EXPLORATION OF THE IMPACT OF THE SAME DEVELOPMENTAL
MENTOR TRAINING WITHIN THE INFRASTRUCTURE OF
TWO DIFFERENT SCHOOL DISTRICTS

A Dissertation

by

AMY ELIZABETH ANDERSON

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2009

Major Subject: Curriculum and Instruction
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May 2009

Major Subject: Curriculum and Instruction
ABSTRACT

Exploration of the Impact of the Same Developmental Mentor Training Within the Infrastructure of Two Different School Districts. (May 2009)

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Co-Chairs of Advisory Committee: Dr. Elizabeth Foster
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The literature is convincing that the revolving door presently occurring in schools as new teachers prematurely leave the profession is difficult not only on children and families, but also school staff and school-wide improvement efforts. However, there is also adequate literature that supports new teacher induction coupled with a qualified mentor as a means for reducing new teacher attrition. While mentoring has been found to be an effective approach for retaining new teachers in the profession, there has been little attention on the supports needed to implement and sustain such programs.

The primary purpose of this study is to identify those components of infrastructure necessary to support the implementation and sustainability of a developmental mentoring program. Using literature from the areas of Improving Workplace Conditions and Educational Systemic Change along with Project CREATE and the national standards for mentoring programs a model for infrastructure is proposed. These components along with implications for including or deleting infrastructure from program design are considered. The outcomes from this study will be
useful for those in the midst of creating and improving district level mentoring programs. The findings offer the potential to identify the root causes of instability reducing the possibility of program ineffectiveness in planning, implementing, sustaining and improving developmental mentoring programs.
DEDICATION

This dissertation is dedicated to all my teachers in life. To those of you who taught me in the classroom to those of you who taught me about life, I give my thanks for your dedication, encouragement and support along the way. My perseverance through this entire process grew as a result of your influence on my life.

Dedicated to my dear friends, your constant reminders about the end goal, completion of the degree kept my fires burning. Your unending agreement to either listen to me read aloud or read my writing proved to be invaluable in this experience.

Dedicated to Mom, Dad and the rest of my family who continually showed interest in my new interests. Your words of encouragement and praise allowed me to stay focused on the task at hand and come to the end of this long journey successfully.

Dedicated to my husband Sid and daughter Allyse, your unconditional love and patience through this process has meant so much. For the hours spent at the dining room table writing and re-writing, thank you for giving me that time. For that I will always know how important your role was in helping me complete this chapter of my life.
ACKNOWLEDGEMENTS

With respect and appreciation, I thank the members of my Committee for your encouragement, guidance, perseverance, gentle nudges, understanding, willingness to share your knowledge, kindness and belief in my ability. My wish is that one day I may share these same characteristics with others as you have shared them with me. Thank you.
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CHAPTER I
INTRODUCTION

Chapter I is the introduction to this study. Sections contained in the chapter are background information, statement of the problem, research questions, significance of the study, theoretical framework, operational definitions and summary.

Background Information

In the early 1980s, a number of reports began publicizing the possibility of severe teacher shortages across the nation due to increasing numbers of students enrolling in public education and an increasingly aging teaching force (Ingersoll, 2001b). Interestingly, this shortage continues today. More than two million new teachers will be needed during the next decade to meet the growing shortages (Carter, Foster, & Cormier, 2006; Heller, 2004; Kelley, 2004). This overwhelming need to staff classrooms with qualified teachers is occurring right now. It was estimated that an astounding 3.5 million new teachers will need to be hired by 2013 (Jalongo & Heider, 2006). Only twenty percent of this teacher shortage can be attributed to the graying teaching force and subsequent retirements (Darling-Hammond, 2003). What then is causing this shortage?

This dissertation follows the style of American Educational Research Journal.
Shortage Due to Attrition

It is reported that the current teacher shortage is, in fact, not due to those leaving the profession upon retirement eligibility or to the quantity of students graduating from teacher preparation programs, as there are far more qualified teachers produced than are actually hired (Dove, 2004). Studies indicate that public schools are experiencing a rapid growth in student population. It is estimated that the growth rate in the United States has increased over one million additional students in an eight-year period as of 2007 (Carter & Foster, 2007). The growing teacher shortage cannot be blamed on the rising student population alone, but the alarming numbers of new teachers leaving the profession as well. It has been reported that teacher attrition is the single most significant factor in creating shortages of qualified teachers in the United States and nationally (Dove, 2004). In fact, teaching has one of the highest attrition rates of any profession with an average yearly turnover rate of 13.2% as compared to other professions at 11% such as nursing, law and higher education (Dove, 2004; Heller, 2004; Watkins, 2005).

The numbers of new teachers leaving the profession soon after entering is staggering. As many as 30% of new teachers leave within their first three years of teaching and as many as 50% leave by the end of their fifth year (Boreen & Niday, 2000; Brooks-Young, 2007; Carter & Foster 2007; Carter, et al., 2006; Dangel, 2006; Darling-Hammond, 2003; Dove, 2004; Fulton, Yoon & Lee, 2005; Odell, 2006; Resta, 2006). The rate of new teacher attrition is reported to be even higher in inner-city and urban settings where attrition might be as much as 50% greater than that of teachers in other
High Cost of Attrition

Teacher attrition is a costly phenomenon for public education today both nationally and internationally. In addition to the great expense associated with teacher attrition, the systemic cost to the organizational structure of the schools is high. The resulting constant wave of change in schools is most costly to the students and their families. Jalongo and Heider (2006) suggest that, “the single most important factor in a child’s education is the quality of his or her teachers” (p. 380). This makes the constant flux of professional staff in school a major contributor to the issues of inadequate school performance (Ingersoll, 2001b). It is clear that high turnover leads to less stability and less effective learning environments for children. The human cost of new teacher attrition seems to be most discouraging. High teacher turnover results in fewer quality teachers in classrooms. Ingersoll (2001b) suggests, “one of the pivotal causes of inadequate school performance is the inability of schools to adequately staff classrooms with qualified teachers” (p. 499).

New Teacher Induction and Mentoring

Clearly, teacher attrition impacts recruiting, hiring and training of new teachers (Brooks-Young, 2007). It is also clear that large teacher turnover negatively impacts the continuity of school improvement measures in school as well as student achievement. Over the last few decades, education reformers have worked to increase teacher retention in an effort to reduce the negative side effects connected with attrition. A noteworthy
attempt to improve retention has resulted in the development of new teacher induction programs across the United States. An integral part of most new teacher induction entails the assignment of a mentor to a novice teacher. This has become a common practice across districts and the states (Alliance for Excellent Education, 2005; Carter & Foster, 2007; Carter, Foster, & Cormier, 2006; Fulton, Yoon, & Lee, 2005; New Teacher Center at the University of California, 2006; Russell, 2006; Wood & Waarich-Fishman, 2006).

**Developmental Mentoring**

The term mentor was used circa 700 BC in Homer’s *The Odyssey*. Mentor was the name of the trusted friend of Odysseus who took care of his son (Odyssey, 2008). While the term mentor is certainly not new, its use to describe a formal relationship designed to prepare, train and retain quality teachers in the profession does not begin to appear in the literature until sometime in the early 1980s (Odell & Hulling, 2000). During this time, there was an increased level of attention given to providing structured support designed to ease new teachers into the profession basically as they transition from being students of teaching to teaching students (Huling & Resta, 2001; Odell & Huling, 2000; Resta, 2006). The earliest descriptions of the mentoring relationships found in the literature focus on the mentor being a buddy, a friend and a confidant (Carter & Foster, 2007; Hayes, 2006; McNally & Martin, 1998; Thies-Sprinthall, 1986). However, as the field of mentoring has matured, so have the conceptualizations that have formed the practice. Mentoring now encompasses much more in today’s complex educational community than it did 10 or 20 years ago (Carter & Foster, 2007).
While there are several models of supervision and mentoring currently practiced, one that has shown potential to promote a significant amount of growth in new teachers is the developmental mentoring model. There are several basic elements of developmental mentoring that separate it from other models: (1) it involves the mentor understanding the novice teacher’s current level of cognitive processing; (2) it also uses the novice’s level of cognitive processing in the coaching plan for the novice teacher (Reiman & Thies-Sprinthall, 1998); (3) rather than episodic professional activities, developmental mentoring involves activities designed to promote and extend growth over significant time, usually throughout the induction period that may last through the first three years of the novice teacher’s experience in the profession; (4) growth tends to and will continue to occur if there is sufficient positive interaction, guidance, support and challenge; and (5) it maintains that each novice teacher is a unique individual (Odell & Huling, 2000; Reiman & Thies-Sprinthall, 1998). This model differs from many others in that it focuses on both the mentor and novice; additionally, it examines growth from multiple perspectives and in both formative and summative modes.

*Infrastructure Necessary for Implementation and Sustainability*

A critical, but not yet adequately explored area of research involves investigating the infrastructure required or rather the internal supports necessary within a district for implementing and sustaining a successful mentoring program. Educational systemic change is a process that occurs when particular communities of educators are engaged in the social act of “constructing, co-constructing, and reconstructing meaning within their practice” (Gill & Griffith, 2004, p. 250). The movement toward a sustainable district-
wide novice teacher induction program including the critical component of mentoring involves a series of interrelated and essential elements to promote success of the program thus being an example of systemic change.

A network of supports, people and processes has been identified as essential when designing support for novice teachers (Fulton et al., 2005). The infrastructure necessary for implementing, sustaining and improving a developmental mentoring program becomes a critical framework against which comparison of various outcomes can be made. While there is little literature directly related to infrastructure within the context of developmental mentoring, studies on infrastructure related to improving workplace conditions (Center for Comprehensive School Reform and Improvement, 2007; Delaney & Arredondo, 1998; Johnson & Reiman, 2006) and educational systemic change are common (Adelman & Taylor, 2003, 2007; Fullan, 2000; Joseph & Reigeluth, 2005; McLeskey & Waldron, 2006; Silins & Mulford, 2004).

Dissatisfaction with workplace conditions has been identified as a reason teachers leave the profession (Carter et al., 2006; Charlotte Advocates for Education, 2004; Darling-Hammond, 2003; Heller, 2004; Jalongo and Heider, 2006). Five conditions that have been identified which positively influence teachers’ perceptions about the profession include: (1) securing time for collaborative work with colleagues, (2) working with a positive and supportive principal, (3) feeling empowered through mutual decision-making experiences, (4) participating in ongoing professional development experiences, and (5) having adequate resources (Adelman & Taylor, 2007; Miller, George, & Fogt, 2005; Sterbinsky, Ross, & Redfield, 2006). When these
supportive workplace conditions are in place, teachers feel greater satisfaction in their work, therefore increasing the likelihood they will remain in the profession. These five conditions, that promote workplace satisfaction, begin to form the foundation of the infrastructure necessary for a developmental mentoring program. Just as these five conditions may be linked to a developmental mentoring program infrastructure, the support system related to the change process will be useful in this investigation.

Since the implementation of a system-wide developmental program is a large scale innovation involving many participants, the infrastructure components for systemic change are important to consider. The infrastructure elements related to systemic change are (1) key individuals, (2) resources, and (3) accountability. The key people identified as the teacher participants (Curtis & Stollar, 1996), school leadership (Curtis & Stollar, 1996; Sterbinsky, Ross, & Redfield, 2006) and central office administrators (McLeskey & Waldron; Sterbinsky et al., 2006) play an important role in setting up a system of pressure and support that is required for program improvement (Fullan, 2000). The resources identified within this infrastructure include both monetary funding and time commitments necessary for implementing, sustaining and improving the innovation (Adelman & Taylor, 2007; Miller, George & Fogt, 2005; Sterbinsky et al., 2006). The last element of infrastructure related to systemic changes focuses on program accountability. Both ongoing benchmark assessments used to determine program progress as well as end-of-term formative assessments for program evaluation have been determined critical in systemic change success (Adelman & Taylor, 2003; Joseph & Reigeluth, 2005; Miller et al., 2005; McLeskey & Waldron, 2006). In addition to the
information gleaned from positive workplace conditions research as well as systemic change processes, there are two sources of particular interest to researchers of mentoring practices and infrastructure. They include the recent work of Huling and Resta (2007) through Project CREATE and Association of Teacher Educators’ (ATE) work in collaboration with Phi Delta Kappa (Odell & Huling, 2000).

In a recent presentation on Project CREATE, Huling and Resta (2007) identified a set of ten infrastructure supports that correlate with district level retention of new teachers. The ten supports are:

1. Common planning period
2. Mentor stipend
3. Documentation of mentor/mentee work
4. Same teaching assignment
5. Mentor handbook
6. Guidelines for time spent mentoring
7. Novice teacher support sessions
8. Principal’s understanding of the mentor role
9. On-going mentor training
10. Use of program evaluation results

This study identifies infrastructure components directly related to the sustainability of a developmental mentoring program. Additional work in this area has contributed the only set of national standards for mentoring, (Odell & Huling, 2000).
The national standards formulate a mentoring framework comprised of six major dimensions related to creating quality mentoring experiences for novice teachers. Four of the dimensions are related to implementing, sustaining and improving the mentoring program. The four dimensions related to infrastructure are: Program Purposes (Dynak, Schwille & Nagel, 2000), School, District, University Cultures and Responsibilities (Wolfe, Bartell & DeBolt, 2000), Mentor Preparation and Development (Schwille & Dynak, 2000), and Program Administration, Implementation and Evaluation (Reiman & Dynak, 2000).

The information gained from studies on workplace conditions, systemic change, national standards for mentoring and induction and infrastructure will serve an important role in this study as two different school districts are examined in relation to their infrastructure systems. The purpose of this study is to determine how infrastructure affects the outcomes of two developmental mentor programs.

**Statement of the Problem**

There is no doubt that teacher attrition, related to new teachers leaving the profession prematurely and in significant numbers, is a critical problem that school districts around the nation face each year. In addition, there is substantial research supporting the positive outcomes of having trained mentors work with novice teachers during their first years in service (Gardiner, Grogan & Enomoto, 2000; Reiman & Thies-Sprunghall, 1998: Resta, 2006; The NEA Foundation, 2001; Yendol-Hoppey & Dana, 2006). In fact, mentoring has not only been accepted as a critical practice during the
induction years across the United States, (Carter et al., 2007) but it has also been identified as the single most cost-effective component of new teacher induction models (Odell & Huling, 2000). Indeed mentoring is no longer considered an optional element in the induction process, but rather an essential part of novice teacher induction (The NEA Foundation, 2001). Mentoring is credited with playing a key role in induction programs that have been determined to be a success (Flores, 2006; Wood & Waarich-Fishman, 2006).

The problem rests not with the addition of mentors within induction programs, but rather with the means to implement, support, train and engage mentors in a systematic change model that includes appropriate evaluation of both a formative and summative nature. Those means related to implementation, support, training and engagement will be explored as infrastructure supports critical to success in a developmental mentoring program.

The kinds of supports inherent in the structure of the district or school where developmental mentoring is being implemented vary greatly. It is evident that infrastructure plays an important role in implementing, sustaining and improving innovations. What sort of infrastructure is necessary for implementing, sustaining and improving a developmental mentoring program? How does this infrastructure affect the implementation of, and the sustainability and improvement of a developmental mentoring model? How does this infrastructure or lack thereof affect the sustainability of the developmental mentoring model?
Research Questions

1. What district level infrastructure components may have aided or interfered with attaining the developmental mentoring goals in the two districts?

2. How do the developmental mentoring program outcomes differ between two districts both from a developmental construct and best practices standpoint?

Significance of the Study

For this review of the literature it is evident that little attention has focused on the attributes of system-wide infrastructure that impact innovation, in particular, the success of a developmental mentoring program. The literature is replete with information on new teacher attrition, novice and mentor teacher needs, needs for mentor training, induction models, and successful mentoring programs and even implementing and sustaining innovations; however, from this review of the literature, significant studies identifying infrastructure components of a developmental mentoring program that may ease implementation and increase the likelihood of sustainability of the program are scarce or even non-existent.

The intention of this study is to identify those necessary supports for implementing a developmental mentoring model as well as those supports necessary for sustaining and improving the initiative. Those in the midst of creating district level mentoring models will have the advantage of findings from this study, which when considering the kinds of system-wide supports needed to carry out their plans will guide them in ensuring adequate systemic infrastructure. Both information from successfully
implemented programs as well as information from improving workplace culture and educational systemic change theories will be utilized in identifying the infrastructure needed for implementing and sustaining a district level system-wide developmental mentoring model.

This study has the potential to identify the root causes of possible instability in programs and create a failsafe for innovators that protects them from folly in their planning, implementing, sustaining and improving of innovations related to developmental mentoring programs.

**Theoretical Framework**

*Cognitive Developmental Theory*

The theoretical framework that supports this study as well as the work of developmental mentoring is adult cognitive developmental theory. The understanding of adult cognitive developmental theory and adult learning has been revised significantly in the last 20 years (Reiman & Thies-Sprinthall, 1998). It was not long ago that adulthood was considered a time of cognitive stability and gradual decline (Sprinthall & Thies-Sprinthall, 1998). However, during this time the understanding of how adults change through cognitive developmental domains has received much attention (Johnson & Reiman, 2007).

Historically, Jean Piaget’s (1970) theory on cognitive developmental theory has been the most well known in the field of education (Stanton, 1993). While Piaget’s model ranges from ages two to adolescence, other theorists have used his basic
principles of stage growth in constructing and analyzing developmental stage theories for adults as well (Knowles, Holton & Swanson, 1998). David Hunt’s work on Conceptual Systems Theory (Hunt, 1971; Miller, 1981), and Lawrence Kohlberg’s (Johnson & Reiman, 2007; Kohlberg, 1969) development of the moral and ethical decision making domain have contributed to the unique quality of individualized support for new teachers that is a part of developmental mentoring (Kagan, 1992; Sprinthall & Thies-Sprinthall, 1998). Like children, adult’s cognitive development moves from rather concrete to more abstract functions (Trotter, 2006).

Concerns-Based Adoption Model

Frances Fuller’s work on the typical concerns of student teachers (Reiman & Thies-Sprinthall, 1998) provides the framework for later work in the development of the Concerns Based Adoption Model originally proposed by Hall, Wallace and Dossett in 1973. Fuller’s early work focused on the concerns of student teachers whereby she identified similar kinds of concerns that student teachers expressed throughout their early pre-service experience (Reiman & Thies-Sprinthall, 1998). However, more recent work identifies these same levels of concern in any individual participating in an innovation (Hall & Hord, 2006). The Concerns-Based Adoption Model along with the Stages of Concern Questionnaire will serve as critical data in considering the implementation and use of the innovation of developmental mentoring.
Operational Definitions

The following operational definitions are intended for use throughout this study.

**Developmental mentoring** - involves interventions that promote individual development through focus on personal and professional growth through cognitive, conceptual, reflective, and moral domains. This support occurs over a substantial amount of time (Reiman & Thies-Sprinthall, 1998).

**Induction** - is a period of time as well as a process that new teachers experience while beginning to teach. Usually considered to be the first three years of teaching, induction may include orientation, professional development, and support and challenge from experienced professionals (Wang, Odell & Schwille, 2008).

**Infrastructure** - refers to the “supporting program features” (p. 7) that aid in facilitating, allowing for, and maintaining a program (Huling & Resta, 2007).

**Mentor** - is described as “experienced teachers who have as part of their professional assignment the mentoring of preservice or beginning teachers as they are learning to teach” (Odell & Huling, 2000, p. xv).

**Mentoring** - is the practice of supporting and guiding a new teacher throughout their beginning year or years of teaching (Reiman & Thies-Sprinthall, 1998).

**Mentoring skills** - refers to the various approaches and skills the experienced teacher uses while supporting the new teacher. Mentoring skills may include but are not limited to supporting and challenging, utilizing reflective practice, carrying out the coaching cycle, observing and coaching (Reiman & Thies-Sprinthall, 1998).
Novice- identifies “preservice and beginning teachers in the profession” (Odell & Huling, 2000, p. xv). In this study new, novice and beginning teacher will be used synonymously and pertain to those teachers in their first year of teaching.

Systemic change- is a process that occurs within a particular community or organization that is involved in constructing, co-constructing and reconstructing practice resulting in significant transformation. Systemic change sustains over time and moves entire organizations toward increased quality and level of performance (Sullivan & Shulman, 2005).

Workplace conditions- also termed workplace ecology relate to all the characteristics in the work place environment that make it unique from other environments. The workplace conditions may impact those in the environment positively or negatively (Center for Comprehensive School Reform and Improvement, 2007: Huling & Resta, 2007).

Summary

This introductory chapter included sections on background information, statement of the problem, significance of the study, the theoretical framework for this study and the operational definitions needed throughout the study.

The necessary background for understanding this study included information on teacher attrition and retention. New teacher attrition is at the crux of grand teacher shortages both nationally and internationally. The high cost to schools, students and
communities related to teacher attrition was also described. The human cost seems to be most startling as teacher quality has been directly related to student successfulness.

In relation to retention the background on new teacher induction and mentoring was described as a means for keeping teachers in the profession. One particular form of mentoring, developmental mentoring was introduced as background information as well. The unique elements related to developmental mentoring were identified. These elements include (1) the mentor’s understanding the novice teacher’s current level of cognitive processing; (2) utilizing the novice’s level of cognitive processing in the coaching plan for the novice teacher (Reiman & Thies-Sprinthall, 1998); (3) growth over significant time, usually throughout the induction period that may last through the first three years of the novice teacher’s experience in the profession; (4) growth tends to and will continue to occur if there is sufficient positive interaction, guidance, and support and challenge; and (5) belief that each novice teacher is a unique individual (Odell & Huling, 2000; Reiman & Thies-Sprinthall, 1998).

One of the last sections of background information presented was a description of infrastructure relating to mentoring practices. Characteristics such as creation of a trusting and collaborative environment; a shared and closely monitored mission; the acceptance of approaching initiatives and taking risks; and strong ongoing professional development is identified as those important in a successful learning environment capable of such innovation (Silins & Mulford, 2004). A principle practice commonly found in the literature supports the development of an infrastructure or an internal framework of supports built into the work of the innovation that provides for
sustainability. The elements of infrastructure include key individuals, resources, and accountability. In this study, key individuals, resources and accountability will serve as the basis for examining infrastructure.

The next major section of this introductory chapter focused on the statement of the problem. It is clear that teacher attrition is a critical problem in schools today. Research has clearly supported the importance of the mentoring relationship during the novice teacher’s beginning years in the profession (Gardiner et al., 2000; Reiman & Thies-Sprungthall, 1998; Resta, 2006; The NEA Foundation, 2001; Yendol-Hoppey & Dana, 2006). In fact, mentoring has been identified as the single most cost effective component of new teachers induction models (Odell & Huling, 2000). However, mentoring is a complex undertaking that requires substantial training and time commitments. Keeping in the mind the great complexity involved in the mentoring tasks, school districts should not expect experienced teachers to provide effective mentoring for novice teachers in a systematic way without training and without effective infrastructure support.

The final major section of the introductory chapter identified the two theoretical frameworks that support this study as well as the developmental mentoring program model. Cognitive developmental theories including the work of Piaget, David Hunt and Lawrence Kohlberg have aided significantly in the revision of our understandings of adult learners. In addition, Frances Fuller’s attention to the concerns of student teachers has provided a basis for work on the Concerns-Based Adoption model. This model will serve as a useful tool throughout the study as more contemporary work with the model
draws a connection between the concerns identified in student teachers with concerns of those participating in any innovation.

This study holds particular significance since little attention has focused on the attributes of system-wide infrastructure that impact innovations in this case the success of a developmental mentoring program. This study aims to identify the infrastructure necessary for implementing and sustaining a developmental mentoring program. This study has the potential to alleviate issues that may hinder the success of innovations related to developmental mentoring programs.
Chapter II is the literature review for this study. Current relative literature pertinent to this study is included. The major sections are teacher shortages and teacher attrition, mentoring and induction, effective professional development programs, components of a developmental mentoring program, cognitive developmental theory, concerns-based adoption model, infrastructure, system-wide innovations and summary. The purpose of this chapter is to highlight critical understandings present in the current literature necessary for comprehending this study.

**Teacher Shortages, Teacher Attrition**

As recently as the early 1980s, reports of the possibility of severe teacher shortages began to surface as one of the major issues facing public education. More students were enrolling in schools than ever before and many of the veteran teachers were quickly approaching retirement age (Ingersoll, 2001b). Several sources report that more than two million new teachers will be needed during the next decade to meet this ever-growing shortage impacting the teaching profession (Carter et al., 2006; Heller, 2004; Kelley, 2004). In 2002, the State Board of Educator Certification indicated that Texas alone could be close to 40,000 short (Combs, 2003). Moreover, an unbelievable 3.5 million new teachers will be needed by 2013 (Jalongo & Heider, 2006). Most interestingly, only twenty percent of the shortage can be attributed to the graying
teaching force and their timely retirements (Darling-Hammond, 2003). If it is not primarily a result of retiring veteran teachers, then what is causing this attrition?

It is reported that the current teacher shortage is, in fact, not due to those retiring or an inadequate number of new teachers graduating from teacher preparation programs, as many more teachers are certified than are actually hired (Dove, 2004). Partially impacting this shortage is the great number of new enrollees in public education each day. Reports indicate that public schools are experiencing a rapid growth in student population. It is estimated that the growth rate in the United States is over one million new students in an eight year period ending in 2007 (Carter & Foster, 2007). This growing teacher shortage is a result of not only a growing student population, but also the fact that an alarming number of new teachers are leaving the profession soon after entering.

Teacher attrition is not a new phenomenon. The November 16, 1962 issue of *Life Magazine*’s headline read, “Why Good Teachers Quit” (Huling & Resta, 2001). It has been reported that teacher attrition, the premature and voluntary exiting of teachers from the profession, is the single most significant factor in creating shortages of qualified teachers in the United States and internationally (Dove, 2004). In fact, teaching has one of the largest attrition rates of any profession with an average yearly turnover rate of 13.2% as compared with other professions at 11% (Heller, 2004; Watkins, 2005). The actual attrition rates for new teachers vary slightly from source to source but have been reported to be as high as 30% of new teachers leaving during their first three years and as many as 50% leaving by their fifth year of service (Alliance for Excellent Education,
This rate is reported to be even higher in inner-city and urban settings where attrition rates can be as much as 50% greater (Boyd et al., 2007; Darling-Hammond, 2003; Dove, 2004; Jalongo & Heider, 2006; Smitley & Evertson, 2003). Possibly the most disconcerting statistic is that as many as 9.3% of all new teachers do not even complete their first year of teaching. New teacher attrition establishes a revolving door of professional teaching staff that has been shown to negatively impact relationships that are critical both among teachers and between teachers and families and their children.

The High Cost of Attrition

The approximated monetary cost of attrition is exorbitant. Current estimates indicate that America’s schools lose over two billion dollars a year to teacher attrition (Carter & Foster, 2007; Fulton et al., 2005). For a state like Texas, the cost could reach 329 million dollars per year (Combs, 2003; Fulton et al., 2005; Darling-Hammond, 2003). While there are a number of different formulas used to calculate the cost of attrition, it is not necessarily the statistical method of upmost importance here, but rather the bottom-line cost of replacing teachers who leave. One estimate places the cost of replacing one teacher between $4,366 and $17,872 depending on the district suffering the loss (Hardy & Lingard, 2008). This cost includes the price for new recruiting, hiring, training, mentoring, covering unfilled positions with long-term substitute teachers in
addition to the enormous amount of time spent by human resource officials, administration, fellow teachers and mentors as the new hires acclimate to their new positions (Brooks-Young, 2007; Carter & Foster; Jalongo & Heider, 2006; Kelley, 2004).

While the monetary costs of replacing teachers, who are leaving the profession in droves, seem incredibly expensive, it is the human cost that seems most discouraging. It is clear that teacher turnover places undo stress on the individuals within the organization of schools. High teacher turnover results in fewer quality teachers in classrooms and support staff such as mentors and administrators being stretched thin as their previous inductees leave and the process begins again. Additionally, high turnover slows reform measures as lack of continuity in staff results in little sustained professional development implementation, and fragmented commitments to school improvement due to the lack of shared beliefs (Brooks-Young, 2007; Charlotte Advocates for Education, 2004; Darling-Hammond, 2003; Kelley, 2004). Not only does the school organization suffer, but most detrimental is the effect teacher turnover has on the children in our schools.

