri, the University of Missouri will also provide facilities and medical attention to subjects who suffer injuries while participating in the research projects of the University of Missouri. In the event someone from your district suffers injury as the result of participating in this research project, they are to immediately contact the Campus Institutional Review Board Compliance Officer at (573) 882-9585 and the Risk Management Office at (573) 882-3735 to review the matter and provide further information. This statement is not to be construed as an admission of liability.

If you are granting permission for the elementary school(s) in your district to participate in this study, please complete the attached consent form. A copy of this letter and your written consent should be retained by you for future reference.

Sincerely,

Patricia Orchard
Doctoral Candidate
University of Missouri-Columbia

Informed Consent

I, _____, give my permission for the elementary school(s) in the district to participate in the study entitled An Examination of Learner-Centered Professional Development for Reluctant Teachers conducted by Patricia Orchard. I understand that:

- Teacher's responses will be used for dissertation research and potential future publications.
- Participation is voluntary and may be withdrawn at any point in the process.
- The identify of the district, school, and survey participants will be protected at all times throughout the process as well as in all reports of the research.

I have read the material above, and any questions that I have posed have been answered to my satisfaction. I voluntarily agree to participate in this study.

Signature

Date

Informed Consent Form Building Principal

Dear Participant,

I would like to extend a personal invitation to you to participate in a research study entitled, An Examination of Learner-Centered Professional Development for Reluctant Teachers. I am examining the professional development practices that empowered reluctant teachers to implement and sustain improved instructional practices. The focus of this study is on learner-centered principles in order to connect scientifically proven practices for teaching students in the classroom to effective professional development practices for teachers. This study is part of my dissertation research for a doctoral degree in Educational Leadership and Policy Analysis from the University of Missouri-Columbia and may be published. You must be 18 years of age to participate.

Researcher: Patricia Orchard, University of Missouri-Columbia Doctoral Candidate, pdohc8@mizzou.edu, (417) 934-1174.

Dissertation Supervisor: Dr. Barbara Martin, 4105 Lovinger Hall, Central Missouri State University, (660) 543- 8823.

Purpose of the Study: The purpose of the study is to provide insight and understanding into the perspectives of teachers who are reluctant toward new practices. The study will address the following:

1. Is there a relationship between learner-centered professional development practices and student achievement? Specifically, this question will examine the following achievement indicators: (a) communication arts; (b) math; and (c) total communication arts and math.
2. Is there a relationship between the level of teacher reluctance and implementation of learner-centered professional development? Specifically, this question will examine the following indicators of teacher reluctance: (a) overall; (b) toward new practices; (c) toward change; and (d) toward systematic school improvement.
3. How might reluctant teachers be supported over the long term to ensure sustained implementation of new methods or programs?
4. How might school leaders implement professional development practices that encourage sustained implementation of new methods for reluctant teachers?

Procedures: With your permission, I will meet with and administer a ten-minute, 57 item survey to your K-3 teachers. Due to the sensitive nature of teacher reluctance toward new practices, I will ask that you not be present as the teachers complete their surveys. An optional and detached form will also be distributed with the survey. The form is to recruit once-reluctant teachers who are willing to participate in a follow-up interview to share their story. At any time, any participant may withdraw without risk or penalty whether during or at the conclusion of the survey.

Confidentiality: The data from this survey will be coded and retained in a locked cabinet accessible only to the researcher. The surveys will be retained for a period of three years in a locked cabinet following the completion of the dissertation process and will then be shredded. The optional form for a follow-up interview is detached and unconnected to the survey. Your school and each teacher's personal identify will be protected as no names or identifying information will be used at any point in time including the published study itself.

Risks and Benefits: The risk of your participation in this study is minimal. All names and sites will be coded or issued a pseudonym. The research gathered should be helpful in providing insight into how to create the best conditions to sustain improved practices for all teachers. The study is built around the learner-centered perspective that teacher reluctance is a natural part of the change process, and that the viewpoints of reluctant teachers should be better understood.

Injuries: It is not the policy of the University of Missouri to compensate human subjects in the event the research results in injury. The University of Missouri does have medical, professional, and general liability self-insurance coverage for any injury caused by the negligence of its faculty and staff. Within the limitations of the laws of the State of Missouri, the University of Missouri will also provide facilities and medical attention to subjects who suffer injuries while participating in the research projects of the University of Missouri. In the event you suffered injury as the result of participating in this research project, you are to immediately contact the Campus Institutional Review Board Compliance Officer at (573) 882-9585 and the Risk Management Office at (573) 882-3735 to review the matter and provide you further information. This statement is not to be construed as an admission of liability.

If your decision is to participate in this study, please complete the attached consent form. A copy of this letter and your written consent should be retained by you for future reference. I will be contacting you in the near future to set up a time to meet with and survey your K-3 teachers.

Sincerely,

Patricia Orchard
Doctoral Candidate
University of Missouri-Columbia

Informed Consent

I, _____, agree to participate in the study entitled An Examination of Learner-Centered Professional Development for Reluctant Teachers conducted by Patricia Orchard. I understand that:

- Teacher's survey responses will be used for dissertation research and potential future publications.
- Participation is voluntary and may be withdrawn at any point in the process.
- Identities will be protected at all times throughout the process as well as in all reports of the research.

I have read the material above, and any questions that I have posed have been answered to my satisfaction. I voluntarily agree to participate in this study.

Signature

Date

Informed Consent Form Teacher - Survey

Dear Participant,

I would like to extend a personal invitation to you to participate in a research study entitled, An Examination of Learner-Centered Professional Development for Reluctant Teachers. I am examining the professional development practices that empowered reluctant teachers to implement and sustain improved instructional practices. The focus of this study is on learner-centered principles in order to connect scientifically proven practices for teaching students in the classroom to effective professional development practices for teachers. This study is part of my dissertation research for a doctoral degree in Educational Leadership and Policy Analysis from the University of Missouri-Columbia and may be published. You must be 18 years of age to participate.

Researcher: Patricia Orchard, University of Missouri-Columbia Doctoral Candidate, pdohc8@mizzou.edu, (417) 934-1174.

Dissertation Supervisor: Dr. Barbara Martin, 4105 Lovinger Hall, Central Missouri State University, (660) 543- 8823.

Purpose of the Study: The purpose of the study is to provide insight and understanding into the perspectives of teachers who are reluctant toward new practices. The study will address the following:

1. Is there a relationship between learner-centered professional development practices and student achievement? Specifically, this question will examine the following achievement indicators: (a) communication arts; (b) math; and (c) total communication arts and math.
2. Is there a relationship between the level of teacher reluctance and implementation of learner-centered professional development? Specifically, this question will examine the following indicators of teacher reluctance: (a) overall; (b) toward new practices; (c) toward change; and (d) toward systematic school improvement.
3. How might reluctant teachers be supported over the long term to ensure sustained implementation of new methods or programs?
4. How might school leaders implement professional development practices that encourage sustained implementation of new methods for reluctant teachers?

Procedures: If you agree to participate, I will ask you to complete a ten minute, 57 item survey. A separate and detached form offers an invitation for once-reluctant teachers to tell their story through a separately scheduled follow up interview with the researcher. Teachers willing to participate in an interview are asked to list a contact number or email. The separate form is unattached and will not compromise the anonymity and confidentiality of survey responses.

Confidentiality: The data from this survey will be coded and retained in a locked cabinet accessible only to the researcher. The surveys will be retained for a period of three years in a locked cabinet following the completion of the dissertation process and will then be shredded. The optional form for a follow-up interview is detached and unconnected to your survey. Your school and personal identify will be protected as no names or identifying information will be used at any point in time including the published study itself.

Risks and Benefits: The risk of your participation in this study is minimal. All names and sites will be coded or issued a pseudonym. The research gathered should be helpful in providing insight into how to create the best conditions to sustain improved practices for all teachers. The study is built around the learner-centered perspective that teacher reluctance is a natural part of the change process, and that the viewpoints of reluctant teachers should be better understood.

Injuries: It is not the policy of the University of Missouri to compensate human subjects in the event the research results in injury. The University of Missouri does have medical, professional, and general liability self-insurance coverage for any injury caused by the negligence of its faculty and staff. Within the limitations of the laws of the State of Missouri, the University of Missouri will also provide facilities and medical attention to subjects who suffer injuries while participating in the research projects of the University of Missouri. In the event you suffered injury as the result of participating in this research project, you are to immediately contact the Campus Institutional Review Board Compliance Officer at (573) 882-9585 and the Risk Management Office at (573) 882-3735 to review the matter and provide you further information. This statement is not to be construed as an admission of liability.