Ingersoll suggests, “…one of the pivotal causes of inadequate school performance is the inability of schools to adequately staff classrooms with qualified teachers” (2001b, p. 499). Research indicates that quality teaching by qualified teachers has a significant impact on student learning; that in fact, “the single most important factor in a child’s education is the quality of his or her teachers” (Jalongo & Heider, 2006, p. 380).
Fletcher, Strong and Villar (2008) conducted a study on the effects of induction programs on student achievement. This study found a positive correlation between mentor-based new teacher induction and student achievement given that mentors were carefully selected and there was meaningful mentor contact with the novice teachers on a weekly basis (Fletcher, Strong, & Villar, 2008).

Looking closer at this study, because new teacher induction is mandated from the state level in California, all new teachers with credentials as well as teachers who are interns are eligible to participate in the Beginning Teacher Support and Assessment (BTSA) program. Three districts in California provided student achievement and demographic data as well as years of experience for teachers who were assigned the given students. The demographics of the districts involved in the study varied. Two districts reported a significantly high Latino population and more than one-half of the student body is identified as economically disadvantaged, while the other district included about one-quarter Latino population and low income students. An interesting note about this demographic data includes the fact that in the economically disadvantaged, greater minority population schools, greater numbers of these children were taught by novice teachers. Students’ Stanford Achievement Test (SAT) total reading scores were provided by each district and were used to help the researchers understand the relationship between new teacher support and student achievement (Fletcher, Strong & Villar, 2008).

There were many variables in this study like the proportion of students in each class that were identified as economically disadvantaged, the proportion of minority
students, the class average total reading SAT score, and variations in new teacher induction support such as mentor selections and mentor training and support. In an attempt to exclude other possible contributing factors to student achievement, a hierarchical linear modeling analysis was used in this study as student data was matched with teacher information. At the highest level of new teacher support including a fully released mentor who receives training and support for the role of mentor, all four single variables and interactions were found to be statistically significant with a p value of .01. The authors suggest a critical finding for new teacher support in relation to student achievement. “If new teacher support does not meet some minimal level, then the contribution of Induction to Student Achievement will be cancelled or minimized by the effect of Class Poverty” (Fletcher, Strong, & Villar, 2008, p. 15). Support and training for mentors seems to be as important as supporting the novice teachers when it comes to student achievement success.

In fact Boyd, Grossman, Lankford, Loeb, and Wyckoff (2007) found that first year teachers who have higher attrition rates were less likely to improve student test scores. Additionally this study identified higher attrition rates in schools where lower student achievement was an issue. These researchers used a wealth of data previously collected by the New York State Education Department and the New York City Department of Education. The achievement data from standardized math and English-language arts tests for students in grades four through eight was matched with their over 3000 teacher data profiles. The authors were interested in the relative gain of achievement across grade levels for the students in relation to the retention rates of their
past teachers. In this case, the authors were not only interested in those teachers leaving the profession altogether, but also the teachers who were leaving the school district for other teaching jobs.

The researchers use descriptive statistics in a value-added model taking measures to account for a variety of other factors that may also impact student achievement such as student poverty, English language learner status, student’s background, past student achievement and past schools attended. Even with the careful measures taken, the authors point out that teachers affect student achievement in a broad range of manners, much more than standardized tests can illuminate. However, the standardized tests are a measure by which students can be measured and have been found to be strong predictors of students’ future success. Nevertheless the goal of this study was to estimate teacher-year effects, while including many student, class and school controls by measuring within-school differences in teachers’ effectiveness. This approach allowed for relatively clear estimates of how effective each teacher was in relation to their colleagues with similar teaching experience (Boyd et al., 2007).

The findings from this study indicate that there is little difference between the effectiveness of teachers who remain in the profession more than one year. However, elementary and middle school math teachers in particular who leave teaching prior to their second year can be matched with students who exhibit lower achievement gains when compared to their colleagues who stay in the profession. Further findings indicate that teachers who were found to be relatively ineffective in one school who transfer to another school in the system were equally ineffective in the new school. Interestingly,
the authors purport that completely eliminating new teacher attrition altogether might actually be more harmful to students’ achievement than the current revolving door, as even ineffective teachers have gained some experience. If these ineffective yet experienced teachers leave, then they could be replaced with novice teachers with no experience, those who tend to be less effective. The vicious cycle goes on and on.

Finally, another critical point about attrition and student achievement is illustrated by this study. Oftentimes those teachers, many times viewed as effective and experienced, leave their teaching positions at low performing, high poverty schools for schools with greater student achievement thus exacerbating the achievement gap further. The issues of improving workplace conditions then becomes a critical component of working to retain quality teachers in the most difficult-to-staff schools (Boyd et al., 2007).

This study (Boyd et al., 2007) identifies not only the critical needs of retaining quality teachers especially in hard to staff areas, but also makes a clear link between quality teacher retention and student achievement. While the No Child Left Behind Act of 2001 mandates that all states situate “highly qualified” teachers in every classroom by the end of the 2005-2006 school year (Combs, 2003; Darling-Hammond, 2003; Dove, 2004), this requirement continues to be difficult to fulfill because of the revolving door whereby more experienced teachers or at least those teachers who have completed a few years of teaching, are leaving and newly hired, sometimes alternatively certified or emergency certified, teachers are taking their place. Without a comprehensive effort to reduce teacher attrition on the part of the states, districts and individual schools, the issues of retention will continue to plague education (Carter & Foster, 2007).


**Reasons for New Teacher Attrition**

The Alliance for Excellent Education provides an eye-opening statistic. “Every school day nearly 1000 teachers leave the field of teaching. Another 1000 teachers change schools, many in pursuit of better working conditions” (2005, Introductory paragraph). Better working conditions are indeed one of the reasons often cited for teachers leaving the profession (Carter et al., 2006; Charlotte Advocates for Education, 2004; Darling-Hammond, 2003; Heller, 2004; Jalongo & Heider, 2006). Besides poor working conditions, other reasons are cited in the literature including but not limited to: lack of support from colleagues, a mentor or administration (Brooks-Young, 2007; Darling-Hammond; Fluckiger, McGlammery & Edick, 2006; Ingersoll, 2001a, 2001b; Jalongo & Heider; Smithey & Evertson, 2003), significant feelings of isolation (Fluckiger et al., 2006; Smithey & Evertson2003; Tye & O’Brien, 2002), inadequate preparation (Dove, 2004; Jalongo & Heider, 2006), and a lack of appropriate and much needed resources (Carter, et al., 2006; Darling-Hammond, 2003).

The Charlotte Advocates for Education (2004) (CAE) group began to investigate the large numbers of teachers leaving the teaching profession. During their literature review the group determined that teachers consistently cite working conditions as a major reason for either staying in the profession or choosing to leave. Additionally, principal leadership was indicated as a key component of working conditions that routinely either aided or hindered teacher retention. The CAE sought to understand the relationship between principals, workplace culture and teacher retention. The group
studied the traits and strategies of principals primarily in high need areas with the most success with teacher retention.

Twenty principals completed surveys which were analyzed for emergent themes. In an attempt to better understand the emergent characteristics from the surveys, principals participated in focus group interviews highlighting the key issues identified from the survey results. All data were then analyzed together leading to the following observations and implications.

- Principals who have been more successful in retaining teachers have characteristics of successful entrepreneurs.

- These successful principals believe strong, instructional, operational, and strategic leadership in their school are equally important. However, operational issues dominate much of their time, leaving too little time available for instructional leadership.

- These successful principals understand the value of people. They value teachers as individuals and sincerely want them to succeed and grow. The most successful strategies for these principals are those that give direct assistance to teachers.

- Principal preparation and continuing professional development must include practical information, the nuts and bolts of being a principal, as well as theory (Charlotte Advocates for Education, 2004, p.2).

While this report did not include a clear description of the study methodology that may support further research in the area, the findings illustrate the importance of well
prepared, people oriented administration as one means of improving workplace conditions.

In another study focused on teacher attrition and mobility issues, Marvel, Lyter, Peltola, Strizek and Morton (2007) examined a significant number of teacher questionnaires in an attempt to better understand the characteristics of those teachers who stay in the teaching profession and those who choose to leave. Working in conjunction with the National Center for Education Statistics, the Institute of Educational Sciences and the U.S. Department of Education these researchers analyzed data from the Teacher Follow-up Survey (TFS) representing a subset of elementary and secondary school teachers who participated in the previous year’s School and Staffing Survey (SASS) in 2004-2005 (Marvel et al., 2007). The SASS survey included data from 51,748 public and private school teachers during the 2003-2004 school year. The TFS was completed by 7,429 current and former teachers. Of these participants 2,864 remained in the same school, identified as “stayers”, 1,912 were still teaching but in a different school, identified as “movers”, and 2,653 had left the teaching profession, identified as “leavers” (Marvel et al., 2007).

The TFS survey items and methodology went through two separate revisions in an attempt to accurately grasp current and former teachers’ perceptions about staying or leaving the profession. After current status data were collected from district personnel about teachers who had previously completed the SASS participants in the TFS were either mailed a survey or given the opportunity to complete the survey online. Follow-up fieldwork was utilized to contact all non-respondents by phone or by personal visit in an
effort to gather all data possible. The study utilized a number of strategies to improve the validity of the findings including weighting of responses, computerized data edits, and comprehensive unit nonresponse bias analysis. Data sources that provided to be invalid were discarded from the data set (Marvel et al., 2007).

The TFS data is a stratified sample allocated by status; stayers, movers, leavers: by sector; traditional public, public charter, private: by experience; three or fewer years of teaching experience, more than three years teaching experience: grade level taught; elementary, middle, secondary: and minority status; minority or non-minority. All teachers who responded to the TFS were stratified by these five variables in the following order: sector, status, teaching experience, grade level taught, and minority status (Marvel et al., 2007).

Selected findings appearing in this report include:

- Of the 3,214,900 public school teachers who were teaching during the 2004-2004 school year, 84% remained at the same school, 8% moved to a different school, and 8% left the profession. Data from private schools indicated a slightly lower rate for “stayers” and almost double rate for “leavers”.

- Thirty-eight percent of public and 33% of private school “movers” rated the opportunity for a better teaching assignment as very important or extremely important in their decision to change school. Additionally, 46% of private school teacher “movers” rated better salary or benefits as a very
important or extremely important reason in their decision to change schools.

- Twenty-five percent of public and 30% of private school leavers rated pursuing a position other than that of a K-12 teacher as very important or extremely important in their decision to leave K-12 teaching. Additionally, 31% of public school “leavers” rated retiring and 25% of private school leavers rated pregnancy and child caring as very important or extremely important in their decision to leave K-12 teaching.

- Twenty-nine percent of public school “leavers” were working in a position in the field of education, but not as a regular K-12 classroom teacher, while 12% of public school teacher “leavers” were working in an occupation outside the field of education.

- Fifty-five percent of public school teacher who left teaching but continued to work in the field of education reported that they had more control over their own work in their new position than in teaching, while 65% of public school “leavers” who worked outside the field of education felt that their workload in their new position was more manageable and that they were better able to balance their personal and work life (Marvel et al., 2007).

The numbers reported from the TFS for “leavers” are significantly lower than the up to 50% of novice teachers leaving the profession by the end of their fifth year of teaching reported by others (Alliance for Excellent Education, 2005; Boreen & Niday,
2000; Brooks-Young, 2007; Carter & Foster, 2007; Carter et al., 2006; Dangel, 2006; Darling-Hammond, 2003; Dove, 2004; Edutopia Staff, 2001; Fulton et al., 2005; Odell, 2006; Resta, 2006; Rubenstein, 2007; Stanulis, Fallona & Pearson, 2002; Watkins, 2005; Zeek and Walker, 2006). However, this study does only account for the status of the 7,429 teachers who completed the TFS survey. Exact numbers of those leaving as indicated on personnel records may account for the larger percentages of those leaving.

The other important findings presented by Marvel et al. (2007) indicate the reasons teachers either stay or leave teaching or even choose to move to different schools but remain in teaching. This study provides current data on why teachers leave, thus providing the field of education some much needed information on how to possibly reduce attrition. One major pitfall of this study is that respondents were only able to rank on a five-point scale the items or reasons for leaving or staying that were identified by those who created the survey. It seems that a more rich description of why teachers leave could have been captured if in addition to the pre-identified reasons an open-ended format would have been provided for respondents to add other reasons not listed. Nevertheless, the study does provide insight on why teachers leave the profession. This information in conjunction with the reasons given by others including poor working conditions, lack of support from colleagues, a mentor or administration, feelings of significant isolation, inadequate preparation, and lack of appropriate and much needed resources supplies those working on reducing new teacher attrition areas to address.

In another study, Ingersoll (2001) aimed to explain why so many new teachers leave the profession. Contrary to prior belief that schools were facing a teacher shortage
due to lack of a sufficient supply of qualified teachers, Ingersoll (2001) concludes that in fact the teacher shortage can be almost exclusively a result of the ongoing revolving door whereby large numbers of qualified teachers leave the profession for reasons other than retirement. Ingersoll’s goal was to determine organizational causes for this new teacher attrition.

This study utilized Schools and Staffing Survey (SASS) from 1990-1991 and the Teacher Follow-up Survey (TFS) from 1991-1992. A sample of 6,733 elementary and secondary teachers including 3,342 teachers who continued to stay in the profession at the same campus, 1,428 teachers who moved to another campus, and 1,962 teachers who left the profession altogether provided the data for the TFS. Ingersoll reports that what makes this study unusual to its counterparts is the fact that all attrition including teachers who move schools and those who leave the profession entirely both voluntary and involuntary are considered. The analysis of the data is three-fold. First, the researcher aimed to establish the overall extent of annual teacher turnover, in turn examining the impact this issue has on school staffing through the use of descriptive statistics. Second the study involved conducting a multiple regression analysis of the impact of teacher characteristics, school characteristics and organizational conditions on attrition. The last stage of this analysis included an examination that teachers gave for leaving the profession through the examination of self-report data (Ingersoll, 2001). This analysis resulted in a sizable number of findings pertinent to better understanding new teacher attrition.
Findings related to the extent of turnovers and subsequent school staffing problems indicate that educators represent about four percent of the total civilian workforce with the rate of turnover in the profession being higher than many other occupations. The demand for teachers is not due primarily to increasing enrollment issues, but rather to pre-retirement turnovers. Further this study points out that schools that report difficulty in filling all available positions are more than twice as likely to have above average turnover rates when compared to schools that face little difficulty in filling their vacancies. Moreover, high poverty schools with poverty enrollment greater than 50% have higher turnover rates than do other schools with fewer students from low socioeconomic backgrounds (Ingersoll, 2001).

The multiple regression models illustrated the predictors of turnover related to teacher characteristics were found to be statistically significant with a 90% level of confidence. Those teachers less than 30 and greater than 50 years of age were found to be more likely to leave teaching than middle aged teachers to whom they were compared. Further it was found that special education teachers were slightly more likely to leave, while math and science, male, and minority teachers were less likely to leave as compared to their counterparts however these latter findings represented a small difference and were not found to be statistically significant (Ingersoll, 2001).

Interestingly, when school characteristics such as size and location the likelihood statistic decreases significantly. For example teachers in small schools and those working in urban schools are more likely to leave than their peers teaching in rural
schools. However, there was little difference between those working in suburban and urban schools (Ingersoll, 2001).

Finally, when the author controlled for the organizational conditions of schools including advanced salaries, administrative support, student conflict and faculty influence, the model likelihood statistic reduced again by a statistically significant amount. However, when other factors related to school characteristics are controlled, the advanced salary condition loses statistic significance at the 90% confidence level (Ingersoll, 2001).

In the last stage of this study, self-report data on reasons for leaving the profession are analyzed from two distinct groups of teachers—urban, high poverty public schools and small private schools. These two types of schools are direct opposites providing for an opportunity to consider the reasons for both teacher migration and teacher attrition, both voluntary and involuntary. Found to be among the least prominent reasons for turnover is retirement. Job dissatisfaction, lack of administrative support, low salaries, student discipline problems, and lack of student motivation were found to be the most prominent reasons for teacher attrition. While both small private school data and larger urban school data suggest that teachers in both types of schools report leaving their teaching position to pursue a better job or other career opportunities, far more teachers in the small private schools reported job dissatisfaction as a reason than their urban, high poverty public school counterparts. Overall a number of reasons were reported by teachers for leaving the profession. Clearly differences exist as well between those moving to other schools and those leaving the profession altogether.
Considering these reasons given by those who have left the profession, how can educational systems adjust to meet the needs of new educators? Might increasing the level of support in ways that reduce feelings of isolation and provide assistance where new teachers need it the most actually improve the working conditions and reduce the numbers of new teachers leaving the profession? Is this support worth the work and monetary expenditure that it would take to keep the new teachers in the profession? Heller (2004) posits that the most difficult part of staffing classrooms is not producing more teachers, but rather keeping the ones we hire. Could retaining novice teachers through quality new teacher induction and mentoring serve as a significant means of reducing attrition and thus reducing the significant costs to school districts?

**Mentoring and Induction**

*Induction - Not Just a Time Period Anymore*

Induction of some sort is going to happen regardless of whether we offer support to the novice teacher or we do not. New teachers are entering the field in record numbers. It is estimated that 3.5 million new teachers will be needed by the year 2013 (Jalongo and Heider, 2006) and they will go through, if they stay in the profession, a beginning one to three year time period that is known as induction. Prior to the 1980s, little attention was given to providing any kind of systemic, structured support to novice teachers (Odell & Huling, 2000) with the main mentality being one of sink or swim—either novices survived their induction years or they did not (Coeyman, 2000). Veteran teachers felt the weeding effect of sink or swim removed those who were not strong
enough for the job, and administrators thought others had survived so why would these new teachers not be able to make it through.

Luckily, in the early 1980s those involved in school improvement acknowledged the increasing attrition rates of these new teachers and decided to address this problem. At this time many mentors were assigned to assist the novice teachers during this induction period. However, for the most part, mentors did little more than help acclimate the novice to their new teaching community, show them where the supply cabinet was located, and allow them a shoulder to cry on as the demands of their new career mounted (Flores, 2006; Gore, Williams & Ladwig, 2006; Wang, Odell, & Schwille, 2008). It did not take long for studies to show that the mentoring role could benefit the novice more fully if it were designed and carried out to promote teacher cognitive growth. It also became evident that during this induction time new teachers could benefit from a formal comprehensive induction program as well. So what was once a happenchance occurrence, two colleagues beginning to show professional interest in one another, with the mentoring relationship occurring for some, has become routine practice across the nation and throughout school settings.

Over the last 25 years, more than 30 states have made new teacher induction a requirement with the assignment of a trained and qualified mentor as part of this support (Kline, 2007; Lowenstein, 2003).

The New Teacher Center at the University of Santa Cruz is regarded as one of the most successful new teacher induction programs in the United States (Carter et al., 2006; New Teacher Center at the University of California, Santa Cruz, 2006; Russell, 2006). The elements of this induction model that make it successful are one-on-one mentoring by a carefully selected and appropriately trained mentor, participation by all first and second year teachers, a network of support for both the new teachers and the mentors, release time built into the plan for mentors to observe their novice teachers and for the mentor and novice to meet, and ongoing professional development for both the novice and the mentor. Additionally several impediments were reported along with the successes at the New Teacher Center, including a mentor to novice teacher ratio of 1 to 25 and mentors must visit multiple districts to meet with their novice teachers (Carter et al., 2006; Kelley, 2004; Kinne, 2007; Russell, 2006). Nevertheless the New Teacher Center is currently considered a frontrunner for up-to-date research and study into new teacher induction and mentoring.

The Role of Induction in Retaining Quality Teachers

Formal induction programs for new teachers aim to reduce attrition by supporting novice teachers during their initial years in the profession. In the case of novice teachers, induction is considered to be the first one to three years of service in the teaching profession (Carter & Foster, 2007; Kajs, 2002; Odell, 2006; Odell & Huling, 2000;
Watzke, 2002; Wood & Waarich-Fishman, 2006). The goal of new teacher induction is to integrate novices into the professional learning community in ways that provide needed support in establishing relationships and promoting professional learning that will be necessary for success during the induction years and throughout their teaching careers (Combs, 2003). During this induction period, research indicates that novice teachers need much more than a buddy or someone to show them where the supply closet is located. Instead teacher induction programs are moving away from a mere socialization process focused on the personal and social needs of the new teacher to a more comprehensive approach aimed at increasing the novice teacher’s cognitive levels, improving reflective practice, and developing pedagogical models (Flores, 2006; Gore et al., 2006; Wang et al., 2008). What are the components of a comprehensive induction model that will accomplish these key intentions?

A comprehensive “system of induction should include a network of supports, people and processes that are all focused on assuring that novices become effective in their work. An induction system is both, a phase, a set period of time, and a network of relationships and supports with well defined roles, activities, and outcomes” (Fulton et al., 2005, p.4). Activities in this system might include career learning and professional development, action research, and collegial dialogue (Basile, 2006; Fulton, et al., 2005; Watkins, 2005) supported by their mentors, campus and district level administrators (Basile, 2006; Watkins, 2005). Research indicates that there are several critical components of a comprehensive induction model. These components include the assignment of a strong, caring, knowledgeable mentor, ongoing professional
development for the novice and the mentor, campus and district level administrative support, a clear mentor selection process, frequent networking with other novice teachers, dedicated time for mentor/novice meetings, structured observations and feedback by the mentor, common planning times, reduced course loads for the novice and perhaps the mentor, and ongoing program evaluation (Carter & Foster, 2007; Fulton, et al.; Kajs, 2002; Kelley, 2004; Russell, 2006; Wood & Waarich-Fishman, 2006).

The Role of the Mentor

Of all the components of a comprehensive induction program, the one that tends to receive the most attention is the role of the mentor. Mentoring has not only been accepted as a critical practice during the induction years across the United States in urban, rural and suburban school districts, (Carter et al., 2007) but it has also been identified as the single most cost-effective component of new teacher induction models (Odell & Huling, 2000).

In an early study on the role of the mentor and subsequent relationship that develops between mentor and novice teacher, Gehrke and Kay (1984) employed a qualitative study that involved questioning the numbers of novice teachers who had benefited from a mentoring relationship then delving deeper into the particulars of the mentoring experience.

Three hundred short questionnaires were sent to teachers in 12 schools including elementary, middle and high school campuses. Of the original 300 questionnaires, 188 were returned with 111 of them indicating that they had benefited from a relationship with a mentor teacher. Of these 111 teachers who had participated in a mentoring
relationship, 41 were selected to be interviewed. During the interview teachers were
asked to describe the relationship with their mentor, their feelings about their mentor and
the benefits they believed to be a direct result of participating in this relationship. In
addition the participants were asked if they had the desire to mentors in the future and
the kind of person they would like to mentor (Gehrke & Kay, 1984).

The interviews were tape recorded and later transcribed. The researchers used a
comparative analysis looking for similarities and differences in responses. As a result
several mentor roles were identified including: confidant, teacher, sponsor, role model,
developer of talent, opener of doors, protector and successful leader. As far as
identifying how the mentor-novice relationship developed, most respondents identified
that the relationship began as the potential mentor began to show an interest in the
novice. The interview data indicated that the mentor-novice relationship continued to
develop over time and became more professional and more personal, growing to be more
comprehensive. Finally the benefits reported from taking part in a mentoring relationship
were numerous. One-fourth of the teachers reported that they would not have made the
same career decisions if it had not been for their mentor’s support and input.
Additionally, a majority of teachers reported that finding a mentor was important to the
success of their teaching career with all but one of the respondents indicating that they
too would want to mentor a novice teacher in the future (Gehrke & Kay, 1984).

While this study occurred during the onset of formalizing the role of mentoring
in the induction of novice teachers in the early 1980s, the data collected indicates that
mentors serve an influential role in the early experiences of novice teachers. Not
surprisingly the data suggest that mentoring has positive outcomes for the mentor and the novice teacher as well. However the authors report that even though a good percentage of teachers are willing to become mentors, few actually have the chance. This finding has definitely changed as mentoring and new teacher induction have been mandated in many states and have taken a more vital role in the preparation of novice teachers.

In a more recent study, Boreen and Niday (2000) investigated the types of support offered to novice teachers within a collegial email mentoring partnership. The main focus of the study involved analyzing email interactions between mentors and novice teachers as well as novice teachers to novice teachers for evidence of teacher literacy or rather the ability to think like a teachers. Nevertheless, this study provides additional insight into the role mentors play in novice teachers’ development.

Sixty pre-service teachers participated in the email exchange with four mentor teachers. At the end of the semester photocopied email exchanges, students’ self reflections, notes taken during pre-service teacher conferences and mentor teacher dialogue was analyzed. Upon examination of the large amount of data collected the authors chose to focus the findings of this study on two veteran teachers who mentored pre-service teachers and on two pre-service teachers (Boreen and Niday, 2000).

Major themes that emerged from this analysis led to the following categories describing actions related to mentor roles: mentoring by modeling; mentoring as illustrating; mentoring by affirming; mentoring by questions; mentoring by qualifying; and mentoring by reflecting. Overall, both the mentors and novice teachers commented
on the positive learning opportunity afforded them through the careful questioning of the mentor. It is reported that the novice teachers were quite surprised to have the mentor respond to their questions with questions (Boreen and Niday, 2000).

While this study provides extended context for understanding the role of the mentor, it has several limitations. As noted by the authors, the original design relied solely on email interactions between the mentors and novice teachers. Electronic interactions vary from face-to-face meetings, in that normal functions of conversation are difficult to maintain. Once a question is posed, the initiator then waits for a response. In a face to face conversation the use of clarifying statements, body language and gestures aids in comprehension. Further, the study originally included 60 pre-service teacher participants and four mentor teachers. The findings reported, however, allowed for data from a significantly reduced sample size. It would be interesting to utilize this same format of data gathering and analysis, but with a larger sample size including face to face interactions, thus increasing the likelihood that the findings might represent other groups of mentors and novice teachers in dialogue.

Indeed, mentoring is no longer considered an optional element in the induction process but rather an essential part of not only novice teacher induction, but also of creating a professional learning community school and district-wide (The NEA Foundation, 2001). Mentoring has received much support from those concerned about the successfulness and the quality of new teachers. Both teachers and the general public support the idea of more veteran teachers mentoring novice teachers as a means of
promoting growth and retention of the new teachers (Fluckiger et al., 2006; The NEA Foundation, 2001).

Within the new teacher induction system, research has pointed out two critical considerations related to the mentoring component. How mentors are selected and the kinds and duration of mentor training make a difference in the successfulness of the program. Traditionally mentors are selected based on their success as a teacher or on their past successful experiences with teaching children. However research indicates that being a good teacher for children does not necessarily make a veteran teacher a good mentor. In fact working with adults is significantly different than working with children (Hughes, 2006; Kajs, 2002). It is apparent that those who select and assign mentors need to consider far more than the mentor candidate’s experience to include aspects such as their emotional availability, and their ability to synthesize the novice teachers’ needs and cognitive structures, as well as how the mentor candidates conceptualize mentoring as a developmental process in the adult learning arena (Yendol-Hoppey & Dana, 2006; Young, Bullough, Draper, Smith & Erickson, 2005). After all, mentor teachers are called upon to aid novice teachers in a variety of ways.

In one of the earlier studies related to mentoring, Odell (1986) investigated the kinds of support typically offered to novice teachers. Through a functional analysis approach both the type of support offered to novice teachers as well as the type of support requested by the novice teacher was considered. Participants in this study included 86 first-year teachers in addition to 79 teachers who were not novice teachers but new to the district. During the school year, the mentor teachers recorded the novice
teacher questions as well as the nature of the support provided to the novice teacher. It is important to note that the support provided to the novice may have been in response to the questions posed by the novice teachers, but may have also been a need perceived by the mentor. Once the data was collected, seven generalized categories of support were identified including: 1) system information, 2) resources and materials, 3) instructional, 4) emotional, 5) management, 6) environment, and 7) demonstration teaching. The two categories reported with the highest rank score were related to system information and resources and materials. Interestingly, the one area that routinely shows as a high need in novice teacher self reports, needed support with classroom management issues, was a relatively low need in this study. Subsequently, the frequencies of each category of support were determined which aided in identifying rank order of use of the kind of support for each participant.

Unlike many studies related to novice teacher needs and mentor support, whereby data is collected from self-reports Odell’s (1986) study relied on actual assistance sought or provided. The functional approach used in this study provides data from a different viewpoint than is traditionally used, increasing the applicability of these findings in conjunction with those findings from the self-reported data. While this study does consider both novice teachers and those teachers new to the district, it only occurs during one academic year with one group of new teachers. Both validity and transferability could have been increased if this study had been conducted over several years with multiple groups of new teachers. Nevertheless, Odell’s description of novice teachers’ needs alongside kinds of mentor teacher support provides the impetus for
careful selection of willing and able mentor teachers as well as clearly indicating the need for adequate training for mentors so that they may meet the significant needs of the novice teachers they are mentoring.