If your decision is to participate in this study, please complete the attached consent form. A copy of this letter and your written consent should be retained by you for future reference.

Sincerely,

Patricia Orchard
Doctoral Candidate
University of Missouri-Columbia

Informed Consent

I, _____, agree to participate in the study entitled An Examination of Learner-Centered Professional Development for Reluctant Teachers conducted by Patricia Orchard. I understand that:

- My responses will be used for dissertation research and potential future publications.
- My participation is voluntary and may be withdrawn at any point in the process.
- My identity and that of my employing institution will be protected at all times throughout the process as well as in all reports of the research.

I have read the material above, and any questions that I have posed have been answered to my satisfaction. I voluntarily agree to participate in this study.

Signature

Date

Informed Consent Form Teacher Interview

Dear Participant,

I would like to thank you for your recent participation in my research study entitled, An Examination of Learner-Centered Professional Development for Reluctant Teachers. I am now entering the second phase of the study which involves follow up interviews of both teachers who identified themselves as once-reluctant and the administrators of those teachers.

You indicated that you had once been reluctant to a change initiative in your district, and that you would be willing to participate in a follow-up interview. This consent is to gain your permission for the interview.

I am examining the professional development practices that empowered reluctant teachers to implement and sustain improved instructional practices. The focus of this study is on learner-centered principles in order to connect scientifically proven practices for teaching students in the classroom to effective professional development practices for teachers. This study is part of my dissertation research for a doctoral degree in Educational Leadership and Policy Analysis from the University of Missouri-Columbia and may be published. You must be 18 years of age to participate.

Researcher: Patricia Orchard, University of Missouri-Columbia Doctoral Candidate, pdohc8@mizzou.edu, (417) 934-1174.

Dissertation Supervisor: Dr. Barbara Martin, 4105 Lovinger Hall, Central Missouri State University, (660) 543- 8823.

Purpose of the Study: The purpose of the study is to provide insight and understanding into the perspectives of teachers who are reluctant toward new practices. The study will address the following:

1. Is there a relationship between learner-centered professional development practices and student achievement? Specifically, this question will examine communication arts achievement indicators.
2. Is there a relationship between the level of teacher reluctance and implementation of learner-centered professional development? Specifically, this question will examine the following indicators of teacher reluctance: (a) overall; (b) toward new practices; (c) toward change; and (d) toward systematic school improvement.
3. How might reluctant teachers be supported over the long term to ensure sustained implementation of new methods or programs?
4. How might school leaders implement professional development practices that encourage sustained implementation of new methods for reluctant teachers?

Procedures: If you agree to participate, I will ask you to join me for a one hour semi-structured interview comprised of open-ended questions at a location of your choice. The

interview will be informal and may seem more like a discussion. Feel free to answer the questions that you choose, and pass on those that you do not wish to answer. You may withdraw participation at any time should you wish without risk or penalty whether during or at the conclusion of the survey.

Confidentiality: The tapes and transcripts of this study will be retained in a locked cabinet accessible only to the researcher. Tapes will be erased upon approval of verification of accuracy of the transcript by you. Transcripts and documents will be retained in a locked cabinet for a period of three years following the completion of the dissertation process and will then be shredded. Your identity will be protected as no names will be used at any point in time including the published study itself.

Risks and Benefits: The risk of your participation in this study is minimal. The study is built around the learner-centered perspective that teacher reluctance is a natural part of the change process, and that the viewpoints of reluctant teachers should be better understood. None the less, in discussing your perceptions and opinions regarding your experiences, it is extremely imperative that I assure you of the care given to anonymity and confidentiality of your identity within the study. All names and sites will be issued a pseudonym. Your interview responses will be taped and transcribed verbatim. You will be given the opportunity to verify the transcribed interview or accuracy of what was stated and what you intended. All edits, deletions, and clarifications will be made immediately in order to comply with your right to voluntarily release data and your comfort as a participant in my study. The research gathered should be helpful in providing insight into how to create the best conditions to sustain improved practices for all teachers.