One prevalent false assumption, when it comes to selecting mentors relies on the premise that veteran teachers have been through it, meaning their beginning years; therefore they certainly know how to help a novice through their beginning years (Carter and Foster, 2007). This assumption is false as well; just because one survived a plane crash does not necessarily mean one can help someone else survive the crash they are experiencing! While selecting mentors is a critical step in creating a quality mentoring relationship, so too is the kind of training they receive.

Research indicates that careful planning of the professional development needed by mentors in order to practice their new role is essential. The literature indicates a number of possible considerations for mentor training. Mentors need time to mentor and time to learn to mentor that involves quality professional development coupled with real life experiences practicing the critical elements of mentoring in an attempt to fully realize the benefits for the novice (Carter & Foster, 2007; Hughes, 2006; Odell, 2006). Studies indicate that the intensity of mentor training must be more than a one day workshop approach to staff development. In those programs where mentoring is the strongest and the induction system the most successful, mentors receive training before assuming their new roles, as well as ongoing professional development throughout the year (Carter & Foster, 2007; Kajs, 2002; Odell, 2006; The NEA Foundation, 2001). When novice teachers are paired with a caring, competent, and appropriately trained
mentor within the context of a new teacher induction program the benefits will positively affect the new teacher, the mentor, the school system and most importantly the children.

**Effective Professional Development Programs**

Most providers would agree that the main goal of professional development is to change “individuals’ knowledge, understanding, behaviors, skills… values and beliefs” (Southwest Educational Development Laboratory, 1994). There is plenty of literature related to professional development. Studies suggest everything from specific components to broad schemas for developing the training. What is clearly evident is what does not work.

Sometimes having a clear picture of non-examples provides the best explanation for phenomenon, therefore following is what has been found to not work for professional development. Short term, brief, episodic workshops rarely produce any kind of sustained learning or skill attainment (Carter & Foster, 2007; Thies-Sprinthall 1984; 1986). Furthermore the traditional method of “absorb it here and go back and try it” workshops also do not produce the long term-effects that make significant changes in learning (Carter & Foster, 2007). Likewise, formally planned professional development opportunities that are primarily transmissive in nature, whereby the trainer stands and delivers information while the participants sit passively and try to absorb, also will not produce long-term improvement in knowledge and skills (Fraser, Kennedy, Reid, & Mckinney, 2007). What does work then?
Several suppositions for professional development appear in the current literature. Alan Reiman and Lois Thies-Sprinthall (1998), Bruce Joyce and Beverly Showers (2002), and Malcolm Knowles (1998) each contribute to the contemporary understandings of key issues about adult professional development. For this study the, the mentor training program components considered to be the treatment for the two districts will be compared to these frameworks therefore it is important to consider each in some depth.

*Five Conditions to Promote Growth*

Alan Reiman and Lois Thies-Sprinthall are researchers well known for their work on developmental mentoring as well as the development of the Teaching Learning Framework (Reiman & Thies-Sprinthall, 1998) which adds to the understandings of professional development. The Teaching Learning Framework, based in stage growth theory, “is a social role-taking model that has promoted growth with in-service teaching professionals, as well as pre-service college students (Carter & Foster, 2007, p. 45). The framework was designed to promote cognitive development through multiple domains. The five conditions suggested in the framework that are necessary for this growth to occur are (1) role taking, (2) reflection, (3) balance, (4) continuity and (5) support and challenge.

*Role Taking*

Role taking involves the learner taking an active more complex helping role. Because the role is new and unfamiliar, they would have to construct new skills and thinking in order to meet the demands of this new activity (Reiman, 1999; Reiman &
Thies-Sprinthall, 1998). Role taking is different than role playing in that the latter only simulates the new concept whereas role taking places the learner in the new position (Reiman & Thies-Sprinthall, 1998).

Reflection

Reflection, the second condition to promote growth in the Teaching Learning Framework, is identified as a necessary step in increasing capacity in moral and conceptual development (Reiman, 1999; Reiman & Thies-Sprinthall, 1998). Without reflection, Reiman and Sprinthall suggest that complex new learning experiences make no impact on cognitive development in the learner (1998). Further it is suggested that what does make a difference are “sequenced readings, dialogue journals, and discussions of the role-taking experience” (Reiman & Sprinthall, 1998, p. 72). Fluckiger et al. (2006) identify reflection as essential in teachers’ growth and development. In a mentoring relationship the mentor has a unique opportunity to encourage reflective practice by the novice teacher. However Reiman and Thies-Sprinthall (1998) indicate the concern that often times the mentor teacher does “not necessarily have a sophisticated capacity for reflecting on their own experiences or in guiding the reflection of a colleague” (Reiman & Thies-Sprithall, 1998, p. 73). Therefore structured reflective activities as well as adequate training for the mentor on guiding reflection are necessary components in preparing the mentor. Reflection provides opportunities for the learner to think about and record their reactions to the new helping role.
Balance Between Role Taking and Reflection

Balance, the third condition to promote growth in the Learning Teaching Framework, implies an interaction between the role taking and the reflection, a cycle of action and reflection. Repeatedly research has shown that complex new experiences without reflection make little impact on the cognitive development of the learners. Reiman and Thies-Sprinthall (1998) suggest that the role taking and reflection occur on a weekly basis so that new issues and concerns may be clarified before too much time passes. This frequent balance between role-taking and reflection allows for the last two conditions in the framework, continuity and support and challenge to be more effective (Reiman & Thies-Sprinthall, 1998).

Continuity

Simply put, continuity, the fourth condition to promote growth, means extension over significant time. In order to achieve complex goals of cognitive growth, a continuous interaction between role taking and reflection must occur over a length of time. Reiman and Thies-Sprinthall (1998) suggest at least a semester long experience to realize growth.

Support and Challenge

The last condition of Reiman and Thies-Sprinthall’s (1998) Teaching Learning Framework, support and challenge is substantiated by Piaget’s framework of assimilation and accommodation substantiates the condition of support and challenge. “During the shift created by a knowledge disturbance, the previous equilibrium between assimilation (old learning) and accommodation (new learning) is upset. During such
disequilibrium a person’s affective (emotional) processes become more fully engaged. It is precisely at such a point, that cognition and affect intersect” (Reiman & Thies-Sprinthall, 1998, p. 74). The shift is the challenge and the support is the affect resolving the dissonance. Managing support and challenge may be the most difficult condition for adult growth to manage. Some learners need more support and less challenge, or more challenge and less support, while others learn best with an equal balance of the two. Too much support can lead to dependence and lack of will to improve, while too much challenge may cause the learner to shut down. (Reiman & Thies-Sprinthall, 1998; Sprinthall & Thies-Sprinthall, 1993).

The five conditions to promote adult cognitive growth proposed in the Teaching Learning Framework presented by Reiman and Thies-Sprinthall (1998) have particular importance for the work of developmental mentoring. As the mentor and the novice take on their new roles, mentor as mentor and novice as new classroom teacher significant cognitive growth can occur for both if that is that the other four conditions are present. This information is critical as we plan for developmental mentoring programs. Careful attention must be given to structured and supportive reflective experiences with a balance occurring between the practice and the reflection over a significant amount of time. Further mentor trainers must be prepared to offer supports and challenges to the new mentors so that in turn the mentors may do the same for their novice teachers. The Teaching Learning Framework has provided an important basis for developmental mentoring. Information on quality professional development is equally important.
Joyce and Showers Professional Development Model

Bruce Joyce and Beverly Showers, well-known theorists in the work of professional development, propose a series of units of training that are interrelated and dependent upon the other in providing effective professional development. The Joyce and Showers model (2002) includes the following steps:

1. The theoretical basis or rationale for the new concept is presented. This usually comprises a 30 minute to two hour length one-way delivery, transmissive, to a passive audience. The main goal of this step is to transmit knowledge.

2. Observation of demonstrations of the new concept is provided by presenters who are considered to be a relative expert in the model. Once again the delivery method is one-way requiring no audience participation.

3. Participants take on an active role by participating in practice and feedback cycles in a protected risk-free environment. First participants try out the new concept on each other, then on children who are relatively easy to teach.

4. The trainer provides prompt feedback about the practice performance.

5. Participants and trainer participate in coaching one another as they work the new concept into their repertoire. As the new skills
are tried in classrooms, follow-up is provided by the trainer and/or colleagues (Joyce & Showers, 2002; Southwest Educational Development Laboratory, 1992; 1994).

A large majority of teacher education practitioners agree that the typical staff development teacher experience focus on the first component of the Joyce and Showers model thereby leaving out the last four (Southwest Educational Development Laboratory, 1994). Further reported is that when participants only received the first unit, transmission of theory, only approximately 10% could transfer the new learning to the workplace. As the next unit, modeling and demonstration was added only 2-3% more could transfer. With the addition of the third unit only and additional 2-3% more could transfer the learning. Thus when only the first four units were included in the training, only 16-19% of participants were able to transfer their new learning into the workplace. However, when coaching, the fifth unit was included in the professional development process; up to 95% of participants transferred the skill or new concept into classroom practice (Joyce & Showers, 2002).

In relation to developmental mentoring, ongoing professional development for the mentors is a necessary component of their preparation and continued support. This important need is forthcoming and will be described more fully in the National Framework section. While each unit described in the Joyce and Showers (2002) model is necessary, this work illustrates why each unit should be interrelated to promote the highest level of growth. Furthermore, this model suggests that mentors need to do much more than describe and model quality teaching behaviors, but novices must be given
time to engage in the practice with ample support from their mentors in the form of collegial coaching. One additional framework, Andragogy, supports the work of developmental mentoring as well.

**Andragogy**

Malcolm Knowles, a recognized leader and researcher in adult learning, has also contributed to the basis of developmental mentoring. His work on andragogy, the special field of adult learning, has contributed as well to the field of professional development. While the term and concept of andragogy was first used in 1833, Americans were not introduced to it until around 1967 (Knowles et al., 1998). Knowles who is considered to be the American father of adult education (Strunk & Robinson, 2006) offers the field of adult education, specifically the field of professional development, a clear description of six assumptions relating to adult learning.

1. Adults need to know why they need to learn something.
2. Adults maintain the concept of responsibility for their own decisions, their own lives.
3. Adults enter the educational activity with a greater volume and more varied experiences than do children.
4. Adults have a readiness to learn those things that they need to know in order to cope effectively with real-life situations.
5. Adults are life-centered in their orientation to learning.
6. Adults are more responsive to internal motivators than external motivators (Knowles, et al., 1998, p. 72).
What does this model tell us then about professional development for teachers? How does the model of andragogy impact developmental mentoring program models? Teachers as adult learners have the need to be self directing and responsible for planning their own learning. In andragogy the responsibility for decision-making comes away from the trainer and lies instead in the hands of the learner. As developmental mentoring programs are created, the mentor trainers must keep in mind the six assumptions of andragogy as mentor training is developed and carried out. Further, mentors must consider these six assumptions as they make plans for their novice teacher’s next learning steps. The adult’s need to be self directing, taking responsibility for their own learning and their need in particular to learn based on real-life situations, strengthens the aim of increasing cognitive development through reflective practices while participating in a new role. It is this new role for both the mentor and the novice that sets up the real life situation for learning.

Each of these contributors to the field of professional development offers a specifically unique aspect. Reiman and Thies-Sprinthall provide the premise for cognitive growth lies in utilization of the five conditions to promote growth. Joyce and Showers promote a professional development model that involves five interrelated steps. They also highlight the role of collegial and peer coaching as a means for achieving growth. Knowles provides a deeper understanding into the adult learner. Each of these contributions is critical to better understanding how to plan, implement and carry out teacher professional development and in this case development of the mentor and the novice teacher as well.
Cognitive Developmental Theory

Cognitive developmental theory is the theoretical framework that supports developmental mentoring in this study. Adult cognitive development has recently, within the past 35 years, become an important part of adult learning. It was not long ago that adulthood was considered a time of cognitive stability and gradual decline (Sprinthall & Thies-Sprinthall, 1993). However, during this time the understanding of how adults develop through cognitive developmental domains has received much attention (Johnson & Reiman, 2007). Jean Piaget’s cognitive developmental theory, focused primarily on children from ages two to adolescence serves as the basis for more contemporary work on adult development. David Hunt’s work on Conceptual Systems Theory (Hunt, 1971; Miller, 1981), and Lawrence Kohlberg’s (1969) framework of the moral/ethical stage theory have contributed to the unique quality of individualized support for new teachers that are part of developmental mentoring.

Jean Piaget’s Contribution

Historically, Jean Piaget’s cognitive developmental theory has been the most well-known, influential and most frequently cited (Stanton, 1993). While Piaget is acknowledged for his cognitive developmental theories that identify particular stages of development for children, one might surmise that cognitive development theory stops upon reaching adulthood. Although Piaget’s model addresses growth from ages two to adolescence, other theorists have used his basic principles of stage growth in positing developmental stage theories for adults. Piaget’s underlying assumption was that people proceed through a series of “stages or plateaus that are universal and predictable”
(Reiman, 1999, p. 602) in relation to cognitive development. Further, Piaget suggested that the ages that a person progresses through the stages are not fixed, but the time of the transition from one stage to another is approximate. In addition, the transitions are sequential in nature (Stanton, 1993). In children he supported a four tier model that moved children through sensory motor, preoperational, concrete operations and formal operations. In this model, children move through stages from quite simple to more complex. It is at the formal operations that a person is able to “reason hypothetically and abstractly” (Knowles et al., 1998, p. 176) and it is at this point that mature adult thinking begins. Relating to adult growth and development, Knowles et al. report that “the foundation of most adult cognitive development theories is the work of Piaget” (1998, p. 176).

It is Piaget’s groundbreaking work on cognitive development theory that provides the much needed framework for theorists working on adult cognitive developmental theories. The domains that have been studied for years in the teacher education context are David Hunt’s work on Conceptual Systems Theory (Miller, 1981), and Lawrence Kohlberg’s work on moral/ethical reasoning development (Reiman & Thies-Sprinthal, 1998). Trotter points out that like children, adult’s cognitive development moves from rather concrete to more abstract functions (2006); however, adults rarely reason from just one level leading researchers to view cognitive development as a “…series of uneven, overlapping waves, reflecting reasoning as a mixture of stages” (Johnson & Reiman, 2007, p. 677). Further, Carter and Foster (2007) point out that cognitive development stages are not lockstep in approach. In fact people
move through stages with great variance resulting with upward movement through the stages occurring as significant interactions with others and with the environment transpire. Growth is individualized according to each person’s abilities to synthesize new learning.

*Conceptual Development: David Hunt*

David Hunt’s work on Conceptual Systems Theory (1971), based largely upon Piaget’s premise of a developmental progression from a less complex to a more complex, abstract level of processing is one component of understanding the teacher as a developing adult learner. The “…conceptual level of a developing teacher can be considered in terms of increasing conceptual complexity, increasing interpersonal maturity, and increasing understanding of oneself and others” (Hunt, 1975, p. 222). Hunt’s (1971) original work examined adolescent and teacher development in relation to how people preferred to solve problems in human interactions. Hunt’s (1971) theory provides a model for analyzing the kinds of structure necessary for cognitive growth to occur. The following paragraph illustrates the different stages in Conceptual Systems Theory.

The stages in Hunt’s conceptual development theory are stage A: a concrete conceptual level where thinking tends to be concrete and rules are fixed; stage B: concrete/abstract conceptual level where there exists a greater awareness of alternative strategies for solving problems and openness to new ideas for solving problems; and stage C: abstract conceptual level where people are able to weigh and balance alternatives, take risks, and value collaboration. At stage C a high tolerance for
ambiguity exists (Reiman & Thies-Sprinthall, 1998). Table 1 identifies commonly occurring descriptors related to each of Hunt’s stages.

TABLE 1. Descriptions of Hunt’s Conceptual Stages: Teachers’ Attitudes Toward Teaching and Learning

<table>
<thead>
<tr>
<th>Stage</th>
<th>Descriptors</th>
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| A     | Strong evidence of concrete thinking  
Knowledge seen as fixed  
Employs a singular “tried and true” method  
Exhibits compliance as a learner and expects the same from pupils  
Low on self-direction initiative  
Does not distinguish between theory and facts  
Teaching is “filling the students up with facts”  
Stays on Bloom’s Levels 1 and 2 regardless of student level  
Enjoys highly structured activities for self and pupils  
Very uncomfortable with ambiguous assignments  
Does not question authority  
Follows curriculum as if it is carved in stone  
Verbalized feelings at a limited level and has difficulty discerning feelings in pupils  
Reluctant to talk about own inadequacies |
<table>
<thead>
<tr>
<th>Stage</th>
<th>Descriptors</th>
</tr>
</thead>
</table>
| B     | Growing awareness of difference between concrete versus abstract thinking  
Separates facts, opinions, and theories about teaching and learning  
Employs some different teaching models in accord with student differences  
Evidence of teaching for generalization as well as skills  
Can vary structure of lesson according to the needs of pupils  
Some openness to innovations and can make some appropriate adaptations  
Shows sensitivity to pupils’ emotional needs  
Enjoys some autonomy  
Employs Blooms’ Taxonomy Levels 1 (memory) through 4 (analysis) when appropriate  
Evaluations are appropriate to assignments |
| C     | Understands knowledge as a process of successive approximations  
Shows evidence of originality in adapting innovations to the classroom  
Comfortable in applying all appropriate teaching models  
High tolerance for ambiguity and frustration. Can stay on task in spite of major distractions  
Does not automatically comply with directions – asks for rationale  
Fosters an intensive questioning approach with students  
Can use all levels of Bloom’s taxonomy – memory through evaluation  
Responds appropriately to the emotional needs of all pupils  
Can match and mismatch with expert flexibility  
Exhibits careful evaluations based on objective criteria  
Continuously reflects on experiences, making adjustments when necessary |

As evidenced in Table 1, conceptual level tends to influence the amount of and type of structure best suited to meet the needs of the learner. As one’s conceptual level increases the matching levels of structure needed to ensure cognitive growth decreases. Various studies have been conducted to determine the characteristics of teachers and mentors demonstrating varying levels of conceptual complexity (Hunt, 1975; Johnson & Reiman, 2006). In most simple terms it has been determined that learners processing at a low conceptual level benefit most from a high level of structure and those functioning at a high level of conceptual development tend to benefit from lower levels of structure or are not impacted by the level of structure offered (Hunt; 1975, 1978).

The information from Hunt’s (1971) Conceptual Systems Theory is important as the work of developmental mentoring is considered. If the mentor is to utilize the novice’s conceptual level when planning next learning steps for the novice, then conceptual level understanding is necessary for the mentor trainers as well as the mentors. New mentors participating in training for their new roles must have practice in identifying levels of conceptual processing that will allow them to match the level of structure to the need. Additionally, mentor trainers must utilize the same sort of information about those participating in the training. Not all veteran teachers participating in the mentor training will be able to process at the same level with the same level of support as others. In this study, the infrastructure necessary in implementing and sustaining a developmental mentoring program is considered, having knowledge of the conceptual levels of the participants, mentors and novices, will allow the innovators to plan accordingly ensuring cognitive growth for those involved.
Moral Development and Ethical Decision Making: Lawrence Kohlberg

Another theory of stage growth proposed by Lawrence Kohlberg (1969) is that of moral development and ethical reasoning. The moral/ethical domain characterizes how knowledge is constructed around issues of social justice and fairness. Kohlberg was most interested in how people think about problems related to social justice (Reiman & Thies-Sprinthall, 1998). Like Hunt’s (1971) stage models, Kohlberg’s model also presents a series of qualitatively different stages that one moves through as their moral/ethical judgments mature.

Teachers at the lowest level of moral/ethical reasoning tend to focus on controlling student’s behavior, while teachers at the higher levels tend to demonstrate more democratic practice by considering multiple viewpoints, and stressing student understanding of the rules and procedures (Johnson & Reiman, 2007). Moral development is characterized by development away for concern for personal gain toward the common good.

Kohlberg’s moral development and ethical decision making model is organized into three broad categories of (1) pre-conventional level, (2) conventional level, and (3) post-conventional level. At each increasing level, the way individuals define moral values from the standpoint of equity and reciprocity in human rights increases significantly. The pre-conventional level is characterized by decision-making based primarily on the personal stake for the decision maker. At this level, the decision maker is focused on survival and getting ahead (Kline & Salzman, 2006). The second level, conventional level is sometimes called the “maintaining norms schema” (Kline &
Salzman, 2006, p. 149). This level is characterized by an individual’s ability to recognize the importance of society-wide implications. At this level the decision maker generally identifies with what the majority wants or what the laws prescribe (Reiman & Thies-Sprinthall, 1998). It is at the highest level, the post-conventional level that the decision maker begins to consider full reciprocity of social norms whereby norms are alterable and relative to each unique situation. (Kline & Salzman, 2006). Table 2 illustrates each of the levels in Kohlberg’s model (Reiman & Thies-Sprinthall, 1998).

TABLE 2. Kohlberg’s Stages of Moral Development

<table>
<thead>
<tr>
<th>Level I Pre-Conventional Level</th>
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<tbody>
<tr>
<td>At this level moral judgment reside in external happenings rather than in persons or standards.</td>
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</tbody>
</table>

| Stage 1 | Concern about self. Obedience and punishment orientation. One sees oneself as being dominated by other forces. Actions are judged in terms of physical consequences. |
| State 2 | One-way concern about another person (what he or she can do for me, how we can agree to act so I will benefit). The basic motive is to satisfy my own needs. |
TABLE 2. Continued

<table>
<thead>
<tr>
<th>Level II Conventional Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>At this level moral judgment resides in performing good or right roles, in maintaining the conventional order, and in meeting the expectancies of others.</td>
</tr>
</tbody>
</table>

Stage 3  Concern about groups of people, and conformity to group norms. An orientation to approval, and to pleasing others.

Stage 4  Concern for order in society. Honor comes from keeping the rules of society. The motive is to preserve society.

<table>
<thead>
<tr>
<th>Level III Post-Conventional Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>At this level moral judgment resides in commitment to shared or sharable rights, principles, or duties.</td>
</tr>
</tbody>
</table>

Stage 5  Social contract, legalistic orientation. What is right is what the whole society decides. There are no legal absolutes. The U. S. Constitution is written in stage 5 terms.

Stage 6  Universal ethical principles. What is right is a decision of one’s conscience, based on ideas about rightness that apply to everyone (all nations, people). These are called ethical principles. An ethical principle is different from a rule. A rule is specific (Thou shalt not kills). An ethical principle is general (All persons are created equal). The most important principles deal with justice, equality, and the dignity of all people. These principles are higher than any given law.

Table 2 lists the three broad categories of moral development and ethical decision making. Several of the broad categories have been further divided into smaller stages. As is evident by the descriptors to the right of the stages, as stage levels increase so does the complexity of moral reasoning.

Kohlberg’s (1969) work on moral development and ethical decision making is important in the context of this study in two ways. First, as mentors are working with their novice teachers, many decisions will need to be made. Because there is not a manual of next steps per se, mentor teachers have an important responsibility in helping make decisions about next learning for their novice teachers. Further, they serve as role models on a daily basis when it comes to ethical decision making for their novices. When the mentor teacher understands the reasoning behind decision-making and how the novice typically responds to moral and ethical dilemmas, there is a greater likelihood that the mentor can predict how the novice will respond to future problems (Johnson & Reiman, 2007; Reiman & Thies-Sprinthall, 1998; Thies-Sprinthall, 1984). When this connection of understanding occurs for the mentor, work between the mentor and novice that leads to growth in this domain for the novice can occur. Johnson and Reiman (2007) indicate that teachers with more complex levels of moral and ethical judgment tend to be more democratic in their interactions with students and less concerned with controlling student behavior. The mentor will be able to move the novice in this direction.

Another important connection between moral development and ethical decision making and this study relates to the issue of implementation of innovations, Witherell and Erickson (1978) identified that teachers processing at higher levels of moral
development and ethical decision making are more likely to “…initiate structural changes in their schools that would encourage student participation and leadership…” (p. 231). In this study, implementing and sustaining the innovation of a developmental mentoring program is at the crux of the problem. If one of the major infrastructure supports of a developmental mentoring program is key people, does the moral development and ethical decision making level of those key people make a difference? Teachers processing at more complex levels of moral development and ethical decision making are more likely to initiate change measures because they are more able to see the good for the whole group, whether that entails better instruction for children or stronger practice in inducting new teachers into the profession.

One of the most disconcerting findings of pre-service teacher development has been the quality of supervision student teachers receive from their supervising teachers. One study conducted by Thies-Sprinthall (1984) embraced many of the concepts discussed up to this point in an attempt to better understand how to improve this supervision experience. In the realm of mentoring, these findings can significantly influence the kinds of training provided to mentors aimed at improving their supervision skills as well. This study used both Reiman and Sprinthall’s five conditions to promote cognitive growth and Joyce and Showers’ professional development training components previously described in creating and implementing professional development experiences for supervising teachers aimed at improving their level of psychological development and improving their behavioral skills. In addition, David
Hunt’s conceptual systems theory and Lawrence Kohlberg’s moral reasoning levels were used as means of measuring growth of the supervising teachers (Thies-Sprinthall, 1984).

Thies-Sprinthall (1984) used a pilot study and a second revised study to conclude that professional development that takes into consideration the participants conceptual level (CL) as well as the five conditions to promote cognitive growth and the professional development training components can produce gains in psychological growth and increased behavioral skills of the supervising teachers. The pilot study included 10 classroom supervising teachers all from one school while the second revised study involved 12 teachers from two different schools. All teachers from both studies were in the same school system. Both sets of supervising teachers also enrolled in a sequence of two semester courses, taught on site, for graduate credit. It was during these courses that the study curriculum was put into place. The overall purpose of the professional development curriculum was to increase supervising teacher flexibility through role-taking, a balanced of learning and reflection experiences and practice (Thies-Sprinthall, 1984).

The Hunt Conceptual Systems Test (CST) and the Rest Defining Issues Test (D.I.T.) were administered as pre and post tests. The Hunt test consists of a series of open-ended statements related to educational beliefs. Blind trained judges scored the responses providing an approximate level of conceptual functioning. The Rest D.I.T. consists of three stories concerning human dilemma situations and provides an estimate of Kohlberg’s stage level for moral and ethical reasoning. Both of these assessment measures were used to increase validity of the findings. An increase on both measures
would be needed in order to suggest true growth from pre to post test administration. While this is a relatively conservative procedure, it was considered necessary by the author to avoid a possible Type Two error because of the small sample size (Thies-Sprinthall, 1984).

During the pilot study, the instructor utilized a variety of teaching models aimed at meeting the differing needs of the participants. Following the pilot study, formative evaluation of the study provided information for the improvement of the second study. Keeping in mind adult cognitive structures are rather fixed and highly stable, reflected by deep rooted structures, the findings from the pilot study indicated only small positive trends. While on both measures there were some slight gains, none were statistically significant at the .05 level. With this information of little but insignificant change, Thies-Sprinthall looked within group differences for indicators of what did not happen during the pilot study. “Apparently the results indicated that the program, as originally designed, did not impact the cognitive-developmental systems of the participants to a significant degree” (Thies-Sprinthall, 1984, p. 55). What resulted was the refined second study.

The most noteworthy changes to the supervising teacher professional development curriculum was more adequate differentiation of instruction for varying conceptual levels including more structure and concrete directions for the low CL group and less structure and added theoretical readings and research projects for the high CL supervising teachers. Following the revised second two courses of graduate study, the results were more positive. The change from pre to post test on both Hunt’s CST and the
Rest D.I.T. was statistically significant at a .04 level. Additionally, on the measure of behavioral skill acquisition showed positive change as well. Upon examination of within groups differences, all but two of the 12 original participants improved. Likewise, the D.I.T. scores improved as well, with all 12 participants showing improvement. Overall the results from the measures of psychological maturity indicate modest and positive gains for both measures on the CST and the D.I.T. as well as the active listening skills of the supervising teachers (Thies-Sprinthall, 1984).

This study indicates that it may be possible to create educational meaningful professional development opportunities that may impact psychological stage development. While this study employed a relatively small sample size, the researcher did in fact try to alleviate any Type Two error by utilizing two different but similar assessment tools. Additionally this study provides valuable insight into the kinds of professional development opportunities that may in fact be most beneficial to not only supervising teachers but also mentor teachers who are supporting novice teachers in the district. As this professional development model is contemplated, however, it is important to realize that a teacher educator or trainer would need an extensive knowledge of not only psychological growth theory, professional development approaches, but also delivery methods to meet the varying needs of the participants. This in and of itself would make this approach to professional development a rarity rather than commonplace when providing training for the masses. However, when considering supporting new teachers, mentors who are assigned several or better yet just one novice teacher, with appropriate training, may be able to determine the psychological level of
their novice and work to meet them with professional development appropriate to their cognitive level.