Injuries: It is not the policy of the University of Missouri to compensate human subjects in the event the research results in injury. The University of Missouri does have medical, professional, and general liability self-insurance coverage for any injury caused by the negligence of its faculty and staff. Within the limitations of the laws of the State of Missouri, the University of Missouri will also provide facilities and medical attention to subjects who suffer injuries while participating in the research projects of the University of Missouri. In the event you suffered injury as the result of participating in this research project, you are to immediately contact the Campus Institutional Review Board Compliance Officer at (573) 882-9585 and the Risk Management Office at (573) 882-3735 to review the matter and provide you further information. This statement is not to be construed as an admission of liability.

If your decision is to participate in this study, please complete the attached consent form. A copy of this letter and your written consent should be retained by you for future reference.

Sincerely,
Patricia Orchard
Doctoral Candidate
University of Missouri-Columbia

Informed Consent

I, _____, agree to participate in the study entitled An Examination of Learner-Centered Professional Development for Reluctant Teachers conducted by Patricia Orchard. I understand that:

- My responses will be used for dissertation research and potential future publications.
- My participation is voluntary and may be withdrawn at any point in the process.
- My identity and that of my employing institution will be protected at all times throughout the process as well as in all reports of the research.

I have read the material above, and any questions that I have posed have been answered to my satisfaction. I voluntarily agree to participate in this study.

Signature

Date

Appendix B

Survey Instrument

1. *LCPD School Practices Survey*
2. Form for a follow-up interview
3. *School Practices Survey* field test statistics

Respondent Number _____

Code Number _____

**Learner-Centered Professional Development (LCPD)
School Practices Survey**

Directions: The purpose of this survey is to look at how people think schools and districts could be changed for the better. The survey helps you assess what you believe your school or district *should have* in terms of policies and practices and what policies and practices your school or district *already has*.

For each item, check the box that best represents your beliefs.

#	Item	Strongly Disagree	Disagree	Neutral Opinion	Agree	Strongly Agree
1.	I believe that professional development should focus on what students are to learn and how to address the problems students might have in learning specific content material.					
2.	Professional development in my school focuses on what students are to learn and how to address the problems students might have in learning specific content material.					
3.	Activities for staff development should be generated in response to analyses of the differences between the goals and standards for student learning and actual student achievement.					
4.	The staff development at my school is generated in response to analyses of the differences between the goals and standards for student learning and actual student achievement.					
5.	In terms of professional development, teachers should be actively involved in selecting what they are going to learn and how to go about gaining the new information.					
6.	Teachers at my school are actively involved in selecting what they are going to learn and how to use the new information.					
7.	I want my professional development to be embedded the day-to-day routine as I work collaboratively with other teachers to improve instruction.					
8.	Professional development at my school is embedded in the day-to-day practices of teachers through collaborative activities aimed at improving instruction.					
9.	I want to be involved in professional development with my collaborative peers. It is important to reduce teacher isolation.					
10.	The professional development at my school is organized around collaborative problem solving that reduces teacher isolation.					
11.	I am willing to engage in change initiatives if I have adequate follow-up and support from my school.					
12.	My school provides adequate follow-up and support for new instructional practices.					
13.	I think the value of the professional development at my school should be evaluated based on how new practices affected student learning.					

#	Item	Strongly Disagree	Disagree	Neutral Opinion	Agree	Strongly Agree
14.	The professional development program at my school is evaluated based on how new practices affected student learning.					
15.	I believe that it is important for me to move beyond comfortable and familiar practices by reading, discussing, and thinking about current educational research.					
16.	My school encourages teachers to read, discuss, and think about current educational research in order to move beyond comfortable and familiar practices.					
17.	I work collaboratively with my peers to continue using new practices after the initial support for the initiative is gone.					
18.	The professional development program at my school supports collaborative practices between teachers in the same school, subject, or grade level.					
19.	As a teacher, I welcome new practices that enable me to analyze student assessment data in order to guide their progress toward clear and shared academic goals.					
20.	My school expects teachers to analyze data in order to guide student progress toward clear and shared academic goals.					
21.	I value working collaboratively with a team to implement new practices that help all students successfully meet high standards.					
22.	Teachers at my school work collaboratively in teams to implement new practices that help all students successfully meet high standards.					
23.	I try new practices that help all students to link prior knowledge and new information in ways that are challenging and meaningful.					
24.	My school's curriculum is structured to help all students link prior knowledge and new information in ways that are challenging and meaningful.					
25.	I believe that I can find the right instructional practices to help all students learn, even those with low motivation, low ability, or very dysfunctional homes.					
26.	My school expects teachers to find the right instructional practices to help all students learn, even those with low motivation, low ability, or very dysfunctional homes.					