**Adult Cognitive Developmental Theories in Relation to Developmental Mentoring**

In considering cognitive developmental growth as it relates to adult learning and mentoring it is important to understand how conceptual and moral development are intimately tied to the work of a mentor. The mentor is an epistemologist and an instructional manager for novice teacher learning, therefore conceptual development plays a key role in a developmental mentoring program. The mentor is a model of democratic values and beliefs for the novice teacher, therefore moral/ethical development shares importance (Johnson & Reiman, 2007).

There is research to support that the cognitive developmental stage level affects the performance results in complex human tasks, suggesting that teachers with higher cognitive development tend to exhibit less bias and prejudice, demonstrate increased empathy, use indirect approaches to instruction to a greater degree, utilize a wider variety of teaching methods, respond accordingly to students needs by adjusting readily, have a more accurate recall of class events, and Reiman (1999, p. 602) specifies the ability to “think on their feet” (Johnson & Reiman, 2006; Reiman, 1999; Thies-Sprinthall, 1986). Conversely, teachers who function at a lower cognitive level tend to “exhibit rigid, concrete and less adaptive behavior in problem solving situations” (Thies-Sprinthall, 1984, p. 53). Mentoring is a complex endeavor. A review of the core tenets of cognitive development education indicates that the role of mentor plays a critical part in the maturation of new educators (Smithey & Evertson, 2003). While mentors guide their
novices through the cognitive developmental domain, there is a significant interplay between the domains and growth through all the domains occurring simultaneously yet independently.

The role the mentor serves must be acknowledged in the novice’s development of cognitive structures. The mentor is responsible for providing learning experiences for the novice that aim to increase their cognitive developmental functioning. The mentor also depends on understanding the novice’s current level of functioning so as to utilize that information in making learning plans for the new teacher. Those responsible for matching the novices to their respective mentors must be aware of mentors’ cognitive processing levels as well. Studies support that care must be given in this matching, as a mentor who is functioning at the same cognitive level or a lower cognitive level will be unable to promote growth in the novice (Reiman & Thies-Sprinthall, 1998; Thies-Sprinthall, 1984). If mentors are not able to model the kinds of higher level cognitive engagement needed to bring about growth in the novice, their classroom practice is likely not to change. Furthermore, if a cognitive mismatch fails to occur, where the mentor is functioning at a more complex level, then the mentor will be little more than a sounding board or buddy to the novice (Carter & Foster, 2007; Kline & Salzman, 2006). In an ideal situation the mentor selection process will focus on identifying mentors who will be able to demonstrate the kinds of higher level processing as well as be able to guide the novices through their own cognitive development.

Another essential consideration associated with cognitive levels and mentoring relates back to those characteristics that are typical of someone processing at higher
levels: less bias and prejudice, increased empathy, greater use of indirect approaches to instruction, wider variety of teaching methods, able to respond accordingly to students needs by adjusting readily, more accurate recall of class events… as listed previously. These characteristics are equally important for mentors in relation to their work with novices. In fact, Thies-Sprinthall (1984) reports that mentors or supervisors functioning at lower cognitive levels tend to be less flexible and less responsive to their novice’s needs. Further, those mentors who function at a low conceptual level as indicated by Hunt’s conceptual level scheme tended to be quite negative in their evaluations of their novices.

The previous sections have focused on the dimension of cognitive development. In particular the domains of conceptual development and moral development and ethical decision-making have been considered as theoretical frameworks that support a developmental mentoring model. In the following section, the discussion of teacher development will be extended to include the concept of teacher change.

**Dimensions of Teacher Change: Concerns**

Frances Fuller, a researcher and teacher educator, focused much of her work on attempting to understand the personal dimensions of student teaching. During her early work with student teachers she began to notice a similar series of concerns raised by student teachers as they encountered increasingly complex experiences in the classroom (Fuller, 1969; Hall & Hord, 2006; Reiman & Thies-Sprinthall, 1998). Reeves and Kazelskis (1985) define the term concern as something that is thought about frequently
and creates the desire in the thinker to do something about it. Fuller (1969) grouped the phases into three broad categories: (1) survival, or self, (2) task and (3) impact concerns. Later, a fourth category was added, the unrelated concerns. At this level the student teacher’s concerns were not related to teaching at all. More often than not, this level of concern focused more on college life and college coursework not specifically related to education courses (Hall & Hord, 2006).

In an attempt to conceptualize concerns of student teachers, Fuller used a series of studies conducted by Fuller herself and a reanalysis of the findings from other investigations related to pre-service and in-service teacher concerns. Three specific groups of teachers in training were considered. The first group involved recorded discussions of a group of student teachers during their scheduled seminar times. The second group of participants completed surveys while the last study involved reanalyzing previous investigations.

**Study One**

The first study occurred in place of the regularly scheduled student teaching seminars. During the first semester a counseling psychologist met with six student teachers. The following semester a second counseling psychologist joined the first and met with eight student teachers. A third group of seven student teachers were counseled in a similar fashion the next semester. During each semester the conversations were audio-taped then later transcribed. Statements from the first two semesters were categorized by two examiners in an attempt to reduce instances of misinterpretation (Fuller, 1969).
Interpretation of this data involved recording frequencies the categories of the statements made throughout the semester. While many topics naturally emerged from the categorization of the statements the student teachers made, a more parsimonious division materialized as the tapes were reviewed. The statements were easily divided into statements about self and statements about students. The frequency of the statements did indicate that the student teachers were more concerned about themselves during the first part of the semesters with their concerns shifting to more about student learning near the end of the semester (Fuller, 1969).

This study certainly supports Fullers posit that teachers concerns develop and mature over time. However, it is important to keep in mind that this study reflects the thinking of a relatively small subject pool of 14 student teachers all within the same school system and who were supervised similarly. Another caution to take in considering the findings from this study involves the way the data were interpreted. The frequencies of statements were reported, meaning that a higher number of statements about a particular topic could have resulted from one or two verbose participants. In this case the data could have been skewed by just a few participants’ responses (Fuller, 1969).

Study Two

The second study contributing to Fuller’s findings about teacher concerns involved the analysis surveys completed by 29 student teachers who were being supervised by four different university supervisors. Each student teacher was asked to respond to the question, “what are you concerned about now” (Fuller, 1969, p. 214) at two week intervals. Their responses were categorized into three categories including
issues about self, concerns about class control, and responses about student learning. The data collected indicated that all 29 student teachers were concerned about self adequacy and classroom management or control. Consequently none of the participants responded in ways that indicated that they were concerned with student learning (Fuller, 1969).

Once again this study support Fuller’s stance that concerns mature over time in practice. However, once again 29 participants seems to be a relatively small sample size. Further, the fact that the student teachers were asked to respond to just one question of reflection, might indicate further investigation is needed to fully conceptualize the idea of teacher concern.

*Study Three*

Fuller’s work on conceptualizing student teacher concerns also included regrouping and reanalyzing data from six previously conducted studies. Basically the survey data was reassigned categorizes related to self and those related to students. It is as this point that Fuller’s work becomes more valid as both the sample size and participant diversity increased through the use of other data sets. In addition, this part of the study suggests that student teachers’ concerns are much like those concerns of early career teachers. Of the data considered, all six studies indicated concerns related to self when identified early in the semester. Likewise, late concerns or those concerns of career teachers rarely focus on discipline or worries about evaluations, but rather on lack of progress of students. These experienced teachers reported most satisfaction from evidence of student success (Fuller, 1969).
These studies further prove Fuller’s hunch that teacher concerns mature from self-oriented to concerns for others as teachers gain experience. Fuller noted that when concerns were mature, the focus tended to be on student achievement and self-evaluation, however, when they were immature, the focus seemed to fall back to self-concerns of the student teachers. It is only at the impact level that concerns shift to a focus on the learning of students (Fuller, 1969; Reeves & Kazelskis, 1985).

Later work on teacher concerns refined Fuller’s work by further delineating the three broad categories she originally purported. This refinement led to the creation of the Concerns-Based Adoption Model as well as the Concerns Questionnaire (SoC), a paper-and-pencil assessment that identifies the dominant concerns expressed (Hall & Loucks, 1978; Hall, Wallace & Dossett, 1973). While Fuller’s original work focused just on concerns of student teachers, more recent work on concerns has identified that anyone participating in an innovation, in other words, going through any significant change exhibits these same phases of concerns (Hall & Hord, 2006).

Table 3 identifies the three major categories originally identified by Fuller (1969) in the last column. The refined stages appear in the first column. The exemplars provide example statements that participants in an innovation may state somewhere during their experience. They are provided to help the reader fully understand the essence of each stage. In addition, words that describe the general feeling of someone in each of the stages in provided, for further clarification.
<table>
<thead>
<tr>
<th>Phase</th>
<th>Exemplar</th>
<th>Feelings</th>
<th>General Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Refocusing</td>
<td>I’d like to adapt the curriculum to better meet the needs of the students.</td>
<td>Confident</td>
<td></td>
</tr>
<tr>
<td>5. Collaboration</td>
<td>I am eager to share these ideas with my teammates at school.</td>
<td>Excited</td>
<td>Impact</td>
</tr>
<tr>
<td>4. Consequence</td>
<td>Are all the students connecting with the lesson?</td>
<td>Puzzled</td>
<td>Successful</td>
</tr>
<tr>
<td>3. Management</td>
<td>I never have enough time to do everything that is needed. How can I keep up with all this paperwork?</td>
<td>Frustrated</td>
<td>Task</td>
</tr>
<tr>
<td>2. Personal</td>
<td>How will this new program affect me? Will the parents like and respect me?</td>
<td>Anxious</td>
<td></td>
</tr>
<tr>
<td>1. Informational</td>
<td>I need more information about the district curriculum guidelines.</td>
<td>Curious</td>
<td>Self</td>
</tr>
<tr>
<td>0. Awareness (lack of)</td>
<td>I’m not the least bit concerned about the new program.</td>
<td>Apathetic</td>
<td></td>
</tr>
</tbody>
</table>

Unfortunately Fuller’s (1969) work has shown many new teachers remain at the task level due to the lack of professional support they receive during their induction years. It is clear that lower level concerns must be met before impact or higher level concerns can be considered. Fortunately, Fuller (1969) found that concerns can change through appropriate support. In the developmental mentoring program, the well trained mentor takes into consideration the novice’s level of concern in decision making about the novice’s learning. In the case of developmental mentoring, the novice is guided through addressing concerns at their current level, so that higher level concerns may come into focus.

One study conducted by Newman, Lenhart, Moss and Newman (2000) reports the shifting concerns associated with the acquisition of increasing levels of responsibility during the student teaching semester. This four year cross-sectional study of changes of pre-service teacher concerns included data collected from 53 pre-service elementary education students. Each participant was interning with two mentor teachers during each fall semester of the study and subsequently student taught with those same mentor teachers the following semester. Two measures were administered three times during each year. The self-efficacy scale and the Concerns-Based Adoption Model (C-BAM) were administered when they entered the program, at the end of their internship semester and finally at the end of their student teaching semester.

Descriptive, inferential and qualitative analyses were utilized. Descriptive and inferential analyses were based on participants’ responses to the Self-Efficacy Questionnaire and the C-BAM. Qualitative analysis was conducted on the multiple
responses acquired from the intern/student teacher reflective journals. This analysis focused on responses that could be identified as indicators of changes in concern.

The findings from this qualitative analysis indicate that overall pre-service teachers responses to concerns follow similar patterns moving from higher efficacious attitudes focused on positively impacting student learning upon entry to their internship semester to a mid-year low related to concerns of lack of teaching efficacy and even some questions about suitability for teaching. This pattern continued through the end of their pre-service experience with a rise to once again a higher sense of self-efficacy.

Like Fuller’s suggestion, this study indicates that levels of concern can be influenced by support or lack thereof of the one experiencing the innovation. However, this study suggests that all pre-service teachers do not necessarily begin at the awareness and information level then sequentially progress to higher levels. Rather, some pre-service teachers begin at a higher level then drop as they take on more responsibility in the classroom. The pre-service teachers’ concerns mature to a more a student centered concern as their gain experience in the classroom.

This study provides some insight into the levels of concern expressed by 53 pre-service teachers. Interestingly, the pattern exhibited in the findings by Newman, Lenhart, Moss and Newman (2000) vary slightly from the previously mentioned studies by Fuller (1969), Hall & Hord, (2006) Hall & Loucks, (1978), and Hall, Wallace & Dossett (1973). These studies indicate that most people going through any innovation will begin at a level of no concern, then progress through the other levels as they gain experience.
While this study sheds some light on the natural cycles some pre-service teachers progress through at the beginning of their teaching experiences, it does have limitations. Even though quantitative data was collected, at the point of publication full analysis of this data had not been completed. The quantitative data could have certainly help substantiate the findings. Additionally, this study was limited to understanding the concerns of pre-service teachers. Consideration of other teachers with varying levels of experience in the profession might have provided additional insight into the common concerns related to teaching. Nevertheless, this study does help illuminate the kinds of feelings associated with beginning a teaching career.

Concerns-Based Adoption Model in Relation to Developmental Mentoring

Work by Frances Fuller and later by Hall and Loucks (1978) and Hall et al., (1973) provides a necessary framework by which to examine the personal side of change. As participants progress through a change process or the implementation of an innovation feelings and perceptions evolve. The feelings and perceptions have been identified as the Stages of Concern. The use of this kind of information, in a mentoring relationship, can lead to “…significantly more effective one-on-one coaching sessions, more relevant workshops, and strategic plans that take into account the personal side of the change process” (Hall & Hord, 2006, p. 134). In the case of this study then can we assume that innovators, administrators and mentors utilizing their understandings of concerns of teachers will increase relevance of the ongoing professional development and improve long range strategic plans in a developmental mentoring program as well?
So far, this literature review has recognized professional development, cognitive development, and teacher change frameworks all of which will be used to compare the developmental mentoring programs and outcomes for the sites selected for this study. In addition to these frameworks, literature on infrastructure was examined to establish the foundation for identifying the supports necessary for a developmental mentoring program.

**Developmental Mentoring Constructs**

Beginning in the 1980s, the assignment of a mentor teacher to the novice was becoming more widely used. At this point it was thought that the mentor’s role was to provide emotional support and ease the “reality shock” (Odell & Huling, 2000, p. 73) novice teachers feel as the demands of their new position mount (McNally & Martin, 1998; Odell & Huling, 2000; Smithey & Evertson, 2003). However, current research indicates that mentors must provide much more than technical, emotional buddy type support. Carter and Foster (2007) support this thought by reporting

“The mere presence of a mentor who cares, is insufficient, if the goals of an induction and support program are related to cognitive and conceptual growth. Being present as a mentor, a caring and empathic mentor only, will have little impact…” (p.47) on the novice’s professional capacity and personal growth.

Mentoring programs will only produce positive benefits if they are carefully and thoroughly planned and fully supported. Education reformers suggest that teacher
mentoring is an important strategy for increasing new teacher retention and new teacher professional and personal abilities. This national developmental mentoring framework identifies the quality components of an effective developmental mentoring program. These components along with the work of Reiman and Thies-Sprinthall provide a sound base on which to build a quality developmental mentoring program. In the end, research has shown that well designed, implemented and supported mentoring programs raise retention rates for new teachers thus reducing the stress of teacher shortages (Darling-Hammond, 2003).

While the National Commission on Professional Support and Development for Novice Teachers establishes a framework for best practices for all types of mentoring programs, developmental concepts embrace practices related to cognitive developmental theory such as: people change and grow through a stage sequence (Odell & Huling, 2000a; Witherell & Erickson, 1978); adults respond to change more positively if they reflect on their own growth and have the chance to examine their own practices (Knowles, Holton, & Swanson, 1998) and reflection is a critical piece of adult growth and is necessary for the individual to see long term change (Fluckiger, McGlammery & Edick, 2006; Kelly, 2004; Reiman, 1999). Mentoring practices related to reflection include: careful field note taking from classroom observations of all participants both mentors and novices; videotaping of classroom teaching by all participants; written reflections with stems and/or guided response journals; and self assessment through analysis of teaching behaviors (Reiman, 1999). What kind of support program addresses
both of these domains for the new teacher? The paragraphs that follow describe one such framework.

*National Standards for Mentoring Programs*

The National Commission on Professional Support and Development for Novice Teachers developmental mentoring framework identifies an outline of quality developmental mentoring practices designed to help the novice grow professionally and personally (Odell & Huling, 2000). This national framework for quality mentoring is organized into six broad categories that are identified as dimensions. Each dimension in the framework is comprised of subparts called components. The dimensions are not designed to stand alone but rather they are interrelated to form the whole framework. The six dimensions included in the framework are: (I) Program Purposes; (II) School, District, and University Cultures and Responsibilities; (III) Mentor Selection and Mentor/Novice Matching; (IV) Mentor Preparation and Development; (V) Mentor Roles and Practices; and (VI) Program Administration, Implementation, and Evaluation (Odell & Huling, 2000).

Like the frameworks for teaching and learning, professional development and adult learning, this framework will also be used to compare the mentor training provided to the two districts in this study. Therefore, the following paragraphs provide more detailed descriptions of the framework dimensions from the National Commission.

*Dimension 1*

Program Purposes includes concepts such as helping novices develop a professional practice aligned with professional standards for teaching and learning, and
providing professional development opportunities for veteran teachers serving as mentors (Odell & Huling, 2000). The main focus of this dimension is establishing clear program purposes for both the mentor and novice that will help them develop the professional capacity needed in quality mentoring programs (Dynak, Schwille, & Nagel, 2000). Other studies highlight the use of the Interstate New Teacher Assessment and Support Consortium (INTASC) standards as an integral part of helping novices attain proficiencies in areas critical to teaching children (Council of Chief State School Officers, 2007).

Dimension 2

School, District, and University Cultures and Responsibilities focuses on the unique kind of collaboration necessary when schools and universities are involved in designing and implementing mentoring programs. While these entities work together, each must be considered from their individual, unique perspective (Wolfe, Bartell & DeBolt, 2000).

Dimension 3

Mentor Selection and Mentor/Novice Matching helps identify the process for selecting possible mentors then matching their unique characteristics to those of the novice teachers’. Selection criteria and processes are identified for mentors. In addition the benefits of using criteria for matching mentors and novice teachers are considered (Schwille, Nagel, & DeBolt, 2000). Traditionally mentors were chosen based on their success in teaching children. However it has become evident that just because a teacher is excellent teaching children they may or may not have requisite skills for working with
adults (Heller, 2004; Odell, 2006; Yendol-Hoppey & Dana, 2006; Young et al., 2005). Many studies substantiate the importance of the process of selecting mentors based on a set of characteristics appropriate to the particular program purposes (Fulton et al., 2005; The NEA Foundation, 2001; Hughes, 2006; Kelley, 2004; Odell, 1986; Yendol-Hoppey & Dana, 2006; Young et al., 2005).

**Dimension 4**

Mentor Preparation and Development establishes the need for mentor training. In addition the focus of this dimension addresses content, duration, and modes for providing mentor training. Regularly scheduled meetings between mentors and between mentors and their novices are essential. Furthermore, formal professional development that occurs both prior to the mentor work and ongoing throughout the year provide the needed opportunities for learning about the mentor’s new role (Schwille & Dynak, 2000). Several particular content areas are listed for mentor training include but are not limited to:

- observing and analyzing the practice of novice, with emphasis on professional standards-based teaching;
- national and local reform initiatives to enhance teaching;
- collecting classroom data;
- communicating and resolving conflict;
- understanding novice development an the needs/concerns of novices;
- fostering productive conversations about teaching and learning;
- studying the mentor’s own teaching and helping the novice learn from these processes;
- analyzing the learning of diverse students and helping the novice learn from these processes;
- mentoring strategies and practices to support and challenge novices to learn at their maximal level;
- analyzing school and district context and their influence on mentoring, teaching and learning to teach;
- working with novices as adult learners; and
- exploring ways to facilitate the novice’s use of school, district and community resources (Schwille & Dynak, 2000, p. 68-69).

Numerous studies support these training components identified in the national framework, other topics for mentor training appear in the literature as well such as training on observing and providing feedback in a constructive way (Fulton et al., 2005; Hughes, 2006; Huling & Resta, 2001; McNally & Martin, 1998) and peer coaching (Basile, 2006; Kelley, 2004).

**Dimension 5**

Mentor Roles and Practices describes the myriad of roles the mentor participates in as they support novice teachers. Dynak and DeBolt (2000) indicate that the mentoring role is “multifaceted and demanding” (p. 77). In addition, the wide variety of skills necessary to be an effective mentor is indicated. Carter and Foster suggest “the role of the developmental mentor is a strategic one and can play a significant part in the
formulation of a coaching plan that inspires and challenges change, growth and higher levels of cognitive complexity (2007, p. 47). Roles identified in the literature include “reflective guide, supportive coach, and understanding caregiver” (Kajs, 2002, p.62), “leader, teacher, coach, helper, role model, and nurturer” (Carter & Foster, p.37), and “trusted colleague, counselor, confidant, friend, door opener, sponsor, and symbol of expertise” (Smithey & Evertson, 2003, p.3). Possibly one of the most critical mentoring skills that need continual refinement is the use of a coaching plan within the coaching cycle. The coaching plan allows for individualized learning based on the novice’s needs and current cognitive levels while the coaching cycle involves the pre-conference, the observation and the post-conference (Reiman & Thies-Sprinthall, 1998).

**Dimension 6**

Program Administration, Implementation and Evaluation identifies the need for strong leadership related to the mentoring program. Reiman and Dynak indicate that the participants in the program need to play a role in developing the criteria for the selection of the mentoring program coordinator. Furthermore, the authors suggest that as mentoring programs are developed, designers need to carefully consider the network of relationships that exist across the six dimensions.

**Supports, People and Processes: An Infrastructure for a Developmental Mentoring Program**

A network of supports, people and processes was identified previously in this literature review as necessary when designing support for novice teachers (Fulton et al.,
This section of the literature review will examine the infrastructure necessary for implementing and sustaining a developmental mentoring program within the constructs of supports, people and processes. While there is little literature directly related to infrastructure within the developmental mentoring framework, studies on infrastructure in schools that create positive workplace environments and infrastructure in relation to systemic change will be utilized instead, as developmental mentoring may be considered an innovation. The five conditions related to improving experiences in the workplace add to understanding how this may influence those working in a developmental mentoring model. In addition, the three elements of infrastructure related to systemic change may also add in understanding how implementing a developmental mentoring program is similar to implementing change across a large group or entire institution. Therefore the conditions to improve workplace environments and the three elements of infrastructure related to systemic change will be considered in relation to implementing a developmental mentoring program.

Improving Workplace Conditions

Workplace conditions have been identified as one source of dissatisfaction of professionals who eventually leave teaching (Carter et al., 2006; Charlotte Advocates for Education, 2004; Darling-Hammond, 2003; Heller, 2004; Jalongo & Heider, 2006). The Center for Comprehensive School Reform and Improvement (2007) has identified five conditions that can positively influence teachers’ perceptions about teaching including: (1) securing adequate time for planning and collaboration, (2) working in a school with positive and supportive principals, (3) feeling greater professional influence through
participating in school level decision-making, (4) participating in ongoing professional
development, and (5) receiving adequate curricular resources. Workplace conditions
have clearly been shown to either “…enable or constrain good teaching” (Johnson, 2006,
p. 1). The following paragraphs will discuss each of these conditions.

Condition One: Adequate Time

The issue of never having enough time to what is expected of them has long been
a concern for teachers. Delaney and Arredondo (1998) indentified that a key need for
improving workplace conditions for teachers involves providing adequate time for
teachers to work collaboratively. Many studies cite the socio-cultural norm of teachers
working in isolation of others and the difficulty this sustains in promoting growth and
change within the school (Brandt, 1987; Brooks-Young, 2007; Hardy & Lingard, 2008;
Rogers & Babinski, 1999). One way to break this long standing tradition of working in
isolation of others is to provide time for teachers to work collaboratively with others for
planning and problem-solving (Delaney & Arredondo, 1998). The Center for
Comprehensive School Reform and Improvement (2007) provides several suggestions
for creating more time during the day without adding to the teachers’ workload. One
suggestion is to lengthen the day so that early release time or additional planning days
may be added to the calendar. Another suggestion, which seems more feasible in regards
to not increasing teacher workload, is to hire paraprofessionals or permanent substitute
teachers who can cover classes while teachers collaborate. The last suggestion made for
increasing time for teacher collaboration falls on those who organize students into
teacher’s classes by ensuring that course and student assignment loads are fair and
manageable (Center for Comprehensive School Reform and Improvement, 2007; Johnson, 2006). The principal may be the one to make the decisions necessary to ensure manageable workloads for teachers. Other ways the principal may improve workplace conditions is to work in other supportive ways with the staff.

**Condition Two: Successful Leadership**

Principals fill many important roles on their campuses in the daily operation of schools (Watkins, 2005). The principal’s role is an important one in many ways, but is especially important in retaining and developing quality professionals in the field of teaching (Brooks-Young, 2007; Charlotte Advocates for Education, 2004; Darling-Hammond, 2003; Ingersoll, 2001b; Watkins, 2005). One study reported by The Center for Comprehensive School Reform and Improvement indicated that for more than one-quarter of teachers, the leadership in the school was the most crucial working condition in making or breaking their decisions to remain in the profession (2007). In another study, Chrisman (2005) reported that successful principals in successful schools were “…more likely to create time for teachers to collaborate and to provide them with structured support” (p. 18). One study even suggested that the principal play a role in relieving teachers of the classroom duties so that time may be acquired for them to work collaboratively with others in the district (Heller, 2004). Principals also have the opportunity to improve workplace conditions by involving teachers in the decision-making process in the schools.
Condition Three: Teacher Empowerment Through Increased Decision-Making

“Historically, teachers have been permitted to make instructional decisions within their classrooms but have experienced much less influence in other school functions” (The Center for Comprehensive School Reform and Improvement, 2007, paragraph 9). Many studies cite the lack of teacher decision-making as a pivotal reason for job dissatisfaction and leaving the profession (Ingersoll, 2001a; 2001b; Johnson, 2006; The Center for Comprehensive School Reform and Improvement, 2007). Some suggestions for increasing teacher decision-making at the campus and district level include engaging teachers in school improvement teams and varied instructional leadership roles. One such role identified by The Center for Comprehensive School Reform and Improvement is a release time model where the teacher participates in a reduced teaching load while fulfilling other instructional duties such as peer review and coaching (2007). Increased teacher empowerment in the decision making process at the campus and district level raises the feeling of respect and job satisfaction leading to increased likelihood of them remaining in the profession. Provision of ongoing professional development increases this likelihood as well.

Condition Four: Provision of Ongoing Professional Development

The fourth condition for improving workplace conditions involves providing ongoing professional development for teachers. Ensuring that teachers have opportunities to continue to develop their skills increasing their capacity to meet the needs of the diverse learners in their classrooms is another way of improving job satisfaction (The Center for Comprehensive School Reform and Improvement, 2007).
Johnson (2006) traces the history of teacher professional development from a time when trainings were disconnected and unproductive to today where teachers have opportunities to focus on student learning and effective teaching practices applicable to their classroom experiences. Further Johnson (2006) indicates that quality professional development has the opportunity to energize teachers as the focus on teaching and learning is directly applicable to their current work. Within the context of professional development it is important to consider the information previously presented on the Joyce and Showers (2002) model for professional development, Reiman and Thies-Sprinthall’s Teaching and Learning Model (1998), and Knowles assumptions of andragogy (1998) in considering appropriate professional development experiences for teachers. Coupled with appropriate professional development opportunities is the need for curricular resources.

**Condition Five: Adequate Resources**

The fifth condition of improving workplace conditions involves providing teachers with adequate curricular resources. Carter et al., (2006) and Darling-Hammond (2003) have reported lack of adequate supplies as a reason for dissatisfaction and subsequent leaving the profession by teachers. Johnson clarifies this condition by identifying that teachers need both curricular support as well as the resources associated with teaching the curriculum (2006). “Qualitative studies of teachers’ work are replete with stories of ill-equipped schools and classrooms….They tell of out-of-date textbooks, stringent quotas on paper, and deficient libraries with torn books and antiquated audiovisual materials” (Johnson, 2006, p. 11). Certainly teachers’ perceptions of the
level of respected deemed appropriate are related to the conditions of their working environment.

When these supportive workplace conditions are in place, they have a significant influence on the level of satisfaction teachers feel in their work, therefore increasing the likelihood that they will remain in their positions in the profession. These five conditions serve as an infrastructure that ensures teachers’ feelings of success in the profession. In initiating a developmental mentoring program, we can use these examples of infrastructure for teacher success in considering the kind of infrastructure necessary for a developmental mentoring program.

*Systemic Infrastructure Related to Organizational Change*

In the work of systemic change, the term institutionalization means much the same as to sustain. “Institutionalization is the active process of establishing your initiative, not merely continuing your program, but developing relationships, practices, and procedures that become a lasting part of the community” (Adelman & Taylor, 2003, p. 2). In educational systemic change, sustainability involves integrating the innovation so completely into the system that continuity is ensured regardless of who is in the leadership role, how the innovation might have evolved over time, or the level of difficulties faced as the innovation begins and continues.

The reason that the area of change and sustainability is a part of this review is because mentoring programs are often viewed as innovations in schools. Just as innovations are subject to outcomes such as maintenance, sustainability and dissolution, so too are mentoring programs. A principle practice commonly found in the literature
supports the development of an infrastructure or an internal framework of supports built into the work of the innovation that provides for sustainability. The elements of infrastructure as identified as what supports sustainability in innovative programs and change mechanisms include: (1) key individuals, (2) resources, and (3) accountability. The sections that follow describe the elements of infrastructure included in the literature on systemic change: key individuals, resources and accountability.

**Element One: Key Individuals**

Key individuals are identified as critical to the infrastructure that supports implementation of and sustainability of the innovation. While examining change in systems, individuals who are key to the sustainability include a wide variety of participants. Staff members participating in the innovation as well as the administration who control the district resources, have been found to play an important role in the infrastructure. District-wide support from teachers, principals and central office staff is essential. This can be described as top-down and bottom up support or what Fullan describes as “downward investment and upward identity” (2000, p. 22). Support from the administrative level, or the downward investment includes providing necessary resources including funding and time while the upward identify occurs as staff buy-in substantially increases as success is accomplished (Fullan, 2000; McLeskey & Waldron, 2006; Sterbinsky et al., 2006). Strong buy-in from the staff participating in the innovation is important as groups of people must work collaboratively with a shared vision. Collaboration, two or more people working together to achieve a common objective is an essential factor in successful organizational change (Curtis & Stollar,
Not only is significant staff participation necessary in organizational change, but the principal or leader’s role is critically important in successful organizational change. Without a doubt, effective leadership is key to successful organizational learning (Curtis & Stollar, 1996; Sterbinsky et al., 2006). The literature points to transformational leadership as a style that effectively supports organizational learning. A transformational leader establishes clear visions and goals; promotes an atmosphere of caring and trust; expects participative decision making; encourages reflection; provides moral support and show appreciation; and maintains high performance expectations for both students and staff (Silins & Mulford, 2004). Not only is the school administration seen as key leadership able to either promote or negate organizational learning, but many times teachers in leadership roles can impact this professional development as well.

In a study by Silins and Mulford (2004), leadership practices of teachers in particular were considered with regard to successful organizational learning. Using data collected for a much larger project Leadership for Organisational Learning and Student Outcomes (LOLSO) which was funded by the Australian Research Council. Drawing on the survey data already collected for the larger project along with results of the analysis, Silins and Mulford (2004) worked to identify the nature of learning organizations as well as kind of principal leadership that supports organizational learning. A number of variables were included in the path model and analysis developed to examine the influence of a number of internal school variables including: socioeconomic status, school size, resources available, campus leader characteristics, staff value level,
leadership satisfaction, community focus, teacher leadership, organizational learning characteristics, teachers work habits, and student participation and engagement.

The path model utilized in this study allowed for weighing impact of all variables on all variables. Each variable was considered. When the total of the doubled standard error was greater than or equal to .40, then that variable was retained in the model. Once the outer variables were stable, then the inner variable model was refined.

Several variables emerged as direct predictors of teacher leadership: staff value level (p= 0.37), leadership satisfaction (p= 0.36) and socioeconomic status (p=-22). The negative path was reported to indicate that there was some tendency for greater levels of teacher leadership in low socioeconomic schools. In additional five variables were found to be direct predictors of organizational learning: teacher leadership (p=0.26), staff value level ( p= 0.26), leadership satisfaction (p= 0.22), leader (p= 0.19), and resources available (p= 0.17). In summarizing the findings, this study indicates that teacher leadership contributes significantly to organizational learning. School structures and leadership processes that promote organizational learning also promote teacher leadership in an indirect manner.

This study contributes beneficially to the growing understanding of the major changes occurring in the work lives of teachers. The importance of nurturing learning organization communities centered on mutual trust, and collegial conversations focused on self reflection the traditional excessive autonomy of teachers that has been found to be a leading contributor to teacher attrition can be reduced significantly. This study provides findings that support this shift in organizational structure in our schools.
Because many variables were included in the path model, strength can be assumed when considering these findings in relation to other schools as well. Considering the complexities and anxieties commonly associated with change, leadership even teacher leadership that can motivate constituents through these challenges best promote system-wide learning (Adelman & Taylor, 2007). The literature is clear about how these foundational components of promoting organizational growth lead to successful systemic change.

In another study primarily designed to look at the reasons for improvement in low performing schools, teacher and principal leadership appear as two of the emergent themes from the data analysis. Chrisman (2005) compared successful and unsuccessful schools in three areas: analysis of test scores and school characteristics; interview responses of a sample group of teachers and principals at the target schools, and questionnaire responses from 356 principals whose schools experienced student achievement growth in at least one of the two years following the initiation of a program designed to increase student achievement. Represented in the data was the finding that strong teacher leadership was apparent in each of the successful schools involved in the study. The teacher leaders were involved in policy decision making, creation of student learning groups, implementation of innovations, and decisions related to professional development.

In addition, those schools found to be successful in raising student achievement were found to have strong principal leadership as well. These principals were found to
more often create time for teacher collaboration, structured instructional support, and often used student data in decision making.

While the study was not entirely focused on characteristics of organizational structures for systemic change, it does validate further the importance of quality leadership in initiating and supporting change efforts. The schools that were viewed as successfully changing the student achievement outcomes, shared a common structure of strong leadership.

In additional to teachers and principals, central office administrators play an equally critical role in success change initiatives and in improving workplace conditions. It is imperative that innovation have strong support from central office as many of the resources decisions related to money and time originate here (McLeskey & Waldron, 2006; Sterbinsky et al., 2006).

As a part of the infrastructure, these key people play an integral role in creating a system of “pressure and support” (Fullan, 2000, p. 15). “For some time we have realized that combinations of pressure and support are required for improvement. This works well when systems of pressure and support are integrated, not segmented” (Fullan, 2000, p. 24). Pressure and support as described related to systems change can be compared to Reiman and Thies-Sprinthall’s (1998) work with support and challenge whereby for growth to occur a significant amount of challenge for learning must occur coupled with adequate support. In this case the pressure is equated with challenge and the support the same in both models.
Element Two: Resources

Resources, the second element in infrastructure related to change, are necessary in sustaining change efforts. Adelman and Taylor suggest that a significant portion of the resources allocated to systemic change must be used in designing and implementing the infrastructure necessary for implementing, sustaining and evaluating the innovation (2007). In this case resources refer to monetary support as well as time designation for the innovation. A significant amount of the resources allocated to a change project must be used to design and maintain the infrastructure necessary to support sustaining the change (Adelman & Taylor, 2007). Funding is needed to insure adequate staff and even reassignment of personnel that may be necessary for sustaining the innovation (Adelman & Taylor, 2007; Miller et al., 2005). Miller et al., suggest that sometime fiscal resources need to be shifted in order to allow for sufficient monetary support for new practices (2005).

Time has also been indicated as a needed resource in supporting change (Delaney & Arredondo, 1998; Miller et al., 2005; Sterbinsky et al., 2006). Time is a valuable resource needed to ensure sustainability of the change initiative by allowing for ongoing collaboration reducing the typical isolated nature of teaching (Delaney & Arrenondo, 1998). Restructuring time in schools in ways that do not increase the teachers’ workday are essential in allowing extended time for planning, practice and monitoring the institutionalization of the innovation (McLeskey & Waldron, 2006; Sterbinsky, et al., 2006). While people and resources are necessary in implementing and
sustaining change efforts, accountability serves as a way of checking progress and adjusting when necessary to ensure continued success of the initiative.

*Element Three: Accountability*

The third element of infrastructure related to systemic change is accountability (Adelman & Taylor, 2003; Joseph & Reigeluth, 2005; Miller et al., 2005; McLeskey & Waldron, 2006). At the crux of accountability is the need to evaluate the change process as it is implemented and carried out in a way that measures relative success. If needed, the innovation can be altered if the evaluation indicates that something within the system is not functioning fully in order to make the implementation or systemic change process more smooth (Adelman & Taylor, 2003; McLeskey & Waldron, 2006). Adelman and Taylor (2003) warn that too often policymakers are premature in their desires to learn of early outcomes of innovations and oftentimes mandate early accountability measures. What results is reduced attention to possible long-term effects of the innovation in light of incomplete or immature measures early on. Rather it is suggested that system-wide change efforts be measured against short-term outcomes or benchmarks in an attempt to progress monitor intermediate outcomes (Adelman & Taylor, 2003). Ultimately, long-term outcomes that measure the relative effectiveness of systemic change can be utilized to determine the success of systemic changes after significant time when the process has had time to become well established (Adelman & Taylor, 2003; McLeskey & Waldron, 2006).

When these three elements of infrastructure related to systemic change are in place there is an increased likelihood that the innovation that is the focus of systemic
change will be successful. Key individuals, access to resources and accountability form and infrastructure necessary for successful implementation of and sustainability of any system-wide change process. Just as the infrastructure for improving workplace condition in considering the kind of infrastructure necessary for a developmental mentoring program can be used, so too will the infrastructure related to systemic change prove valuable.

**Supports, People and Processes Necessary in a Developmental Mentoring Program**

**Improved Workplace Conditions Infrastructure in Relation to Developmental Mentoring**

The information on infrastructure in relation to creating improved workplace conditions as well as that for systemic change can certainly support the developmental of an infrastructure framework for a developmental mentoring program. There are direct correlations between the three. Improving workplace conditions is aimed at reducing teacher attrition by improving how teachers perceive the respect and value placed on their careers ((Carter et al., 2006; Charlotte Advocates for Education, 2004; Darling-Hammond, 2003; Heller, 2004; Jalongo & Heider, 2006; Johnson, 2006; The Center for Comprehensive School Reform and Improvement, 2007). Developmental mentoring is also designed to reduce new teacher attrition through individualized support based on the novice teachers unique personal and social needs in a more comprehensive approach aimed at increasing the novice teacher’s cognitive levels, improving reflective practice and developing pedagogical models (Flores, 2006; Gore et al., 2006; Reiman & Thies-Sprinthall, 1998; Wang et al., 2008). Likewise, systemic change shares common goals with developmental mentoring as well.
Systemic Change Infrastructure in Relation to Developmental Mentoring

The infrastructure used to support system change is useful in considering an infrastructure framework for developmental mentoring also. Just as the infrastructure for systemic change is aimed at supporting the planning of, implementing, sustaining, and improving the innovation that is the focus of the change process, the creation of a developmental mentoring program involves these same steps. For most new mentors in a developmental mentoring program, many new concepts must be attained in order for them to fulfill their role successfully. As mentors learn their new role, a fundamental change in their thinking occurs. As groups of new mentors, schools and school district adopt the developmental mentoring program as the model they will use, in effect a system-wide change will occur in relation to how novice teachers are inducted into their new districts. Systems thinking in relation to systemic change, certainly adds to the knowledge base regarding educational improvement, in the case of developmental mentoring, improvement in novice teacher induction practices. It is evident that the focus on the entire system increases the likelihood that the change effort will not only be implemented but may also be sustained in a way that the new structure of the organization is fully integrated into the system (Miller et al., 2005). The current literature on systemic change provides a description of the infrastructure that must be in place so that the innovation may be sustained. If the implementation of a developmental mentoring program can be considered an innovation in a model of systemic change, the information captured in the current literature on change infrastructure can be useful as an infrastructure for developmental mentoring is constructed.
**Infrastructure Directly Related to Developmental Mentoring**

There are two sources of particular interest to researchers of mentoring practices and infrastructure. They include work of Leslie Huling (2008) through Project CREATE and the Association of Teacher Educators (ATE) in collaboration with Phi Delta Kappa (2000).

**Infrastructure Identified in CREATE Teacher Induction Study**

In an ongoing multi-phase study, The Relationship of Mentor Support to Novice Teacher Retention and Student Achievement, (Huling & Resta, 2007) a set of ten infrastructure supports that have been found to be statistically significant in correlation with district level retention of new teachers is identified in the study. Following each component in parenthesis is the statistical significance for each type of infrastructure support. The components listed occur in order of most significant to least significant.

1. Common planning period (.0001)
2. Mentor stipend (.0005)
3. Documentation of mentor/mentee work (.0065)
4. Same teaching assignment (.012)
5. Mentor handbook (.0125)
6. Guidelines for time spent mentoring (.021)
7. Novice teacher support sessions (.0225)
8. Principal’s understanding of the mentor role (.0335)
9. On-going mentor training (.0345)
10. Use of program evaluation results (.042)
Each of these items is statistically significant at the .04 level or below. This study identifies infrastructure components directly related to the sustainability of a developmental mentoring program. However, the study also investigated other critical components of a system-wide mentoring program.

The CREATE study involved collection of extensive data on Mentor Support and Workplace Ecology. The data was collected from 451 novice teachers beginning their careers during the 2005-2006 school year. These novice teachers participated in a three part interview process including foci on mentor support, workplace ecology, and demographics. In addition, their mentor teachers completed surveys that focused on the program infrastructure and demographics. The research instruments used to collect this data were created by the principle investigators specifically for this study as they determined that no existing instruments would both answer their research questions while not imposing too heavily on the participants. These instruments were piloted first then refined. When enough data was collected, the instruments were examined for evidence of validity and internal consistency. Finally, interviewers were trained to ensure a satisfactory level of inter-rater reliability. The first interviews began in late April and early May 2006 (Huling & Resta, 2007).

The data reported in the phase two findings were summarized using descriptive statistics and analyzed using both parametric and non-parametric techniques. Huling and Resta report,“The goal in the analyses was to include the maximum number of cases in each analysis without sacrificing data integrity” (2007, p. 5). A few of the findings listed in the summary of the findings for phase two of this study include:
1. There is a statistically significant relationship (<.01) between mentor program infrastructure and mentor support received by novice teachers and between mentor program infrastructure and the district retention of novice teachers (<.01).

2. There is a statistically significant relationship (<.05) between mentor support and the retention of novice teachers within the district and between workplace ecology [relating to workplace conditions previously discussed] and novice teacher retention within the district (<.01).

3. More than three-quarters of novice teachers were retained in the same district. The vast majority remained at the same campus; 4% changed campuses within the district.

4. Novice teachers who rated their relationship with the mentor as “indifferent” left the district at twice the rate of those who rated their relationship as “close” (Huling & Resta, 2007, p. 1).

The findings reported in the CREATE study provide credence of necessity for this study on mentoring infrastructure as the CREATE study clearly identifies the kinds of infrastructure that seemed to be more or less important to the participants interviewed. In addition, the CREATE study provides findings in an area that has rarely been the focus in determining ways to improve mentoring in school districts. In addition to this study, Odell and Huling (2000) edited the first and only published set of national standards for mentoring. These national standards provided additional information directly related to implementing and sustaining a mentoring program as well.

*Infrastructure Components in the National Mentoring Standards*

Another support appropriate for use in designing developmental mentoring program infrastructure involves the national standards co-published by the Association
of Teacher Educators (ATE) and Kappa Delta Pi. The national standards formulate a framework comprised of six dimensions related to implementing, sustaining, and improving mentoring programs. This resource which was described in more detail in the section of this literature review titled Components of Developmental Mentoring Programs, provides a clearly organized framework including goals, rationales and actions associated with implementing and sustaining a developmental mentoring program. This framework can provide the foundation of supports for the infrastructure needed to maintain this work with novice teachers.

Keeping in the mind the primary purpose of an infrastructure system is to aid in implementing and sustaining an innovation, in this study, developmental mentoring will be considered the innovation. While not all dimensions included in the National Mentoring Framework are significant components of the infrastructure aimed at implementation, sustainability and improvement of a developmental mentoring program, four dimensions prove valuable: (1) Program Purposes, (2) School, District, and University Cultures and Responsibilities, (3) Mentor Preparation and Development, and (4) Program Administration, Implementation, and Evaluation.

The first dimension identified as important for including in an infrastructure framework is Dimension I: Program Purposes. Dynak et al.,(2000) suggest that for anyone wishing to develop or improve a mentoring program, defining clear purposes for the program is a critical beginning step. “Establishing clear program purposes will help participants to develop the professional focus of quality mentoring programs” (Dynak et al., 2000, p. 39). It is the establishment of a clear focus that will help set the purpose for
the work of mentoring as well as guide the ongoing monitoring of the program that allows for constant refinement and improvement. When clear program purposed are established multiple stakeholder groups can participate in the development and implementation of the developmental mentoring program.

The next dimension of the National Mentoring Framework that seems to contribute significantly to the developmental mentoring infrastructure involves the collaboration between schools, districts and universities. Dimension II: School, District, and University Cultures and Responsibilities. When frank discussions about the roles and responsibilities of all stakeholders in a developmental mentoring program occur, more effective collaboration will result. Mentoring programs can be difficult to develop and sustain, particularly when multiple stakeholder groups are involved. However more productive collaboration can ease this difficulty (Wolfe et al, 2000). While collaboration is a necessary construct of a developmental mentoring program, the preparation and ongoing training for the participants is equally important.

Mentor Preparation and Development is the next component included in the infrastructure designed to implement, sustain and improve the developmental mentoring program. The preparation of the mentors who will work with the novices in the developmental mentoring program is a critically important component of sustaining the program objectives. “Mentors should be involved actively in professional development work prior to and during their roles as mentors. Their work must be supported continually to develop their teaching and mentoring skills further” (Schwille & Dynak, 2000, p. 67). Included in this component is the need for resource allocation including
both time and funding. Establishment of program purposes, clearly defined roles for all stakeholders, and mentor preparation in addition to program administration, implementation and evaluation comprise all the components of the developmental mentoring program infrastructure based on the National Mentoring Framework (Odell & Huling, 2000).

The last dimension comprising the developmental mentoring program infrastructure is Program Administration, Implementation and Evaluation. This component serves as the structure that ties the entire mentoring program together. Included in this component is the consideration for effective leadership, establishment of a proven decision-making process, and implementation of an accountability process for measuring program goals and objectives is essential in all phases of the innovation of a developmental mentoring program infrastructure (Reiman & Dynak, 2000). It is the accountability piece that ensures adequate implementation of the program and allows for improvement when needed.

**A Combination of Four Models in Identifying the Developmental Mentoring Infrastructure**

How can the models for improving workplace conditions, systemic change, Project CREATE and the National Mentoring Framework be combined to form one combined infrastructure framework? Hall and Hord (2006) suggest the use of Innovation Configuration (IC) maps to aid in identifying the major components of innovations while also identifying the variations of each. The Cross Walk IC map is particularly useful in
looking at several models. Table 4 identifies all essential components of infrastructure just discussed.

<table>
<thead>
<tr>
<th>Combined Infrastructure Component</th>
<th>Improving Workplace Conditions</th>
<th>Systemic Change Infrastructure</th>
<th>Project CREATE</th>
<th>The National Mentoring Framework</th>
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<tbody>
<tr>
<td><strong>Collaboration</strong></td>
<td>Adequate Time for Planning and Collaboration</td>
<td>Work Between Involved Groups</td>
<td>-Common Planning Period</td>
<td>School, District and Universities Cultures Responsibilities</td>
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<td></td>
<td></td>
<td></td>
<td>-Same Teaching Assignment</td>
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<tr>
<td><strong>Leadership</strong></td>
<td>Positive and Supportive Leadership</td>
<td>Key Individuals</td>
<td>-Principal’s Understanding of the Mentor Role</td>
<td>Program Administration, Implementation and Evaluation</td>
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<td><strong>Mutual Decision Making</strong></td>
<td>Teacher Empowerment</td>
<td>Through Participation in Decision Making</td>
<td></td>
<td>School, District and Universities Cultures Responsibilities</td>
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<tr>
<td>Combined Infrastructure Component</td>
<td>Improving Workplace Conditions</td>
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<td><strong>Ongoing Professional Development</strong></td>
<td>Ongoing Professional Development</td>
<td>-Novice Teacher Support Sessions</td>
<td>Mentor Preparation and Development</td>
<td>-Ongoing Mentor Training</td>
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<td><strong>Provision of Resources</strong></td>
<td>Adequate Resources</td>
<td>-Mentor Stipends</td>
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<td><strong>-Funding</strong></td>
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<td>-Mentor Handbook</td>
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<td><strong>-Time</strong></td>
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<td><strong>Accountability and Measurement</strong></td>
<td>Accountability</td>
<td>-Documentation of Mentor/Mentee Work</td>
<td>Program Administration, Implementation and Evaluation</td>
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<td>-Guidelines for Time Spent Mentoring</td>
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<td>-Use of Program Evaluation Results</td>
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<td><strong>Clear Program Purpose</strong></td>
<td>Establishment of Clear Program Purposes</td>
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The purpose of Table 4 was to combine all the findings on infrastructure or internal support systems in the current literature in an attempt of formulate a combined infrastructure model for developmental mentoring. The first column titled Combined Infrastructure Components identifies the common components across all four models. The next four columns include components of those infrastructure systems considered in the literature review. Going back to the three main constructs of new teacher support, supports, people and process, each of the Developmental Mentoring Infrastructure fits into construct. The supports construct includes: (1) Ongoing Professional Development, and (2) Provision of Resources. The people construct includes: (1) Collaboration, and (2) Leadership. The processes construct includes: (1) Mutual Decision Making, (2) Accountability and Measurement, and (3) Clear Program Purpose. The information found in this table will serve an important role in this study as two different school sites are examined in relation to their infrastructure systems. The purpose of this study is to determine how infrastructure affects the outcomes of two developmental mentor programs.

It is critical as more and more developmental mentoring programs are created across the nation, that the information gleaned from the current literature is considered. Mentoring remains the single most cost effective means at reducing new teacher attrition leading to increased retention (Odell & Huling, 2000). When the revolving door of teacher turnover is shut, children, families, schools and communities reap the benefits. Infrastructure seems to be the most cost effective means of sustaining the developmental mentoring program aimed at eliminating high rates of teacher turnover.
As evidenced by this literature review, little study has been conducted directly related to infrastructure needed for implementing and sustaining a developmental mentoring program. In this study a combination of sources allow for the development of a proposed infrastructure framework model including literature on Improving Workplace Conditions, Educational Systemic Change and the national mentoring standards. In addition, data from the Project CREATE study directly related to infrastructure added to this model. This study intends to not only identify the components of infrastructure necessary for implementing and sustaining a developmental mentoring program, but also identify the possible outcomes associated with either including or deleting these components from the program design.

**Summary**

This literature review began with an examination of the current issues related to teacher shortages across the nation. While the teacher shortage that was originally reported in the early 1980s continues today, current data indicates that it can be primarily attributed to new teachers leaving the profession soon after entering rather than inadequate applicant pool or timely retirements. Not only is new teacher attrition costly monetarily, but the human cost of attrition is alarming. High teacher turnover results in few quality teachers in classrooms as well as support staff such as mentors and administrators being stretched thin as their previous inductees leave and the process begins anew. Reasons often cited in the literature for teacher attrition include better working conditions, lack of support, feelings of isolation, inadequate preparation and
lack of resources have all been reported as reasons why teacher leave the profession. This section of the literature review serves the purpose of magnifying the importance of continuing to work to improve new teacher retention.

The following section reviews the current literature on mentoring and induction. Within the last 25 years attempts to reduce new teacher attrition have been made through the implementation of new teacher induction and mentoring for those new to the profession. Early attempts at mentoring focused on orientation of the novice to the profession as the mentor served as a buddy or emotional support, while the new teachers faced the increasingly difficult demands of a new career. However, it did not take long for new studies to show that the involvement of a mentor could benefit novices more fully if the mentor was prepared to design, promote and carry out teacher cognitive growth. What resulted was a growing interest in new teacher induction programs that included the pairing of novice teacher with mentors. The role of induction as well as the role mentors play in the induction process continues to develop.

In the following sections, research on effective professional development programs was assessed. Reiman and Thies-Sprinthall’s work on the Teaching and Learning Framework and the five conditions to promote adult cognitive growth, Joyce and Showers professional development model, and Knowles assumptions about adult learners were reviewed to form a body of knowledge about professional development practices that are both appropriate and beneficial for teachers. This section proved valuable as the mentor not only serves in a professional development mode for the novice teacher, but must also participate as a continual learner as the mentoring
relationship matures and the novices’ needs change. The Teaching and Learning Framework proposed by Reiman and Thies-Sprinthall provides a possible framework for creating professional development experiences for the mentee and novice alike. When participating in the new role, in this case either teaching or mentoring, is enriched with a balance of time for reflection, over a significant period of time along with adequate support and challenge, significant cognitive growth can occur. In addition, the rich literature on Joyce and Showers professional development model provides the field of developmental mentoring with a structure that supports the needed ongoing professional development of both the mentor and the novice teacher. Finally, Malcolm Knowles assumptions related to andragogy, the specialized field of adult learning, aids in further understanding the unique needs of both learners in the mentoring relationship.

In the following section, the components of a developmental mentoring program were considered in light of the National Mentoring Framework created by the National Commission on Professional Support and Development for Novice Teachers. This framework is organized into six broad dimensions which are not designed to stand alone, but rather are interrelated to form the whole framework. Mentoring programs will produce positive benefits if they are carefully and thoroughly planned and fully supported. This national developmental mentoring framework identifies the quality components of an effective program. Research has shown that well designed, implemented and supported mentoring programs raise retention rates for new teachers.

Next, the theoretical framework of cognitive developmental theories was described in relation to adult learning and developmental mentoring. Piaget’s
foundational work on cognitive developmental theories provided the basis for later work in adult cognitive developmental theories. Piaget’s underlying assumption that people proceed through a series of stages that are universal and predictable yet unique depending on the individual, provides the framework that theorists working on adult cognitive developmental theories used in their work.

Further, the next two sections the cognitive developmental domains of Conceptual Systems Theory proposed by David Hunt and Moral Development and Ethical Decision Making Model first suggested by Lawrence Kohlberg were described in some detail as to allow for a full understanding of these two theories. The information on Hunt’s Conceptual Systems Theory is important as the infrastructure necessary for developmental mentoring is considered, as the conceptual developmental levels of the participants involved in the innovation is critically important to consider in creating professional development plans around the innovation. Kohlberg’s moral development domain is critically important as well, as it has been identified that teachers processing at higher levels of moral development tend to be more likely to initial change.

The foregoing sections of adult cognitive developmental theories serve as a foundation for understanding how adult cognitive developmental theories are related to the developmental mentoring program. There is research to suggest that cognitive developmental stage level affects the performance results in complex human tasks, suggesting that teachers with higher cognitive development tend to exhibit less bias and prejudice, demonstrate increased empathy, use indirect approaches to instruction to a greater degree, utilize wider variety of teaching methods, respond accordingly to
students needs by adjusting readily, have a more accurate recall of class events and are able to think quickly on their feet. This section focused on the dimensions of conceptual development and moral development and ethical decision-making as theoretical frameworks that support a developmental mentoring program model.

In the following section the discussion of teacher development was extended further to include the concept of teacher change. France Fuller’s work on the concerns of student teachers served as a basis for the later development of the Concerns-Based Adoption Model and the Concerns Questionnaire (SoC). This review also considered more recent work on concerns has identified that anyone participating in an innovation, in other words, going through any significant change exhibits these same phases of concerns.

The final major section of this literature review examined current research on infrastructure. The constructs of a network of supports, people and process was determined to be the overarching organizational framework. Information about infrastructure related to improving workplace conditions systemic change were first investigated to provide substance to the literature related to developmental mentoring program infrastructure. Finally, literature relating specifically to infrastructure models in a developmental mentoring program was considered. A combination of these four infrastructure models provides a broad inclusive framework for a developmental mentoring infrastructure.
CHAPTER III
METHODOLOGY AND RESEARCH DESIGN

This chapter discusses the methodology and research design employed in the study. The population in the study is described and the procedures used to conduct the research, the method of data collection, and the data analysis methodology are presented. Next, assumptions related to this study are recognized and limitations of the study are identified. Reflections on a major shift in the data analysis phase of this conclude this chapter.