#	Item	Strongly Disagree	Disagree	Neutral Opinion	Agree	Strongly Agree
27.	I believe that instructional practices should avoid stereotyping students, such as tracking or labeling.					
28.	Instructional practices at my school avoid stereotyping students, such as tracking or labeling.					
29.	It is important for me to change my instruction by working collaboratively with other teachers based on changing standards and student performance expectations.					
30.	My school provides an effective collaborative system for instructional improvements based on changing standards and student performance expectations.					
31.	I have developed a positive attitude toward change and ongoing learning for both my students and myself.					
32.	My school implements change in such a way as to generate positive feelings for ongoing learning for students and faculty alike.					
33.	I willingly participate in collaborative problem solving with teachers in my same school, subject, or grade level in order to alter existing beliefs that might limit our ability to change.					
34.	Teachers in my school are provided with time and support to participate in collaborative problem solving with teachers in the same school, subject, or grade level.					
35.	Change efforts should be accompanied with professional development and an organizational commitment to continuous experimentation and improvement.					
36.	Change efforts in my school include adequate professional development and an organizational commitment to continuous experimentation and improvement.					
37.	It is important for teachers to work from the precept that learning is a never-ending process of change in order to reach all students.					
38.	Teachers in my school work from the belief that learning is a never-ending process of change in order to reach all students.					
39.	Conflict is natural during the change process, so it is important for those who disagree to develop collaborative relationships.					

#	Item	Strongly Disagree	Disagree	Neutral Opinion	Agree	Strongly Agree
40.	Conflict as a natural part of change is acknowledged at my school. Differing views can be shared and considered at a professional rather than personal level.					
41.	I believe that change is essential to further the professionalism of teaching. Change unleashes the energies and furthers the commitment of teachers to their work.					
42.	At my school, change is considered essential to furthering the professionalism of teaching and adequate support is provided for a healthy change process.					
43.	Teachers working together to solve problems leads to more impacting school improvement than when teachers are told how to solve problems from an authority figure.					
44.	Teachers at my school are encouraged to work together to solve problems rather than being told what to do from an authority figure.					
45.	I believe that professional development is central to continuous school improvement, and that ongoing school improvement initiatives benefit the nation's educational system.					
46.	My school provides effective professional development for ongoing school improvement that better the nation's educational system as a whole.					
47.	I should be a contributing member of a collective effort to improve the school's capacity to help all students learn at high levels.					
48.	My school values teachers as contributing members of a collective effort to improve the school's capacity to help all students learn at high levels.					
49.	I believe that school policies should promote relations among teachers and between teachers and administration in order to build stronger communities of learning.					
50.	The policies at my school promote relations among teachers and between teachers and administration in order to build stronger communities of learning.					
51.	Schools should have policies for decision making that include students as well as teachers, parents, and community.					
52.	My school has policies for decision making that include students as well as teachers, parents, and community.					

Invitation for a Follow-up Interview

The purpose of this study is to gain a better understanding of why educators are reluctant to try new practices, and to emphasize respect for teachers' expertise and beliefs. If you were once-reluctant and would be willing to participate in a follow-up interview, please enter a contact email address or phone number below. Participants will be selected randomly. The one hour semi-structured interview will be comprised of open-ended questions at the location of your choice. Our time together will be informal, and may seem more like a discussion. Your confidentiality will be protected at all times.

Phone number or email address for further contact

Your perspective will help others. Thank you!