Population

Site Selection

The two districts selected for this study were chosen because the participants at both sites attended the same initial training on developmental mentoring conducted by a large university organization called the Mentoring Research Collaborative for Learning and Development. This sample could be classified as a purposive sample (Erlandson, Harris, Skipper, & Allen, 1993; Glesne, 1999; Lincoln & Guba, 1985; Schwandt, 1997). A purposive sample is chosen purposefully rather than randomly. Further, in purposive sampling the sites are chosen because the researcher believes that the experiences of participants there are critical to understanding some process or concept. In this case, the two districts that were identified to participate in this study because of some similarities between the two including: attendance at the same developmental mentor training; and having received the same grant from TEA allowing for the training. The first level of
training called *Pathways to Mentoring, Level I* was provided to participants in District One and District Two.

The Mentoring Research Collaborative for Learning and Development (MRCLD) is a non-profit organization originally created to train mentors and support mentoring programs in public schools, provide research distribution, networking, and support graduate students pursuing advanced degrees focused on developmental mentoring. In the spring of 2007, the MRCLD received official approval to be a provider for the Beginning Teacher Induction and Mentoring Program Grant from the Texas Education Agency, House Bill 1, 79th Legislature, 3rd Called Session, Section 4.07; TEC §21.458 initiated in the fall of 2007 (TEA, 2007).

The Beginning Teacher Induction and Mentoring Program grant, sponsored by The Texas Education Agency, was started to provide funds to public school districts and open enrollment charter schools to either establish or enhance new teacher induction programs. Campuses that were eligible were those where mentor teachers were assigned to new classroom teachers with less than two years experience. The goals of the grant are to provide support and ongoing professional development for beginning teachers; to improve teacher performance and effectiveness; to provide preparation and ongoing professional development for mentors, and support and training to administrators aimed at supporting novice and mentor teachers; and to increase beginning teacher retention. (Texas Education Agency, 2007).

The training *Pathways to Mentoring* is the beginning level training offered by the MRCLD and includes components identified as important in developing a knowledge

Within the Joyce and Showers (2002) professional developmental model, five major elements constitute quality professional development: the theoretical basis or rationale for training is presented; observation and demonstration of new learning is provided; participants take an active role in practicing new learning in the workshop setting; the trainer provides prompt feedback; and participants develop learning further through cycles of coaching and practice in real settings, generally in the workplace. In the case of the Pathways to Mentoring training offered by the MRCLD, the rationale for mentoring is presented early in the training through a brief history on mentoring as well as information on the retention dilemma facing schools today. The last four components of the Joyce and Showers (2002) professional developmental model are sequenced appropriately throughout the activities in the training and practical experiences of the mentors. For each new learning component, the trainers offered demonstrations, whether it was live demonstrations with the trainers and participants or through video tapes of
practiced mentors and their novice teachers. All new learning was first demonstrated. Next, time was built into the schedule to allow for active role-taking in the training session for participants to practice the new skill. During this time, the trainers, and other participants served as observers and offered reflections based on their observations. Finally, as mentors assumed the new role as a mentor to novice teachers, the trainers along with the district level mentor coordinator were available throughout the year to observe the mentor and novice work as well as offer feedback as the mentor’s skills develop. This professional development model presented by Joyce and Showers (2002) provided a framework that promotes significant growth on the part of the participants. Additionally, the Teaching Learning Framework suggested by Reiman and Thies-Sprinthall (1996) adds to the structure of the training focused on specific conditions related to promoting adult growth.

The Teaching Learning Framework (Reiman & Thies-Sprinthall, 1996) consists of five specific conditions recommended to promote adult growth including: role-taking, reflection, balance, continuity, and support and challenge. The Pathways to Mentoring training also utilized this framework as a means of creating significant learning opportunities for participants. Much like the description of active role-taking and extended real settings in the Joyce and Showers (2002) model, this active role-taking involved the mentor practicing the new skills of developmental mentoring in the school with the novice teachers. During this time, mentors were asked to reflect often on their practice in their mentoring journal which constitutes the condition of reflection. The next condition of balance, constitutes building into the learning a cycle practice and reflection
where there is a constant flux between the two. The condition of continuity suggests that for optimal learning to occur, participants must be actively involved in this cycle over a length of time. Unlike the one shot, one day, take it and use it or lose it workshop approach for professional development, the MRCLD utilized active role-taking in the real setting in conjunction with a series of professional development opportunities spread out over the course of the time the mentors are practicing as a means of providing this continuity. Finally, the last condition to support adult growth is support and challenge. For this condition to be actualized there must be someone to mentor or coach the mentors as well. This condition suggests that while the mentors are working through the Teaching Learning Framework (Reiman & Thies-Sprinthall, 1986), steps one through four, there needs to be someone who can not only support them during their struggles, but also provide just enough challenge to cause some cognitive dissonance. It is this cognitive dissonance, albeit uncomfortable, that promotes new learning. Within the professional development model provided by the MRCLD, the trainers as well as the district level mentor coordinator worked to provide this support and challenge throughout the year to the mentors participating in the training.

The MRCLD mentor training supports a developmental approach to mentoring. The mentor training provided opportunities for mentor teachers to develop skills and strategies that will allow them to individualize the mentoring experience for the novice teacher. As Pajak (2002) indicates growth built on existing strengths offers opportunities for extended development. The MRCLD training focuses mentors’ attention on understanding novice teacher’s current developmental level within specific domains,
learning style and needs; then asks them to individualize the coaching plan, and focus on
the specific needs of the novice teacher. While the mentor may gain information about
learning and teaching styles of their novice teacher through easily administered
preference inventories, the information on conceptual and concerns levels occurs
through the observation cycle and guided reflection. The MRCLD model acknowledges
teacher differences and offers an individualized, developmental, approach to mentoring.

The training is organized into four days of professional development, three of
which were designed to be provided before the mentor assumes the new role of
mentoring a novice teacher, and a fourth day scheduled approximately six weeks after
the work begins. Not all districts that contract with MRCLD are able to schedule their
days as planned.

All trainers associated with the MRCLD organization are highly trained in the
areas of developmental mentoring as well as possess extensive professional development
experience, at the state and the national levels. In the case of both the mentor and
administrator training provided to District One and District Two in this study, a two
trainer model was utilized for each district with one trainer being a constant. This one
uniform trainer between the two district trainings allowed for greater consistency in the
training provided for each district. Further, the MRCLD used a single mentor teacher
manual and training script for all trainings, further ensuring identical training in both
District One and District Two. See Appendix A for résumés for each of the trainers
involved in the trainings related to this study.
School District One

School District One is an urban school district in a large state in the Southwestern part of the United States. It is a 453 square mile urban district consisting of 25 campuses that serve over 14,786 students.

School District One has a culturally and economically diverse student population. There are 3,549 African American students, 24% of the total population; 6,210 Hispanic students, 42% of the total population; 4,879 White students, 33% of the total population and 148 students of other ethnicity, 1% of the total population as identified by the State Education Agency. There are 9,640 students identified as economically disadvantaged and 2,070 students identified as limited English proficient (LEP) (Academic Excellence Indicator Standards Report, 2007). Over 65% of the students in District One were identified as economically disadvantaged thus qualifying for free or reduced priced meals based on their reported household incomes. Additionally, 14% of all District One students were identified as limited English Proficient (LEP). Table 5 identifies the number of students and the ethnic percentages of these student groups in School District One (AEIS Report, 2007).

The student attendance rate for all student subgroups is 95.1% which is just under the state average of 95.5%. The reporting of attendance from the state AEIS report is always one year behind in publication of the academic performance results, therefore the attendance data reported here is based on the 2005-2006 school year (AEIS Report, 2007).
TABLE 5. Ethnicity of School District One’s Student Population in 2003-2004

<table>
<thead>
<tr>
<th>Representative Ethnicity</th>
<th>Student Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>3,549</td>
<td>24</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6,210</td>
<td>42</td>
</tr>
<tr>
<td>White</td>
<td>4,879</td>
<td>33</td>
</tr>
<tr>
<td>Other</td>
<td>148</td>
<td>1</td>
</tr>
<tr>
<td>Economically Disadvantaged</td>
<td>9,640</td>
<td>65.2</td>
</tr>
<tr>
<td>Limited English Proficient</td>
<td>2,070</td>
<td>14</td>
</tr>
</tbody>
</table>

Note: AEIS Report, 2007: Texas Education Agency.

District One employed a total of 2,148 staff members during the 2006-2007 school year. This number includes both professional and paraprofessional staff. Teachers including classroom teachers and others classified as teachers such as permanent substitute teachers comprise 48% of the total staff reported as of fall of the 2006-2007 school year. The central office administration makes up 1% of the district staff while campus administrators make up an additional 2%. Other professional positions reported include 10% professional support staff, 10% educational aides and 30% auxiliary staff. TABLE 6 shows District One’s employee distribution and the percentages that each subgroup represents for the entire staffing body (AEIS Report, 2007).
TABLE 6. Identification of District One’s Staffing as of Fall 2006

<table>
<thead>
<tr>
<th>Employee Population</th>
<th>Number of Employees</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Administration</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>Campus Administration</td>
<td>43</td>
<td>2</td>
</tr>
<tr>
<td>Professional Support Staff</td>
<td>215</td>
<td>10</td>
</tr>
<tr>
<td>Teachers</td>
<td>1,031</td>
<td>48</td>
</tr>
<tr>
<td>Educational Aides</td>
<td>215</td>
<td>10</td>
</tr>
<tr>
<td>Auxiliary Staff</td>
<td>644</td>
<td>30</td>
</tr>
</tbody>
</table>

Note: AEIS Report, 2007: Texas Education Agency.

Of the 1,031 teachers employed in District One 62 (6%) are African American, 124 (12%) are Hispanic and 845 (82%) are White (AEIS Report, 2007). Within the district 207 (20.1%) teachers hold advanced degrees. The average years of experience for the teachers in District One is 10.2 years, however 422 (42.9%) teachers have five or fewer years of experience teaching. The teacher turnover rate is reported to be 19.2% meaning nearly one out of every five teachers leave the district each year (AEIS Report, 2007).

Reflections of the data represented here for District One as reported by the State Education Agency’s Academic Excellence Indicator System (AEIS, 2007) indicated that the district is a large urban district with a diverse student population, comprised more than half of economically disadvantaged students, with acceptable attendance rates, and graduation and dropout rates that do not equal the state averages. The teaching force is comprised mainly of white teachers with over 40% of the teaching staff having fewer
than five years experience. The teacher turnover rate suggests that nearly one in five teachers leave the district each year.

School District Two

School District Two is a rural school district in a large state in the southwestern part of the United States. District Two consists of 15 campuses that serve over 10,468 students.

While not as diverse as School District One, School District Two has a varied student population as well. There are 314 African American students, 3% of the total population; 2,094 Hispanic students, 20% of the total population; 7,956 White students, 76% of the total population and 105 students of other ethnicity representing 1% of the total population as identified by the Texas Education Agency. A little over one third of the students in District Two are identified as economically disadvantaged (3,685 students) and 11% or 1,151 students identified as limited English proficient (LEP) (AEIS Report, 2007).

Over 35% of the students in District Two were identified as economically disadvantaged, thus qualifying for free or reduced priced meals based on their reported household incomes. Additionally, 11% of all District Two students were identified as limited English Proficient (LEP). Table 7 identifies the number of students and the ethnic percentages of these student groups in School District One (AEIS Report, 2007).
TABLE 7. Ethnicity of School District Two’s Student Population in 2003-2004

<table>
<thead>
<tr>
<th>Representative Ethnicity</th>
<th>Student Group N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>314</td>
<td>3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2,094</td>
<td>20</td>
</tr>
<tr>
<td>White</td>
<td>7,956</td>
<td>76</td>
</tr>
<tr>
<td>Other</td>
<td>105</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Student Group N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economically Disadvantaged</td>
<td>3,685</td>
<td>35.2</td>
</tr>
<tr>
<td>Limited English Proficient</td>
<td>1,151</td>
<td>11</td>
</tr>
</tbody>
</table>

Note: AEIS Report, 2007: Texas Education Agency.

The student attendance rate based on the 2005-2006 year for all student subgroups is 95% which is just under the state average of 95.5% (AEIS Report, 2007).

District Two employed a total of 1,382 staff members during the 2006-2007 school year. This number includes both professional and paraprofessional staff. Teachers including classroom teachers and others classified as teachers such as permanent substitute teachers comprise 52% of the total staff reported as of fall of the 2006-2007 school year. The central office administration makes up 1% of the district staff while campus administrators make up an additional 2%. Other professional positions reported include 6% professional support staff, 10% educational aides and 28% auxiliary staff. TABLE 8 shows District Two’s employee distribution and the percentages that each subgroup represents for the entire staffing body (AEIS Report, 2007).
Of the 724 teachers employed in District Two 14 (2%) are African American, 36 (5%) are Hispanic and 674 (93%) are White (AEIS Report, 2007). Within the district 136 (18.8%) teachers hold advanced degrees. The average years of experience for the teachers in District Two is 11 years, however 251 (34.7%) teachers have five or fewer years of experience teaching. The teacher turnover rate is reported to be 15.3% meaning nearly one out of every seven teachers leave the district each year (AEIS Report, 2007).

Reflections of the data represented here for District Two as reported by the State Education Agency’s Academic Excellence Indicator System (AEIS, 2007) indicate that the district is a large rural district with a varied student population that is predominantly white, comprised more than one third of economically disadvantaged students, with acceptable attendance rates, and graduation and dropout rates that do not equal the state averages. The teaching force is comprised mainly of white teachers with over 30% of the teaching staff having fewer than five years experience. The teacher turnover rate suggests that nearly one in every seven teachers leave the district each year.
For comparison purposes, TABLE 9 shows District One and District Two’s data for size, student population, graduation rates, and employee data.

**TABLE 9. Comparison of District One and District Two Demographic Data**

<table>
<thead>
<tr>
<th>Student Populations</th>
<th>District One Percentage</th>
<th>District Two Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>42</td>
<td>20</td>
</tr>
<tr>
<td>White</td>
<td>33</td>
<td>76</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Economically Disadvantaged</td>
<td>65.2</td>
<td>35.2</td>
</tr>
<tr>
<td>Limited English Proficient</td>
<td>14</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff Populations</th>
<th>District One</th>
<th>District Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Administration</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Campus Administration</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Professional Support Staff</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Teachers</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>Educational Aides</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Auxiliary Staff</td>
<td>30</td>
<td>28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teacher Statistics</th>
<th>District One Percentages</th>
<th>District Two Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>White</td>
<td>82</td>
<td>93</td>
</tr>
<tr>
<td>Advanced Degrees Held</td>
<td>20.1</td>
<td>18.8</td>
</tr>
<tr>
<td>Fewer Than Five Years Experience</td>
<td>42.9</td>
<td>34.7</td>
</tr>
<tr>
<td>Teacher Turnover</td>
<td>19.2</td>
<td>15.3</td>
</tr>
</tbody>
</table>
The data presented in Table 9 illustrates the similarities and differences between District One and District Two in the categories of student populations, staff populations and teacher statistics. It is clear that in the category student populations, District One is significantly more diverse than District Two. District One’s subgroups for African American, Hispanic and White are relatively similar, in that each percentage value differs by only 9%. Hispanic students represent the largest percentage of students in the district. District Two differs in that White students comprise 82% of the total student population with the Hispanic subgroup reporting only 20 % of the whole. African American students represent only 3% of the total population. Both districts report only 1% of the student population labeled other. While the student populations differ greatly between the two districts, interestingly the teacher populations are quite similar.

Both District One and District Two report that only 1 % of total employees are represented by central office administration, 2% represented by campus administration and 10% represented by educational aides. While the subgroups of professional support staff, teacher and auxiliary staff are reported as slightly different, the difference is minimal with no more than 4% difference for any subgroup. District One is larger and employs close to 750 additional teachers than District Two, the numbers presented in Table 9 are percentages and more appropriate to compare as the population sizes are so different. Not only are the staff distributions similar, so too is the ethnic diversity of professional staff in the district.

Both District One and District Two employ a majority of teachers that are White. District One reports a total of 82% White teachers with District Two’s report slightly
higher at 93% White. While the Hispanic teacher population of District One is 12%, the Hispanic population of District Two and the Black population of teachers in both districts is very low at less than 10% in each subgroup. The rest of the data reported in Table 9 is likewise very similar for District One and District Two. Close to 20% of the teachers in both districts hold advanced degrees. More than one-third of all teachers in both districts have fewer than five years experience. The teacher turnover is comparable between the districts with District One reporting a teacher turnover rate of 19.2% (close to every one in five teachers leaves) and in District Two a teacher turnover rate of 15.3% (close to one in every 7 teachers leaves).

**Participants**

Of the 25 campuses in District One, six participated in the MRCLD training. Four elementary campuses and two middle school campuses implemented the developmental mentoring program during this initial year. Out of District One’s total staff 31 teachers and 6 administrators attended the training.

District Two is comprised of 15 campuses. All campuses participated in the MRCLD training including all elementary, all middle school and both secondary campuses. Approximately 49 teachers and 27 administrators attended the training.
<table>
<thead>
<tr>
<th>Participatory Opportunities</th>
<th>District One</th>
<th>District Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance at Mentor Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentors</td>
<td>31</td>
<td>49</td>
</tr>
<tr>
<td>Administrators</td>
<td>6</td>
<td>27</td>
</tr>
<tr>
<td>District Campuses Involved in Developmental Mentoring Program</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Total Campuses</td>
<td>25</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 10 illustrates a comparison between District One and District Two’s level of participation in the MRCLD training Pathways to Mentoring. Table 10 includes the numbers of participants for each district in the MRCLD training Pathways to Mentoring. While District One is a larger district with almost twice as many campuses, the participation level in District Two doubled the total in District One. Moreover, when considering the percentage of personnel participating, in comparison to the total number of staff, District One had a participation rate of almost 2% and in District Two the participation rate was almost 11%. While these numbers do not seem to be notably different, current literature on organizational change suggests that greater buy-in contributes to more substantial outcomes. In fact, there are few reform efforts focused on whole school districts whereby all schools are involved in the change initiatives (Adelman & Taylor, 2007; Fullan, 2000). In this case every campus in District Two had someone involved in the mentor training, suggesting greater participation and greater
buy-in into the change effort of creating a developmental mentoring program in the
district.

Because each person in attendance at the *Pathways to Mentoring* training
completed pre and post assessments, each person in attendance will be considered a
participant in this study as this data will be collected and analyzed. Further data
collection will occur from a random sample of these total participants in the form of
individual and focus group interviews.

**Data Collection**

The data collection for this study involved collecting qualitative data primarily
from individual and focus group interviews as well as descriptive data from the
Developmental Mentoring Evaluation Survey.

This research study utilized qualitative methodology. The qualitative data in the
form of focus group and individual interview responses were used in an attempt to tap
into participant perspectives of their experiences in the mentoring program in their
respective districts. The semi-structured interview format allowed for participants and
the interviewer to expand on the interview items as needed to further clarify the
participants’ responses. While the initial plan of this research was to use a mixed
methodology, which allows the researcher to combine design components of a variety of
methods in a way that offers the best chance of answering the specific research questions
(Johnson & Onwuegbuzie, 2004), it became impossible to complete statistical analysis
processes due to the lack of instrument reliability data. This complication will be
described in detail at the end of this chapter. However, a combination of data collection methods including multiple participant groups, individual and focus group interviews and survey data, were utilized in this study so as to allow for the best possible responses to the research questions.

The use of self-report data is a widely accepted practice in the social sciences. Self-report data allows for the measurement of the constructs of interest. “While self-reports of behavior, beliefs, and attitudes are prone to known biases, there are no acceptable alternative means of measurement for many constructs” (Kimberlin & Winterstein, 2008, p. 2281).

There are a number of pitfalls associated with research conducted solely with self-report data. Odell (1986) reports that one “…drawback to nonstandard interviews and questionnaires yield self-report data that may be unreliable” (p. 26). Another study by Kruger and Dunning (1999) presents the idea that unaccomplished individuals as well as highly competent individuals struggle to give a truly accurate self appraisal. Unaccomplished individuals lack the metacognitive skills necessary for accurate self appraisals. Oftentimes, views of one’s own ability are overly favorable compared to actual talent. Interestingly, once unaccomplished individuals have opportunities to improve their own metacognitive skills, accuracy in self-reports increase. On the other hand, highly competent individuals also show some systematic bias in their self appraisals as well. The highly competent individual is more likely to believe that others must have performed equally as well, often underestimating their ability. This underestimation of ability causes the highly competent individual to report lower than
actual responses on self-report measures (Kruger & Dunning, 1999). This phenomenon of misrepresentation of actual ability on self-report measures must be considered when individuals report their own perceptions as a means of collecting data for research studies (Reeves & Kazelskis, 1985). In this study, it is important to keep in mind the possibility of self-report data bias as participants’ responses are used to identify potential components of infrastructure necessary for implementing and sustaining a developmental mentoring program.

**Instruments**

*Individual and Focus Group Interviews*

In an attempt to add participant voice to the data collected in this study a series of individual and focus group interviews were conducted. The interviews were used to gain narrative data for further clarification of the participants’ perceptions. Both sets of interviews, individual and focus group were semi-structured allowing for additional questions deemed necessary, by either the interviewer or participants, during the interview to be asked along with the prepared interview questions (Appendix B). Both the individual and focus group interviews were tape recorded and later transcribed. The interview transcriptions were examined through constant comparative method. Multiple sorts of units of data allowed common themes to emerge from the data.

District Level Mentor Coordinators in both districts assisted in identifying participants for the individual and focus group interviews. A majority of participants in both districts attended either an individual or focus group session. The District Level
Mentor Coordinator assisted in arranging for an interview location as well as scheduling participants for one of the interviews.

*Developmental Mentoring Evaluation Survey*

Data were collected from the Developmental Mentoring Evaluation Survey (Appendix C) which was administered to all participants in both districts at the end of year one. Novice teachers, mentors and administrators responded to items on this multi-part survey designed specifically for that group. The survey is divided into two main parts. Part one focuses on the levels of use associated with developmental mentoring for novice teachers, mentors and administrators. Part two addresses the levels of importance of particular mentoring components as perceived by the participants. Determining Levels of Use (LOU) is a common assessment technique developed in the Concerns Based Adoption Model (CBAM) model. All data collected by the Developmental Mentoring Evaluation Survey were categorical. As “…frequency and percentage distributions are the most common and practical method for describing categorical survey variables” (Alreck & Settle, 1985, p. 324)

*Developmental Mentoring Evaluation Survey: The Instrument*

The Developmental Mentoring Evaluation Survey is a multi-item instrument that was constructed during the school year of 2007-2008 by Elizabeth S. Foster, Lucy E. Larrison and Barbara Hollingshead. These three individuals served as the Director, Associate Director and Assistant Director of the Mentoring Research Collaborative for Learning and Development. While there was no piloting of the instrument, the developers felt that the items needed to match exclusively to the mentor preparation and
program implementation of these specific districts and the expectations of the district-wide program. As a result of the focus, it was agreed that there was not another current instrument in development that addressed the issues of this developmental mentoring model; therefore, after reviewing available literature and examining the extensive professional experience of the instrument developers, the survey was administered in the Spring of 2008. Reporting from this instrument can only be in the form of descriptive statistics as the criteria necessary to establish reliability were not present. It is acknowledged that the survey was intended to measure outcomes from a developmental mentoring model and it is also acknowledged that there were no other known developmental mentoring models in the same geographic areas in which this study was occurring.

The Developmental Mentoring Evaluation Survey included 38 items on the novice teacher survey, 52 items on the mentor survey and 36 items on the administrator survey. As illustrated in Table 11, content of the items is found in two parts for each participant group. Included in Part I of the mentor survey were 15 questions about examining mentoring practices, six questions examining program design practices, seven questions examining campus based and district level program implementation, and four items examining professional development devoted to mentor skills. Part II of the mentor survey included four questions about mentor program purposes, four questions on mentor selection, four questions on mentor preparation and development, three questions on mentor roles and practices, and five questions on program administration, implementation, and evaluation. The survey for novice teachers varied only slightly from
the mentor survey. Content of the items found on the novice teacher in Part I included, 15 questions about examining mentoring practices, six questions examining program

Table 11. Developmental Mentoring Evaluation Survey Items

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Questions on Each Participant Group Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mentor Survey</td>
</tr>
<tr>
<td><strong>Part I</strong></td>
<td></td>
</tr>
<tr>
<td>Area 1: Examining</td>
<td>15</td>
</tr>
<tr>
<td>Mentoring Practices</td>
<td></td>
</tr>
<tr>
<td>Area 2: Examining</td>
<td>6</td>
</tr>
<tr>
<td>Program Design and</td>
<td></td>
</tr>
<tr>
<td>Practices</td>
<td></td>
</tr>
<tr>
<td>Area 3: Examining</td>
<td>7</td>
</tr>
<tr>
<td>Program Implementation:</td>
<td></td>
</tr>
<tr>
<td>Campus Based and</td>
<td></td>
</tr>
<tr>
<td>District Level</td>
<td></td>
</tr>
<tr>
<td>Area 4: Examining</td>
<td>4</td>
</tr>
<tr>
<td>Professional</td>
<td></td>
</tr>
<tr>
<td>Development Devoted</td>
<td></td>
</tr>
<tr>
<td>to Mentor Skills</td>
<td></td>
</tr>
<tr>
<td><strong>Part II</strong></td>
<td></td>
</tr>
<tr>
<td>Area 5: Mentor</td>
<td>4</td>
</tr>
<tr>
<td>Program Purposes</td>
<td></td>
</tr>
<tr>
<td>Area 6: Mentor</td>
<td>4</td>
</tr>
<tr>
<td>Selection</td>
<td></td>
</tr>
<tr>
<td>Area 7: Mentor</td>
<td>4</td>
</tr>
<tr>
<td>Preparation and</td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td></td>
</tr>
<tr>
<td>Area 8: Mentor</td>
<td>3</td>
</tr>
<tr>
<td>Roles and Practices</td>
<td></td>
</tr>
<tr>
<td>Area 9: Program</td>
<td>5</td>
</tr>
<tr>
<td>Administration,</td>
<td></td>
</tr>
<tr>
<td>Implementation, and</td>
<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td></td>
</tr>
</tbody>
</table>
design practices, five questions examining campus based and district level program implementation, and two items examining professional development devoted to mentor skills. Part II of the novice teacher survey included four questions about mentor program purposes, four questions on mentor selection, and two questions on mentor roles and practices. The administrator survey varied slightly as well. Part I included two questions about examining mentoring practices, six questions examining program design practices, seven questions examining campus based and district level program implementation, and two items examining professional development devoted to mentor skills. Part II of the administrator survey included four questions about mentor program purposes, four questions on mentor selection, four questions on mentor preparation and development, three questions on mentor roles and practices, and five questions on program administration, implementation, and evaluation.

The items found in all three surveys matched closely among the participants which was purposeful in order to be able to compare the perceptions and practices of the participants. The design of the items was configured based upon the Best Practices model advocated by the Mentoring Research Collaborative for Learning and Development which analyzed and utilized the best practices from the national mentoring framework found in the publication *Quality Mentoring for Novice Teachers* (Odell & Huling, 2000). In fact, the major areas within the Developmental Mentoring Evaluation Survey were derived from the identified chapters of the text listed above. While there may have been a difference in sequence and in some specific wording, ultimately the intent of the national framework is evidenced in the headings of the Developmental
Mentoring Evaluation Survey. The theory into practice components, based on Cognitive Developmental Theory were thoughtfully considered during the item development phase. Further, the construct of the items included consideration of items on the CREATE Study survey including items in the categories of mentoring practices, program design, program implementation and mentor preparation in particular (Huling & Resta, 2007).

The Developmental Mentoring Evaluation Survey includes items intended to measure the use of best practices in a district-wide developmental mentoring program, as well as the degree of use of those practices. Degree of use follows the format and procedures established within the Concerns Based Adoption Model (Hall & Hord, 2006). In the CBAM model there is an instrument designed to measure the Level of Use (LOU) of any innovation. Additionally, the national standards for mentor program development and implementation (Odell & Huling, 2000) focused item choices in the instrument to ensure that the items mirrored the practices involved in the national standards. As the “Best Practices” are examined that were recommended to both districts during the training and implementation phases, there was a specific focus on ensuring that items on the evaluation surveys matched closely to enable measurement of the use of “Best Practices” within the units. The third source, against which items were designed, included the CREATE Study (Huling & Resta, 2007) which is one of the few studies that designed an instrument to examine infrastructure within the mentoring program. The actual formatting of the questions for this current survey was also based on the work of the CREATE study. Selection of items that may have matched the CREATE survey
were selected only if there was a match to the “Best Practices” recommended to the two school districts who participated in this study. While not all items on the Developmental Mentoring Evaluation Survey match items from the CREATE study, some of those differences can be attributed to the fact that the CREATE study was not a measure of developmental mentoring.

*Part One- Level of Use*

In an attempt to gather information on the extent of use of the elements of developmental mentoring in both districts, Part I of the Developmental Mentoring Evaluation Survey was designed to identify the participants’ actual use and quality of use of particular mentoring practices. Part I of the Developmental Mentoring Evaluation Survey involved participants identifying the kind of practices and involvement in which they were engaged throughout the year of the study. There were four major sections on part one of the survey including: Examining Mentoring Practices; Examining Program Design Practices; Examining Program Implementation: Campus Based and District Level; and Examining Professional Development Devoted to Mentor Skills (Training). For each item participants were asked to identify which choices best describe their mentoring practices and engagement. Within the survey there were examples of multiple choices that participants could select. It is clear that certain specific answers represent better practice than some other answers. An example of this would be on the Mentor’s survey, Item 10, Part 1, Section 1 Examining Mentoring Practices: Following a classroom observation, I have held my post-observation conference within 48 hours or 3-4 days or 5 or more days. While some districts may support an answer of three to four
days, the “Best Practice” identified for both districts was within 48 hours. Assessing the quality of the answers became critical to understanding the participants’ appropriate engagement and quality involvement.

**Part Two – Levels of Importance**

Like Part I, Part II of the Developmental Mentoring Evaluation Survey was designed to gather participants’ perceptions of the degree of importance of particular aspects of the developmental mentoring program. For this section, each item required two responses. First, participants were asked to rank the importance of each item or statement in relation to their work in the mentoring program. Next, participants were asked to identify whether or not that item was either evident or not evident at the campus or district level. There were five major sections in Part II of the survey including: Program Purposes; Mentor Selection and Mentor/Novice Matching; Mentor Preparation and Development; Mentor Roles and Practices; and Program Administration, Implementation and Evaluation.

For this study, two varieties of matched items will be considered. An exact match is represented by item wording that is exactly the same for various members surveyed. A group dependent match will indicate items that are similar except that the group name is inserted into the item. Additionally group dependent matches were made when the item was worded according to the specific role carried out by the group member. For a group dependent match, all other wording other than role or group name will be similar. The following paragraphs describe the items on surveys for novice teachers, mentors and administrators. The descriptions will be organized according to the nine sections
identified previously. Similarities as well as differences between the surveys created for each group of participants will be described.

*Examining Mentoring Practices: Section One Developmental Mentoring*

*Evaluation Survey*

Novice teacher and mentor surveys included group dependent matched items for section one of the Developmental Mentoring Evaluation Survey. The thirteen items in this section are similar except for the change for the group name or the specific role for either the novice teachers or mentors. For example, item one on the novice teacher survey states, “In getting to know my mentor, I engaged in the following” while the same item on the mentor survey states, “In getting to know my mentee (novice teacher) I engaged in the following.” Only the name of the participant group changed in the item statement. Another example of the group dependent matching in this section of the survey involved simply a change in the role. Item nine on the novice survey states, “When holding a pre-observation conference, I came prepared with,” and the same item on the mentor survey states, “When holding a pre-observation conference, my novice teacher came prepared with.” While each item on the novice teacher and mentor surveys for the first section on Examining Mentoring Practices were closely matched, the items on the administrator survey for this section differed substantially.

There were two items on the administrator survey for this section, Examining Mentoring Practices. Both items required administrators to identify descriptors for their role in the program whereas the same section on the novice and mentor surveys required those participants to identify descriptors of the mentoring relationship between the
novices and mentors. Therefore, the items in section one of the administrator survey do not match the items on the novice teacher and mentor surveys in the same section.

**Examining Program Design Practices**

All items in section two, Examining Program Design Practices, were matched exactly or group dependent matches for novice teacher, mentor and administrator surveys. Items one, three, four, five and six are all exact matches on all three participant group surveys. Item two was a group dependent match across all three surveys. On the novice teacher survey, participants were asked to identify the number of mentors assigned to them, mentor teachers were asked to identify the number of novices assigned to them, and administrators were asked to identify the number of novice teachers assigned to each mentor. For this section of the Developmental Mentoring Evaluation Survey all participant groups were asked the same or very close to the same questions.

**Examining Program Implementation: Campus Based and District Level**

Section three of the Developmental Mentoring Evaluation Survey included several matched items across participant groups as well as some group specific items. Item one in section three was an exact match on the novice teacher and mentor survey and a group dependent match on the administrator survey. Novice teachers and mentors were asked to indicate whether or not designated time was provided in their schedules for mentoring to meet, observe, and to conference while administrators were asked to indicate whether or not designated time for mentoring was provided in the schedule for mentors and novices to meet, observe and to conference. This item only changed slightly on the administrator survey to better address the administrative role in the program. Item
two in section three had a similar focus across the three participant groups, but was group dependent only between the novice teacher and mentor survey. Novice teachers were asked to identify whether or not their schedule accommodated time to observe their mentor teaching while mentors were asked to identify whether or not their schedule accommodated time to observe their novice teaching. Administrators, on the other hand, were asked to identify whether or not their schedule accommodated time to listen to successes and concerns and to offer feedback to both novice teachers and mentors. Item three in section three of the Developmental Mentoring Evaluation Survey was an exact match on the novice teacher and mentor survey. These participant groups were asked to identify whether or not the campus based principal had high expectations for mentors. Item three on the administrator survey asked administrators to identify whether or not they had a process in place for supervision of mentors. This item was completely different on the administrator survey than on the novice teacher and mentor survey. The next two items on the mentor and administrator survey were very similar. Both groups were asked to report the topics discussed during meetings together and meetings with teams of participants. Novice teachers were not asked this item. Although the surveys for each participant group were numbered differently at this point, because of the additional items on the mentor and administrator surveys not included on the novice surveys, the last two items asked all participant groups to respond to exactly matched items. All participant groups were asked exactly matched items about the Program Coordinator’s role, and district level support.
Examining Professional Development Devoted to Mentor Skills

The last section in part one of the Developmental Mentoring Evaluation Survey consisted of one group dependent matched item and one exactly matched item on the novice teacher and administrator surveys. The last section of the mentor surveys, however, consisted of five items specifically designed to allow mentors to respond the professional development they had received. The two items on the novice and administrator surveys asked novice teachers and administrators to identify the areas of training evidently provided to the mentors as well as the areas of training that they thought would personally benefit themselves. Mentors, on the other hand, were asked to identify areas of training that were beneficial to their growth as a mentor, to assess their own growth, and identify future areas of training needed as the program continues.

Part Two: Level of Importance

Part two of the Program Evaluation shifted in purpose to gather participant perceptions on the level of importance of particular practices. The sections included in part two of the survey were: Mentor Program Purposes; Mentor Selection and Mentor/Novice Matching; Mentor Preparation and Development; Mentor Roles and Practices; and Program Administration, Implementation, and Evaluation. Mentors and administrator surveys matched exactly for all sections in part two. While novice teachers were asked to respond to exactly matched items as mentors and administrators, they did not have items from all sections listed. Instead novices only responded to exactly matched items in three sections: Mentor Program Purposes; Mentor Selection and Mentor/Novice Matching; and Mentor Roles and Practices. Part two of the novice survey
included only about one half of the items included on the mentor and administrator surveys. Nevertheless, each item was exactly matched for all three participant groups.

Data Collection Plan

The data collection plan is illustrated in Table 12. This mixture of data collection procedures allows for a more full explanation of the research questions. Table 12 demonstrates how each research question will be addressed with particular data collection procedures. The instruments and data collection procedures chosen for this study each have a particular purpose in design.

Data Analysis

Interview Data

Constant Comparative Method

The qualitative data collected in this study was examined through constant comparative method (Erlandson, Harris, Skipper, & Allen, 1993; Glaser & Strauss, 1967; Lincoln & Guba, 1985). Different from content analysis where category labels are semi-rigid, occurring from a priori guiding theories and executed through a set of “explicitly formulated rules and procedures” (Lincoln & Guba, 1985, p. 337), the constant comparative method is based on emerging themes and categories, unitization and memoing, integrating categories and their properties, delimiting the theory, and writing the theory (Lincoln & Guba, 1985).
Table 12. Data Collection Plan

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Instrument Used</th>
<th>Type of Data Collected</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What district level infrastructure components may have aided or interfered with attaining the developmental mentoring goals in the two districts?</td>
<td>Developmental Mentoring Evaluation Survey</td>
<td>Qualitative Descriptive</td>
<td>Novice N=56 Mentor N=57 Administrator N=28</td>
</tr>
<tr>
<td></td>
<td>Individual Interviews</td>
<td>Qualitative</td>
<td>District One N=33 Novice n=9 Mentor n=16 Administrator n=7 District Coordinator n=1</td>
</tr>
<tr>
<td></td>
<td>Focus Group Interviews</td>
<td></td>
<td>District Two N=74 Novice n=31 Mentor n=31 Administrator n=12 District Coordinator n=1</td>
</tr>
<tr>
<td>2. How do the developmental outcomes differ between the two districts?</td>
<td>Individual Interviews</td>
<td>Qualitative</td>
<td>District One N=33 Novice n=9 Mentor n=16 Administrator n=7 District Coordinator n=1</td>
</tr>
<tr>
<td></td>
<td>Focus Group Interviews</td>
<td></td>
<td>District Two N=74 Novice n=31 Mentor n=31 Administrator n=12 District Coordinator n=1</td>
</tr>
<tr>
<td></td>
<td>Developmental Mentoring Evaluation Survey Part One</td>
<td>Qualitative</td>
<td>Novice N=56 Mentor N=57</td>
</tr>
</tbody>
</table>
The emergence of themes from the data is at the heart of the constant comparative method. The initial attempts at coding the data, involve the researcher organizing units, smallest meaningful chunks of data, into categories. As this occurs each new unit is compared to all other units in the same and different groups. This process results in two types of categories: those that the researcher constructs, and those that have emerged as a result of language used by the participants, represented by both descriptive and explanatory categories. After some time, however, some categories fail to make much sense, resulting in the researcher finding conflicts in the thinking during the previous categorizations. At this point, it is important for the researcher to record reflections thus far, what Glaser and Strauss (1967) term memoing. This reflective activity aids in uncovering the properties of the category, allowing the rules for assignment to this category to emerge (Erlandson, et al., 1993; Glesne, 1999; Lincoln & Guba, 1985).

The next step in constant comparative method is integrating categories and their properties. While the initial step involves comparing units of data with other units in the same category based primarily on intuition, this step is based on previously defined category properties. Once categories have been more defined, the researcher considers units on the premise of whether or not it exhibits the category properties. Oftentimes, during this step, the researcher finds it necessary to create subcategories or even redefine some original categories. During this step, relationships between categories become more evident allowing for integration and explanatory theory begins to be developed (Lincoln & Guba, 1985).
“Delimiting begins to occur at the level of the theory ... because fewer and fewer modifications will be required as more and more data are processed.... The inquirer begins to realize both parsimony and scope in his or her formulation” (Lincoln & Guba, 1985, p. 343). At this point as well, as delimiting begins the number of categories originally composed become reducible because of the integration and improved descriptions. In addition, the categories become so well defined that no further examples are necessary. At this point the theory begins to emerge, grounded in the data, not decided before the inquiry begins (Lincoln & Guba, 1985).

The individual and focus group interviews were analyzed using constant comparative method as just described. The categories that emerged in the data will focus the discussion of the findings. Moreover, the specific quotes attained from the interviews will provide the material necessary to report the findings through thick descriptions (Erlandson, et al., 1999; Lincoln & Guba, 1985).

**Survey Data**

The Developmental Mentoring Evaluation Survey was administered to all participants in District One and District Two at the end of year one. As this study searches for likenesses and differences in outcomes from two different school districts, descriptive statistics will be used for analyzing the data.

**Triangulation**

Triangulation is a means of seeking out several different sources that provide insight into the phenomenon being studied (Erlandson, et al, 1999). Triangulation “...enhances meaning through multiple sources and provides for thick description of
relevant information” (Erlandson, 1999, p. 115) and increases trustworthiness (Ely, Anzul, Friedman, Garner, & Steinmetz, 1991). The purpose of methods triangulation is not simply to combine a variety of data collection techniques, but to attempt to neutralize threats to validity in a study. There are different forms of triangulation including multiple data-collection methods, use of a variety of data sources, different kinds of people involved, multiple investigators and multiple theoretical perspectives (Glesne, 1999).

While the intent of this study was to utilize a mixed methods approach, circumstances related to survey construction were discovered during the data analysis phase, which prevented reliability measures of the findings associated with the survey data. It was planned that in this study triangulation would occur through the use of both qualitative and quantitative data. However, due to limitations within the design of the survey, triangulation occurred in this study through qualitative descriptive analysis of survey data in conjunction with the primary data source, focus group and individual interviews.

**Study Assumptions**

The outcomes of this study are based on several assumptions:

1. Interview participants will be open and honest in their reflections of their experiences as a mentor/ novice teachers/ administrator.

2. Interview participants will understand the language of the interview protocol.

3. Interpretation of the interview data reflects the intent of the participant.
4. Data collected reflect the objective and honest responses of the participants.
5. Data collected will be interpreted in accordance to the participants’ intent.
6. Design and methodology for this study are appropriate for this research study. 

**Study Limitations**

a. Data were collected from only two school districts
b. Relatively small number of participants in some groups
c. One urban and one rural school district with varied student populations and support personnel
d. Although this situation was constant within both school districts, various forms of teacher certification routes could impact differences seen in novices and their needs for mentoring
e. Participants come to the interview and approach the survey with varying pre-dispositions, experiences and beliefs related to the mentoring programs
f. Because inferential statistics were not utilized, generalizations cannot be made.
g. Because of the lack of reliability data on the survey instrument, the choice of statistical analyses which could be used was limited. Therefore the data analyses which were planned were adapted and changed.
Reflections on a Shift in the Planned Data Analysis During This Study

As briefly mentioned earlier in this chapter, the original intent of the design for this study was to capitalize on the strength inherent in a mixed methods approach, through the use of both qualitative and quantitative data. However, during the data analysis phase of this study several noteworthy circumstances emerged that inhibited the planned statistical analysis of the Developmental Mentoring Evaluation Survey. At the crux of these circumstances was the issue that reliability and validity could not be established for the survey, therefore rendering any statistical analysis of the findings unusable. The two major issues regarding establishing reliability and validity involved the lack of a pilot of the survey instrument and inconsistent wording of survey stems and possible participant responses. Therefore, descriptive data in the form of frequencies and percentages were used to report all findings. This necessary change in statistical methods strictly limited the type of information that could be gleaned from the survey data.

The Developmental Mentoring Evaluation Survey was written to gather end of the program year data from participants in two school districts which had participated in the Mentoring Research Collaborative for Learning and Development mentoring training and program. As designed, this survey provided the program coordinators much needed data for understanding the progress of the program during the year. However, because there were no similar groups, developmental mentoring programs in the nearby area, the Developmental Mentoring Evaluation Survey was not piloted before it was used. The exclusion of this step in the survey development process resulted in the inability to establish reliability and validity for the instrument. If piloting had occurred, the survey
instrument could have been amended and many of the ambiguities could have been corrected. Thus, the findings from this survey were not suitable for the planned statistical analyses. As a result, descriptive analysis incorporating frequencies and percentages was used to describe the developmental mentoring practices of participants in the two districts.

**Ambiguities in the Survey Instrument Design**

Creating survey instrument to capture reality is a difficult task. As Dillman (2007) states:

> Writing an effective survey is a painstaking process, one which is composed of many critical steps. Each step in survey design is governed by specific criteria designed to reduce survey error. A particular source of error, known as ‘measurement error,’ occurs when a respondent’s answer to a survey question is inaccurate, imprecise, or cannot be compared in any useful way to other respondent’s answers. Measurement error results from poor question wording and questionnaire construction. A challenge for all survey methods, it is of particular concern in self-administered surveys, in which direct feedback from respondents about poor questions is less available than in interview surveys (p. 9).

In the case of the Developmental Mentoring Evaluation Survey, instances occurred that resulted in measurement error. The following paragraphs describe these.

A critical issue related to this survey instrument involved circumstances of ambiguity within some questions included on the survey. Dillman (2007) reports, “The
goal of writing a survey question for self-administration is to develop a query that every potential respondent will interpret in the same way, be able to respond to accurately and be willing to answer” (p. 32). In the case of the Developmental Mentoring Evaluation Survey, two issues emerged. The first issue was that some questions were difficult for participants to understand and interpret. The second issue involved response items which were intended to produce quantitative data, but did not contain inclusive and mutually exclusive choices, rendering them unsuitable for statistical analysis. Still other questions were not scaled correctly, again rendering them unsuitable for statistical analysis.

In some instances, some questions were ambiguous to the participants as evidenced by numerous participants’ penciled in responses which differed from those provided on the survey instrument. For example, on the mentor survey participants were asked to respond to the stem: My campus based principal has high expectations for mentors in our building. Answer choices provided were “yes” and “no.” An open-ended response was also allowed in case the respondent wished to make a comment. In answering this question 7 of the 51 mentor participants, 13.73% wrote in either “I don’t know” or wrote a question mark in response to principals holding high expectations of the mentors. Likewise, on the novice teacher survey participants were asked to respond to the same stem: My campus based principal has high expectations for mentors in our building. Answer choices provided were “yes” and “no.” An open-ended response was also allowed in case the respondent wished to make a comment. In answering this question 7 of the 56 novice participants, 12.5% wrote in either “I don’t know,” a question mark, or simply left the item black. It is possible that participants either lacked
understanding of the question or simply did not know the answer to this question. It is also possible that participants felt uneasy judging the building principal. In any case, if this survey had been piloted the choice of “I don’t know” could have been added to the response items, producing data that could have been evaluated. Also, one way the wording of the stem could have been improved would be by writing: It is my perception that my campus based principal has high expectations for mentors in our building. This wording may be less ambiguous as the participant is being asked to make a judgment of the principal.

Another issue impacting the validity of this survey instrument resulted from the inclusion of response items which were not inclusive, or mutually exclusive in addition to the lack of uniform scaling for items. These are critical criteria that are evaluated during the survey design process and are discovered and corrected during the survey pilot or pretest. The response items on questions that were intended to produce quantitative data were not inclusive and/or mutually exclusive, rendering them unusable for quantitative statistical analyses. Because of these design issues, the data that were meant to be quantitative in nature became categorical causing quantitative analysis to be impossible.

For example two questions occurred on both the mentor and the novice teacher survey that asked each participant group to identify the frequency in which they met with each other: 1) formally, and 2) informally. The possible answer choices were: 3 or more times a week; 2 times a week; 1 time a week; and It varies from 0 - ____ (fill in) times a week. The inclusion of the “It varies,” response causes these four questions, two
on the mentor survey and two on the novice teacher survey to lack mutual exclusivity, therefore eliminating the possibility of statistical analysis.

Another question which illustrates the lack of inclusivity or mutual exclusivity was found on the Administrator, Mentor and Novice Teacher surveys. The question on all three surveys asked the respondents to select “The amount of time that I spend in all of the mentoring related activities per week (average over the year).” The choices provided to the participants were: 30 minutes – one hour; 1-2 hours; 3-4 hours; and 5 or more hours. These choices are neither inclusive nor mutually exclusive. Inclusive suggests that all time periods are included in the answer choices. For example, there is no time choice between two and three hours, and no time choice between four and five hours. On the other hand, exclusive means that data can fit into only one category. If the mentors met for one hour, do they select “30 minutes- one hour” or “one to two hours?” One hour fits into both category choices. This question also demonstrates how not all possible answer choices were scaled consistently. Different amounts of time were included in the choices; thirty minutes in the first choice, and hour in the second choice and third choice, followed by the last choice, which skips an hour of time. Possible response choices representing scaled items would be 0-59 minutes, 1 hour to 1 hour 59 minutes, 2 hours to 2 hours 59 minutes, 3 hours to 3 hours 59 minutes, 4 hours to 4 hours 59 minutes, and five hours or more. These choices are both inclusive and mutually exclusive, and meet the criteria established for meaningful quantitative data analysis. These errors would have been discovered and corrected in a thorough pilot survey.
Another problematic question was asked on both the mentor and novice teacher surveys. Mentors were asked to respond to the stem: I engage in written stem reflections with my novice teacher (either by hand or electronically). Novice teachers were asked to respond to the stem: I engaged in written stem reflections with my mentor (either by hand or electronically). The response choices on both the mentor and the novice teacher survey were: weekly; every 10-14 days; every 2-3 weeks; once a month; and not at all. Again these response choices are neither inclusive nor mutually exclusive. Furthermore, the scaling of the variables is not consistent, as the responses are written in days, weeks and months. Because time was missing between one weekly, the first choice and 10-14 days, the second choice, the choices are not inclusive. The choices lack mutual exclusivity because 14 days is the same amount of time as two weeks, resulting in one answer falling into two different categories. A pilot survey would have resulting in these ambiguities being discovered and corrected.

Related to the previously discussed survey items, the survey item on the mentor survey that asked them to respond to the stem: After conducting a classroom observation of my novice teacher, I …. The choices provided were: Always conduct a post-conference; Most of the time (75%) conduct a post-conference; Occasionally (50%) conduct a post-conference; and Never conduct a post-conference. The novice teachers were also asked to respond the stem: After conducting a classroom observation my mentor…. The identical choices were provided to the novice teachers. These response choices were not uniformly scaled, however including one more response item such as
“Seldom (25%) of the time conduct a post-conference” would have resulted in a scaled item able to be statistically analyzed quantitatively.

In addition to rewriting survey items to create inclusive, mutually exclusive and scaled response choices, the survey could have been improved through the pilot by utilizing the participants’ comments as possible additional response choices. Almost all questions on the survey included a place for participants to write in comments related to the questions. As a result, participants added their additional comments often, sometimes identifying alternative answers to the survey items. If the Developmental Mentoring Evaluation Survey had been piloted, these additional items could have provided answer choices more closely representing the actual experiences of the participants. For example, the first question on the novice teacher survey asked novices to identify how they got to know their mentor. Possible responses included: Completed the on-line and hard-copy learning style instruments for myself; Participated in an off-campus time together with my mentor; Ate lunch together; and Other. Eleven of the 56 novice participants, 19.64% of the participants, wrote in responses such as, “We talked every day,” or “We communicated often.” Likewise, 7 of the 56 novice teacher participants, 12.5% of the participants, wrote in “planning time together” in response to this item. Piloting this survey instrument could have allowed for responses such as these to be added to the possible answer choices, with the favorable result of increased validity of the instrument.
The Need for a Pilot Study

The previously outlined examples have demonstrated the need for piloting the survey, or pretesting the survey during the design process. These problems outlined above limited the types of analyses which were acceptable for data analysis, which in turn severely limited the quality of information that could be produced from the data. Because of these issues, the desired information could not be gleaned from this survey. As argued by Babbie (1990), the risk of investing large amounts of resources to carry out a study only to not achieve the planned research objectives due to unforeseen error provides the impetus to carry out pretesting of the survey instruments. The goal of pretesting or piloting the survey is to improve the research instrument, resulting in more valid results. “The best method of ensuring valid interrelationships is to conduct a pilot study- a miniaturized walk-through of the entire study from sampling, to reporting. The pilot study should differ from the final survey only in scale…” (Babbie, 1990, p. 225). The pilot study examines every aspect of survey design, from the accuracy of the presentation of the underlying constructs to an actual data analysis of obtained data to be sure that the desired information can be gleaned from the data. Stems and responses are closely examined to be sure they meet criteria for obtaining the desired information and for producing data suitable for quantitative analysis.

As evidenced by these examples and the fact that the survey instrument was not piloted and amended, the findings from the Developmental Mentoring Evaluation Survey used in this study will be limited to descriptive statistics including frequency of occurrence. This data in conjunction with the interview data will be used to describe the
infrastructure necessary for implementing and sustaining a developmental mentoring program. This data will also be used to suggest how participants in District One and District Two carried out the mentoring role as well as their use of “Best Practices.” It is important to note, however, that while the findings and report on the infrastructure may be generalized to a wider population, the findings on program participation and “Best Practices” are primarily useful for describing what specifically happened in District One and District Two.

Summary

This chapter described the research methodology to be used in this study. Sections included in this chapter were populations, participants, data collection, instruments, data analysis, study assumptions, study limitations, a description of a change in the planned data analysis, and summary.

The first section of this chapter included demographic descriptions of the two school districts involved in this study. Student ethnicity, staffing population, staff ethnicity, and teacher statistics were included in these descriptions. It was clear that School District One and School District Two had similarities in regard to percentages of staff positions, staff ethnicity and teacher statistics. However, the student populations were different. District One’s student population was diversified, while District Two’s student population was represented by a large majority of White students.

The next section in this chapter described the participants in this study. Both school districts identified for this study received a grant for Beginning Teacher Induction
and Mentoring from the state. Included in this grant was money for initiating or improving current new teacher induction practices. The Mentoring Research Collaborative for Learning and Development served as provider for mentoring professional development as a part of this grant.

Data collection, the next section in this chapter, focused on the ways in which data was collected for this study. Individual and focus group interviews served as the primary data collection means while the Developmental Mentoring Evaluation Survey provided further descriptive qualitative data.

Next, the Developmental Mentoring Evaluation Survey instrument was described. This survey was administered at the end of year one in an attempt to capture participants’ perceptions at this point in the program. In an attempt to assemble qualitative data that provides rich descriptions of the teacher’s perceptions, individual and focus group interviews were utilized as well. This combination of data provided a rich illustration of the participants’ thoughts related to the developmental mentoring program.

Data analysis was described in the next section. Differences in participant use of “Best Practices” and infrastructure supports and barriers of the two districts were the focus of this analysis. The survey instrument was explained as well as the interview protocol.

The next two sections of this chapter consider the assumptions related to this study as well as the limitations of the study.
The final section of this chapter described the limitations that occurred as a result of the lack of survey instrument reliability and validity. Survey items challenging instrument validity resulting in the inability to statistically analyze the survey data were identified. Suggestions for rewording stems and response items that could increase validity by ensuring inclusivity, mutual exclusivity and scaled responses were provided.
CHAPTER IV
RESEARCH FINDINGS

The developmental mentoring framework is a complex system that involves personal interactions between a variety of individuals including novice teachers, mentors, and administration. A number of conditions must be present to increase the likelihood of success in the program. In this study, the conditions related to supporting the implementation and maintenance of the program are identified as the infrastructure. The infrastructure or lack thereof can impact the outcomes of the developmental mentoring program. The purpose of this study was twofold. The first question focused on identifying the components of infrastructure that may have aided or interfered with the developmental mentoring program. The second question focused on identifying the differences in outcomes in two developmental mentoring programs dependent upon the infrastructure components that either aided or interfered with the work in each of the two school districts.

Question One

The purpose of question one was to gather information about the kinds of issues that may have either supported or interfered with the work of those involved in a developmental mentoring program. The combined infrastructure components identified in the crosswalk model in Chapter II will serve as the basic framework for considering this data as research on Improving Workplace Conditions, Systemic Change.
Infrastructure, Project CREATE and The National Mentoring Framework provided are the current literature related to infrastructure in a developmental mentoring program. Those components include: Collaboration, Leadership, Mutual Decision Making, Ongoing Professional Development, Provision of Resources, Accountability and Measurement, and Clear Program Purposes.

In an effort to collect perceptions from all constituents involved in the developmental mentoring program in District One and District Two, individual and focus group interviews were conducted. Novice teachers, mentor teachers, district coordinators and administrators participated in the interviews from both districts. The audio-taped interviews were then transcribed. The written transcriptions were then coded and sorted in an attempt to allow sub-themes to emerge naturally from the data. Through a repeated sort of the interview data, several sub-themes emerged related to supports and barriers associated with initiating and maintaining a developmental mentoring program.

In addition to the qualitative interview data, data collected from the Program Developmental Mentoring Evaluation Survey conducted at the end of year one provides data on the numbers of participants responding in a particular manner to questions related to the emergent themes of supports and barriers. The data from the Program Developmental Mentoring Evaluation Survey will be reported in frequency of occurrence. When N/A appears in the table this indicates that the items did not appear on that particular survey rather than no response. It is important to note that the percentages may be greater than 100% total for any one row as participants were encouraged to identify all items that pertained to their own experience. Additionally an asterisk was
added to the data indicating the category for each item with the greatest frequency of response. If two or more categories had the same high level of response, all categories were then asterisked. For each component in the crosswalk model all applicable Developmental Mentoring Evaluation Survey items will be reported. The qualitative and quantitative data will then be combined to clarify the experiences of the participants in the developmental mentoring program as well as what may have aided or interfered with the mentoring work in District One and District Two.