Table 2

Field Test Results of Mean Ideal and Real School Practices

School Practice	Participant Level							
	Administrator (n=41)		Certified Staff (n=471)		Classified Staff (n=131)		Parent (n=38)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Curriculum and Assessment								
Ideal	4.65	.57	4.50	.62	4.01	.96	4.02	.72
Real	2.86	.69	2.89	.73	3.12	.84	3.08	.74
Motivation and Expectations								
Ideal	4.74	.46	4.63	.62	4.06	1.16	4.54	.61
Real	3.01	.69	3.17	.79	3.19	.94	3.36	.62
Staff Development								
Ideal	4.80	.47	4.64	.65	4.14	.96	4.19	.65
Real	2.82	.78	2.74	.85	3.10	.87	3.18	.75
Leadership and Policy								
Ideal	4.43	.69	4.38	.70	3.96	.91	4.00	.69
Real	2.63	.84	2.61	.79	3.07	.85	2.95	.80
Instructional Management								
Ideal	4.62	.60	4.45	.68	4.04	.94	4.02	.73
Real	2.78	.91	2.88	.83	3.00	.95	3.12	.75
Social Environment								
Ideal	4.80	.38	4.69	.61	4.24	1.01	4.48	.64
Real	3.18	.65	3.08	.85	3.23	.92	3.29	.86
Instruction								
Ideal	4.58	.42	4.49	.64	3.87	1.03	4.29	.58
Real	2.88	.66	2.93	.71	3.03	.86	3.27	.76

Note: Respondents were asked to identify the degree to which they agreed that a practice should be occurring in their schools (*ideal*) and the degree to which they agreed that the same practice was actually occurring in their schools (*real*). A 1-5 scale is used: 1 = Strongly Disagree, 5 = Strongly Agree.

Appendix C

Interview Questions

1. Interview questions – teachers

Interview Questions - Teachers

Personal Experience

1. On the *School Practices Survey*, you indicated you had once been reluctant toward a change initiative, but later became committed to the process. Would you briefly share your experience?

Research Question 5: How might reluctant teachers be supported over the long term to ensure sustained implementation of new methods or programs?

2. What was your biggest roadblock in terms of going along with the change?
3. You ended up supporting the initiative. What happened that changed your mind?
4. Did you have peer support during the change process?
 - a. How was that provided?
 - b. How did it help?
 - c. What other support was there when you needed it?
 - d. What was missing that would have helped?
5. How did the experience change you professionally?
 - a. How do you view your journey from being reluctant to feeling comfortable with new practices in terms of your professional identity?
 - b. Were there periods of alienation and frustration?
 - c. Where are you now? Do you feel reaffirmed and motivated again as an educational professional?

Research Question 6: How might school leaders implement professional development practices that encourage sustained implementation of new methods for reluctant teachers?

6. Describe the leadership within your school.
7. What role did the leadership of your school play in your story?
8. Was there something about your school culture that helped you reengage in (or distance yourself from) the change initiative?
9. What components of your school's professional development program:
 - a. Were helpful in your transition? Why?
 - b. Were harmful in your transition? Why?

In conclusion, regarding your experience with feeling reluctant to try new practices, are there any other thoughts that you would like to share with me?

Appendix D

Forms

1. Document Summary Form
2. Interview Overview Form

Appendix E

Data Codes

1. List of Data Codes

List of Data Codes

TSR	Teacher's response from the open-ended survey questions
I1	Interview 1
I2	Interview 2
Doc1	School improvement plan document from interview 1
Doc2	School improvement plan document from interview 2
Doc3	Professional development plan document from interview 1
Doc4	Professional development plan document from interview 2
I1- <u>1</u> -15	Underlined section indicates the page number of data
I1-1- <u>15</u>	Underlined section indicates the line number of data

VITA

Patricia D. Orchard was born on March 17, 1957, in Mountain View, Missouri, the daughter of William E. and Marilyn V. Sharp. After attending public school at Mountain View, she received the following degrees: B.S in Elementary Education from Missouri State University in Springfield, Missouri (1986); M.S. in Guidance and Counseling from Missouri State University in Springfield, Missouri (1995); Certification as a K-8 Principal from Missouri State University in Springfield, Missouri (2000); and Ed.D. in Educational Leadership and Policy Analysis from the University of Missouri-Columbia (2007). She and her husband are the parents of Mikael and Adriane, and the grandparents of Abigail and Mayan. Presently, Patricia is the principal at Glenwood Elementary at West Plains, Missouri, and an adjunct instructor at Southwest Baptist University in Mountain View.