**Component One: Collaboration**

The combined mentoring component of collaboration in the crosswalk model encompasses a variety of means for those involved in the developmental mentoring program to work together, ranging from the developing relationship between the novice and mentor as well as the work of schools, districts, regional entities and state governments working together to build stronger programs. The work on Improving Workplace Conditions identifies the need for adequate time for planning and collaboration while the findings from the study Project CREATE recognize that a common planning period and same teaching assignments are important foci in matching mentors to their novice teachers. Heller (2004) found that the, “novice and the mentor should be on the same teaching team, in the same department, same grade level or somehow connected in their day to day assignments” (p. 35). Further, The New Teacher Center at the University of California (2006) reports that “…mentor based induction is associated with positive gains in student achievement if mentor selectivity is high…” (p.
5). A support that was identified by those participating in both districts was the matching process that occurred.

_Collaboration Related Items and Responses on the Developmental Mentoring Evaluation Survey_

Table 13 contains data from the Developmental Mentoring Evaluation Survey related to the collaboration component of infrastructure identified on the crosswalk model. The data in Table 13 is organized into seven items from the Program Developmental Mentoring Evaluation Survey. Each item in this table relates to some aspect of the mentoring relationship including mentor and novice teacher meetings, novice teacher to mentor ratio and matching of novice teacher to mentors. The first five items are related to the mentor and novice teacher relationship while item six identifies ratio data and item seven focuses on matching of novice teacher to mentors.

_Mentor and Novice Teacher Relationships_

Items one through five in Table 13 focus on collecting data from all participants: novice teachers, mentor teachers and administrators from District One and District Two related to the developing novice teacher and mentor relationship. Item one surveyed novice teachers and mentors on how they began to get to know each other. As indicated in Table 13 both novice teachers and mentors in District One identified completing the online and hard copy learning style instruments as a means for initially getting to know their partners with novices responding at 62.5% frequency and mentors at 84.6%. While novice teachers and mentors in District Two also identified this same practice as useful with greater than 50% frequency, novice teachers in District Two identified eating lunch
Table 13. Collaboration Related Items and Responses on Developmental Mentoring Evaluation Survey

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Sub-items Identifying Best Description of Mentoring Practices</th>
<th>District One Novice</th>
<th>District One Mentor</th>
<th>District One Admin.</th>
<th>District Two Novice</th>
<th>District Two Mentor</th>
<th>District Two Admin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In getting to know my mentor/mentee, I engaged in the following</td>
<td>Completed the on-line and hard copy learning style instruments for myself</td>
<td>62.5*</td>
<td>84.6*</td>
<td>N/A</td>
<td>54.2</td>
<td>51.6</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Had my novice complete the on-line and hard copy learning style instruments</td>
<td>88.5</td>
<td></td>
<td></td>
<td>54.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participated in an off-campus time together with my mentor</td>
<td>37.5</td>
<td>38.5</td>
<td></td>
<td>41.7</td>
<td>38.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ate lunch together at school</td>
<td>25</td>
<td>46.2</td>
<td></td>
<td>58.3*</td>
<td>64.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>34.4</td>
<td>26.9</td>
<td></td>
<td>45.8</td>
<td>67.7*</td>
<td></td>
</tr>
</tbody>
</table>
Table 13. Continued

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Sub-items Identifying Best Description of Mentoring Practices</th>
<th>District One Novice</th>
<th>District One Mentor</th>
<th>District One Admin.</th>
<th>District Two Novice</th>
<th>District Two Mentor</th>
<th>District Two Admin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. I would describe my relationship with my mentor/ novice teacher as</td>
<td>Professional, but not close</td>
<td>56.3*</td>
<td>42.3</td>
<td>N/A</td>
<td>8.3</td>
<td>12.9</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Close, both professional and personal</td>
<td>43.8</td>
<td>57.7*</td>
<td></td>
<td>87.5*</td>
<td>77.4*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indifferent</td>
<td>3.1</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hostile</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>0</td>
<td>3.8</td>
<td></td>
<td>4.2</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>3. The frequency with which I met with my mentor/novice for conferencing (formally) was</td>
<td>3 or more times a week</td>
<td>0</td>
<td>11.5</td>
<td>N/A</td>
<td>29.2</td>
<td>12.9</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>2 times a week</td>
<td>15.6</td>
<td>7.7</td>
<td></td>
<td>12.5</td>
<td>19.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 time a week</td>
<td>25</td>
<td>46.2*</td>
<td></td>
<td>25</td>
<td>25.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>It varies from 0 - ___(fill in) times a week</td>
<td>59.4*</td>
<td>34</td>
<td></td>
<td>37.5*</td>
<td>45*</td>
<td></td>
</tr>
<tr>
<td>Survey Item</td>
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<td>District One Novice</td>
<td>District One Mentor</td>
<td>District One Admin.</td>
<td>District Two Novice</td>
<td>District Two Mentor</td>
<td>District Two Admin.</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>---------------------</td>
<td>--------------------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>---------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>4. The frequency with which I met with my mentor/ novice informally was</td>
<td>3 or more times a week</td>
<td>25</td>
<td>53.8*</td>
<td>N/A</td>
<td>66.7*</td>
<td>74.2*</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>2 times a week</td>
<td>31.3</td>
<td>26.9</td>
<td>12.5</td>
<td>6.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 time a week</td>
<td>3.1</td>
<td>3.8</td>
<td>4.2</td>
<td>6.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>It varies from 0 to ___ (fill in) times a week</td>
<td>40.6*</td>
<td>19.2</td>
<td>16.7</td>
<td>9.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I met with my mentor/ novice</td>
<td>During a common planning period</td>
<td>90.6*</td>
<td>76.9</td>
<td>N/A</td>
<td>62.5</td>
<td>51.6</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Only when someone covered my class</td>
<td>3.1</td>
<td>3.8</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Before and/or after school</td>
<td>62.5</td>
<td>96.2*</td>
<td>83.3*</td>
<td>93.5*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>During lunch</td>
<td>31.3</td>
<td>46.2</td>
<td>54.2</td>
<td>71</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>On our personal time</td>
<td>18.8</td>
<td>26.9</td>
<td>45.8</td>
<td>51.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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<th>District Two Admin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. The number of novices assigned to mentors</td>
<td>1</td>
<td>75*</td>
<td>11.5</td>
<td>40</td>
<td>100*</td>
<td>93.5*</td>
<td>100*</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>25</td>
<td>26.0</td>
<td>80*</td>
<td>0</td>
<td>3.2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0</td>
<td>57.7*</td>
<td>60</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>6 or more</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
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</table>
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<th>District Two Mentor</th>
<th>District Two Admin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Matching of novice teacher to mentor occurs (check all that apply)</td>
<td>Randomly</td>
<td>6.3</td>
<td>3.8</td>
<td>0</td>
<td>4.2</td>
<td>3.2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Informally</td>
<td>3.1</td>
<td>11.5</td>
<td>0</td>
<td>8.3</td>
<td>3.2</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>By location in the school</td>
<td>15.6</td>
<td>11.5</td>
<td>0*</td>
<td>12.5</td>
<td>22.6</td>
<td>31.6</td>
</tr>
<tr>
<td></td>
<td>Formally</td>
<td>6.3</td>
<td>3.8</td>
<td>80</td>
<td>8.3</td>
<td>9.7</td>
<td>26.3</td>
</tr>
<tr>
<td></td>
<td>By proximity</td>
<td>3.1</td>
<td>7.7</td>
<td>20</td>
<td>8.3</td>
<td>22.6</td>
<td>31.6</td>
</tr>
<tr>
<td></td>
<td>By expertise</td>
<td>9.4</td>
<td>26.9</td>
<td>100*</td>
<td>29.2</td>
<td>41.9</td>
<td>84.2*</td>
</tr>
<tr>
<td></td>
<td>By grade level</td>
<td>18.8</td>
<td>34.6</td>
<td>80</td>
<td>37.5*</td>
<td>45.2*</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>By volunteerism</td>
<td>15.6</td>
<td>11.5</td>
<td>20</td>
<td>12.5</td>
<td>22.6</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>40</td>
<td>4.2</td>
<td>3.2</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>By subject area</td>
<td>37.5</td>
<td>38.5*</td>
<td>60</td>
<td>33.3</td>
<td>45.2*</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>I don’t know</td>
<td>40.6*</td>
<td>19.2</td>
<td>0</td>
<td>29.2</td>
<td>12.9</td>
<td>0</td>
</tr>
</tbody>
</table>
together at school as a practice most utilized in getting to know their mentors at 58.3% frequency. Mentors in District Two also identified eating lunch at school as a means of getting to know their novice at 64.5% frequency they also identified the choice of other at a greater frequency of 67.7%. Because this item allowed respondents to check all items that apply to their particular circumstance, other than the sub-item of completing the online and hard copy learning style instruments, District Two reported participation at a higher frequency in all other sub-items.

One area that showed a difference between District One and District Two on the Developmental Mentoring Evaluation Surveys was how the novice teachers and mentors described their relationship with each other as illustrated by the data for item two in Table 13. Both novice teachers and mentors in District Two best described their relationship as close, both professional and personal with a greater frequency than the other choices on the survey at 87.5% for the novices and 77.4% for the mentors. However, in District One the novice teachers and the mentors did not describe their relationships in the same way. Novice teachers in District One described their relationship with their mentor teacher as professional, but not close at 56.3% frequency. Mentor teachers on the other hand reported their relationship with their novices as close, both professional and personal at 57.7% frequency. Interestingly the novice teachers and mentors in District One did not describe their relationships with each other in a similar manner as did the same respondents in District Two. One might draw a conclusion between how the mentors chose to get to know the novice and the type of relationship
that developed. Also, the number of observations done in the classroom could have an effect on the relationship.

Items three, four and five in Table 13 focused on gathering data on the frequency and timing of novice teacher and mentor conferences. Novice teachers and mentors were surveyed on three items pertaining to conferencing including the frequency of formal and informal conferences as well as when these conferences took place. Item three asked novice teachers and mentors to identify how often they met together formally while item four asked both groups to identify how often they met together informally. Novice teachers in District One as well as both novice teachers and mentors in District Two identified that formal conferences occurred in a varied fashion according to their needs with greatest frequency with novices in District One reporting at 59.4% frequency, novices in District Two reporting at 37.3% frequency, and mentors in District Two reporting at 45% frequency. Mentors in District One identified with greatest frequency, 46.2% that they met once per week with their novice teachers for formal conferences. Novice teachers and mentors on the other hand reported that informal conferences occurred more often than did formal ones as indicated by item four in Table 13.

Mentors in District One as well as novice teachers and mentors in District Two identified that informal conferences were most often held three or more times a week with mentors in District One reporting at 53.8% frequency, novices in District Two reporting at 66.7% frequency, and mentors in district reporting at 74.2% frequency. Novice teachers in District One indicated at 40.6% frequency that informal conferences were held on a varied schedule. Interestingly, novice teachers and mentors from District
Two reported similar data for items three and four, with a variance of less than 10% indicating like perceptions for these two groups of participants in District Two. To the contrary novice teachers and mentors reported different responses for items three and four in District One. While items three and four in Table 13 had participants identify how often they were able to meet together as part of the mentoring relationship also important though is when these meetings occurred.

Item five in Table 13 involved having participants identify when the conferences between novice teachers and mentors occurred. Like items three and four there was agreement between the novice teachers and mentors in District Two as both groups identified their most common conference time was before and or after school with 83.3% of novice teachers and 93.5% of mentors reporting this category. Mentors in District One also reported that most conferences occurred either before or after school at 96.2% frequency while 90.6% of novice teachers reported that most conferences occurred during a common planning period. While mentor teachers in District One reported at a greater frequency that conferences occurred before or after school, they did report at 76.9% frequency that conferences also occurred during a common planning period which does represent a little over three quarters of the respondents. Another important note to make from item five is that only one respondent from each participant group in District One and no participants in District Two identified having someone cover their class in order participate in a novice teacher and mentor conference. This item will be discussed later in greater detail as resources are outlined.
Novice to Mentor Teacher Ratio and Matching Process

The last two items in Table 13 were designed to collect data on how novices to mentor teacher ratios compare in District One and District Two and how novices and mentors were matched in the two districts. Unlike the items previously discussed, items six and seven included data reported from administrators as well as novice teachers and mentors. Item six in Table 13 shows the frequency reported for the number of novice teachers assigned to each mentor. Novice teachers, mentors, and administrators in District One reported varied numbers of novice teacher to mentor ratios. Novice teachers in District One reported a one to one mentor to novice teacher ratio at 75% frequency. Mentors reported a ratio of one to three for mentor to novice teacher ratio at a 57.7% frequency. Administrators in the same district reported a mentor to novice teacher ratio of one to two at 80% frequency. Unlike District One, the novice teachers, mentors and administrators all reported with greatest frequency a one to one mentor to novice teacher ratio in District Two with novices and administrators responding at 100% frequency and mentors responding at 93.5% frequency. Clearly almost all participants in District Two reported a similar one to one mentor to novice teacher ratio. Further discussion of this decision in District Two to maintain a one to one ratio will follow as infrastructure supports are identified.

Item seven in Table 13 focused on determining participants perceptions on how novice teachers were matched to the mentors who would be working with them. Administrators in both District One and District Two identified with greatest frequency that matching of novice teacher to mentor occurs most often by mentor expertise at
100% frequency in District One and 84.2% frequency in District Two. Novice teachers in District One indicated with 40.6% frequency that they did not know how mentors were matched with novices while mentors in the same district indicated with 38.5% frequency that mentors and novice teachers were matched by subject area. The same group of participants in District Two identified grade level as a means for matching with greatest frequency, both at 45.2%. Novice teachers in District Two also identified matching by grade level at 37.5% frequency.

Supports Related to Collaboration

Matching

Novice teacher and mentor matching as described by Heller (2004) should involve identifying those who are on the same teaching team, in the same department and on the same grade level or somehow otherwise connected in the day to day assignments. While ideal matching, same grade level, same subject, same department, same school, close proximity was not always attainable in District One and District Two, those responsible for the matching process were certainly aware of the characteristics that make a good match. One administrator in District Two said, “The priority was the initial thing we said, they are in love with what they do. And then we got more focus. It’s nice to have them in the same department, it’s even better to have them on the same team, and even better location wise. … the location thing helps especially if they are in rooms next to each other. So between classes the can run over to each others’ rooms, so but we definitely want someone in our building that is going to be successful, and has some experience.” Another administrator in District One began by saying that the
mentor teachers qualifications and availability were how the matching process was initiated, but further explained that considering the subject areas of the mentor and novice teacher was equally important. Another administrator in District One tried to match mentors to novice teachers who shared common conference periods to allow for continuing support during the school day. In addition three administrators interviewed mentioned that similar content areas were important in matching novice teachers and mentors, while three others identified room proximity as important. “Mentor teachers as well identified the importance of proximity as a means of making a successful match between mentors and novice teachers. “It still needs to be proximity, you know near them, same subject area, it’s just going to be more effective,” said one mentor as she discussed matching. Even a novice teacher commented on proximity as beneficial in her experienced being mentored, “…in my case, I think I was lucky because one of my mentors, … was right in front of my classroom so every time when I was stuck and needed help, she was right there for me. So for me, it was a really, really big help.” As far as sound matching practice, constituents in both District One and District Two showed evidence through their interview data that this was important. This belief can be summed up nicely by the coordinator in District One, “If I were able to take the perfect scenario and find everybody a mentor from their grade level and so forth, I would do that.” It is evident from these responses that quality matching practices were utilized as much as possible in both District One and District Two. There were however some extenuating circumstances that did not always allow for making excellent matches resulting in less than outstanding mentor and novice teacher experience outcomes.
One mentor was matched with her novice teachers in District One based on content. Because she had been a bilingual teacher with ample experience, she was matched with three novice bilingual teachers. She was not however a caring mentor by nature. Therefore a close bonded relationship failed to develop between the mentor and her novice teachers. In another case, an administrator described how it was difficult sometimes to make good matches of personality between novice teachers and mentors. One administrator commented on the difficulty of not knowing the novice teachers as well as the veterans who will be mentoring them, “…you put them with warm, fuzzy and this person is not warm, fuzzy so I’m not sure you can get around that when you don’t know the new teachers.” Even though these issues were present, overall the matching of mentors and novice teachers was basically successful in both districts.

**Ratio**

Russell (2006) defines mentoring as one-on-one assistance given to a novice from a more practiced veteran. One clear difference between District One and District Two related to the Collaboration component and the decisions made about ratio. District Two adhered strictly to a one-to-one ratio for mentor to novice teacher. District One on the other hand had some one-to-one ratios and some one-to-two, but more routinely utilized a one-to-three ratio for mentor to novice teachers assigned. This wide variety of novice teacher and mentor ratios utilized in District One may explain why novice teachers, mentors and administrators responded quite differently on the Developmental Mentoring Evaluation Survey on the item about ratio ranging from a one to one ratio to a one to five ratio. On the other hand the data for District Two on ratio on the
Developmental Mentoring Evaluation Survey was clear, all participants in District Two identified a one to one ratio for novice teachers and mentors.

A number of reasons were given by administrators and the district-level mentor coordinator for this decision for an increased ratio in District One. The coordinator indicated that the late notification of the grant award affected the principal’s ability to assign mentors on a one-to-one basis. The late notification of the grant even affected which teachers on each campus participating in District One could attend the mentor training. Therefore in some instances this too limited the number of mentors available to be matched with the novice teachers. Further administrators commented that finding enough veteran teachers, those with enough teaching experience who could mentor was a difficult task on some campuses where many of the staff members were novice teachers themselves, within the first three years of teaching. While adherence to a one-to-one mentor to novice ratio was difficult and often not attainable in District One, several administrators did comment on the “best case scenario would have been one-on-one.” One of these administrators indicated, “It’s [mentoring] is a big job. Trying to keep the ratio low is important to make sure they [the mentor and the novice teacher] had time for planning together and were able to accomplish the responsibilities that go with it.” Another administrator in District One indicated, “I think it is important that the number of novice teachers they have is limited otherwise they have too many and they’re not effective.” Each of these comments illustrates that the administration in District One clearly understood the importance of keeping the mentor to novice teacher ratio low. However, due to circumstances sometimes beyond their control the ratio needed to be
higher in most mentor to novice relationships in District One. One must speculate about the types of relationships developed by the mentors and novices in District One as they identified their relationships as primarily professional. The ratio could be a contributing factor, due to reduced time and increased responsibility on the part of the mentor.

In District Two on the other hand, as evidenced by the Developmental Mentoring Evaluation Survey data as well as interview conversations, each mentor was assigned only one novice teacher. The district level mentor coordinator indicated that that was the way the district had always done it saying, “I think we think it is the best way.” While District Two received notification of the grant at about the same time as District One, the coordinator continued by explaining that almost all of the mentors had already been assigned upon novice teacher hire, long before the grant notification. It has been routine practice in District Two to assign one mentor to one novice teacher even before participating in this program, therefore, the low mentor novice teacher ration just continued with this new program as well.

**Barriers Related to Collaboration**

**Poor Matching**

Mentors and novice teachers discussed the difficulties they had when they had been poorly matched or were not in close proximity with each other. Administrators agreed. Mentors in both District One and District Two commented that the work of a mentor is more difficult when the mentor and novice are not matched in subject and team assignments. One mentor in District Two said, “I found an actual hindrance because I wasn’t on the actual grade level as my mentee. I worked with the grade level
but I wasn’t a teacher assigned to a classroom on that grade level. If I do this again, I’ll know those hurdles to get over, but not knowing those hurdles was a bit of a hindrance to me.” This mentor continued in this focus group session to describe the hurdles of not being on the same team. “I wasn’t on her team so I thought many of the daily workings that she needed to have explained to her I thought the team leader or one of the people on her team would explain to her but like I said before if I do this again, I won’t assume that.” Further, an administrator described the difficulty they had in matching special area teachers like music and art teachers to mentors. “I would say another mismatch, not a mismatch, but when you have special areas like music, it’s hard to find someone who understands. I mean it’s a different curriculum. You know if you taught third grade you can pretty much help with the classroom, fifth grade classroom, but art looks a little different so that was a little difficult for them.”

Not only was a mismatch in subject matter, or team a barrier to carrying out the mentoring role, but classroom proximity too proved to be a barrier. When the mentor and novice teachers’ classroom is not in close proximity then the pair sometimes find it difficult to meet together when it may be most needed. An administrator described one difficult pairing where the mentor’s classroom was in the main building while the novice teacher’s classroom was in the portable buildings on the perimeter of the campus. This administrator described this mentor and novice teacher relationship as difficult, “…she wasn’t able to go in and tweak things with him or to answer questions immediately.” A novice commented on proximity as an issue as well, “Mainly, I guess it would be time. She [the mentor] was in a different grade level and we did not have the same time
period, the same conference times so also I would say we are not in the same part of the building and just to go to her room was a good five minutes’ walk so it was a pretty good distance. So it was during parking lot duty that we were discussing the students and we did most of our chit-chatting and conversations there.” It is clear from these comments that those involved in the developmental mentoring program who were impacted by lack of proximity felt the barrier of distance in successfully carrying out the mentoring of novice teachers.

From the Developmental Mentoring Evaluation Survey data for item seven in Table 13 participants identified that novice teacher and mentor matching occurred by subject area, expertise and by grade level. These matching criteria were used in many instances in matching novice teachers to mentors in District One and District Two. As indicated from the interview data, when good matches were made the novice teacher and mentor relationship tended to be effective and positive.

Ratio

While the topic of ratio was discussed previously in the supports related to collaboration, many comments made by administrators, mentors, and even novice teachers can be construed to suggest when too many novice teachers are assigned to one mentor, the mentoring task becomes overwhelming and less effective. Many comments were made by all groups of participants in District One that the larger ratio of novice teachers to mentors resulted in a barrier to the mentoring work. One particular administrator in District One identified the problem as,
The hardest part still I thought was it was too hard to have three novice teachers especially on a real high needs campus like ours. So many different issues are taking place. Now mentoring has more responsibilities because of being on a high needs campus as they were not necessarily ready to give or be as effective. I think having a smaller number [of novices] would be better.

Clearly the added responsibility of multiple novice teachers for one mentor may exaggerate the barriers of time and affect the mentor’s ability to work effectively with the novice teachers.

**Component Two: Leadership**

Odell states, “The mentoring program needs program leadership. This entails having a person whose designated job assignment is to be ultimately responsible for coordinating the program, to make certain that practices match the program goals, and who arranges for the professional development of mentors and novices” (2006, p. 208). There were several items related to leadership on the Program Developmental Mentoring Evaluation Survey. Information was gathered on leadership participation of campus principals, district level mentor coordinators and overall district level support as perceived by those participating in the survey. Each of those items is reported in Table 13 along with the frequency of response from participants.
Leadership Related Items and Responses on the Developmental Mentoring Evaluation Survey

Campus Principal Leadership

Item one on Table 13 focused on collecting novice teachers’ and mentors’ perception of whether or not campus-based principals held high expectations for the mentors in the district. While 71.9% of novice teachers and 80.8% of mentors in District One indicated that indeed the campus principal held high expectations for the mentors in the developmental mentoring program, slightly more of the same participants in District Two responded similarly with 91.7% of novice teachers and 83.9% of mentors in District Two agreeing. Four novices and two mentors in District One along with one novice teacher and one mentor in District Two disagreed indicating that principals at their campus did not hold high expectations for mentors. Not only did the campus principals serve in leadership capacities for the developmental mentoring program, each district also employed a district level mentor coordinator. The Developmental Mentoring Evaluation Survey also asked participants to report their perceptions of this leadership role.

Supports Related to Leadership

The presence of a positive and supportive leadership including key individuals throughout the program is indicated in all four supporting areas of research used to suggest the cross-walk model for mentoring. Research on Workplace Conditions, Systemic Change, Project CREATE and the National Mentoring Framework identify strong leadership as one of the important infrastructure components in creating and
maintaining a successful innovation. In this case we are considering the implementation and maintenance of the developmental mentoring program as the innovation. The interview data suggest this was also important to those participating in the mentoring program in District One and District Two in this study. The major support identified through the interview data relates to the role of the district level mentor coordinator, as this leadership position provided ongoing consistent monitoring as well as maintaining an open line of communication.

**District Level Mentor Coordinator**

With the exceedingly large responsibilities assigned to building administrators, state-wide testing, scheduling, student behavior, teacher contracts, the addition of a structured mentoring program adds another level of administrative duties. It was the district level mentoring coordinator identified as a highly supportive leadership role in District One and especially supportive in District Two in this study. Both mentors and administrators in District One and District Two discussed the positive support role their district level mentoring coordinators played this first year as the developmental mentoring program was established. Two main categories of support emerged. The district level mentoring coordinator was found to be supportive by providing ongoing follow-through including aiding in consistent monitoring as well as establishing and maintaining an open line of communication regarding the program.

One administrator stated that the district level coordinator was helpful because it allows for follow-up when it might have not been the target of support otherwise. Another administrator affirmed that it was very important that the district level mentor
coordinator be in place to allow for follow-through with the mentors and novice teachers in the district. This particular administrator felt this was such a support because it alleviated the need for someone on the individual campuses from needing to provide for this support position. One mentor gave a nice example of how her district level mentor coordinator was available to provide extended assistance as she developed her understandings of how to use the COPAT, the evaluation tool used during novice teacher observations. “I had to go back to our district mentor leader to seek some help on at least one of those COPATs because it was a very challenging one. I learned a lot from her doing that.” Another administrator indicated that what he liked best about this mentor program was that the mentors had someone to go back to after the meetings. “They could go back and talk to her [the mentor coordinator] about what they were seeing and she could offer suggestions and what to do to come back and work through…”

In addition to providing follow-through related specifically to the mentoring program, the district level mentoring coordinators’ capability to assist in the ongoing monitoring of the program efficacy proved useful as well. Because the district level mentor coordinator was situated away from the campuses participating and served in a district level role, it was clear that the mentor program benefited from unbiased observations and conversations. One administrator highlighted this by saying, “Sometimes it takes an unbiased person to come in, because it’s different when we are in the midst of a battle; she comes in and visits different campuses and can sit down with the principal and say we have a problem here or can say I see great things happening.” One administrator even indicated that it was “a luxury” to have that position to help
focus the mentoring work going on in the district, “…knowing that there was someone else out there helping.” Not only was the district level coordinator responsible for checking in on the mentors and the novices, but she was also responsible for organizing the immense amount of formative assessment data related to program efficacy. Overall, the participation by the district level mentor coordinator was viewed as positive in both District One and District Two.

Another way in which the district level mentor coordinators’ role was seen as supportive toward the functioning of the developmental mentoring program involved the open line of communication they provided in both District One and District Two. Mentors in both districts indicated that the mentor coordinator was readily available through email and phone calls to answer questions and assist when needed. One said, “… has been absolutely wonderful to work with. You know if we ever had questions you know we could certainly get in touch with her.” Another mentor indicated that the mentor coordinator communicated quite clearly the expectations for the mentors through emails. “I feel like our coordinator has done a good job of communicating that and we, I open the email and I feel like there’s so much there that has to be done. It’s all written out. I print it all out, I take it home. I highlight this done, I just need this.” The mentor continued that the ongoing communication between the mentor coordinator and herself allowed her to stay on top of the paperwork and tasks required throughout the program year.

Administrators as well felt that the open line of communication benefited their campuses. “Yes, [the mentor coordinator] was really the key because she would
communicate to us if she felt like there was a novice or a new teacher who needed a little extra help because she got a lot of feedback on a weekly basis from a lot of teachers. Not that she was violating any confidentiality or anything; you know that trust between the teachers and the principal. But we’re all kind of all in this thing together. I don’t think anyone thought of it as threatening. I think everyone thought of it as we all want them to be successful.” The district level mentor coordinator in both districts was viewed as an additional layer of support for novice teachers, mentors and administrators.

Even the coordinators commented on their need to keep the lines of communication open in order to successfully fulfill their jobs. The coordinators reported using email and phone conversations as a way to reach and be reached immediately. In addition, the mentor coordinators made regular visits to the schools involved in each district and aided in ongoing professional development for both mentors and novice teachers. The coordinator in District One additionally specified that constant communication with a lead mentor, the campus Professional Development Specialist, or the campus principal on each individual campus allowed for her to stay abreast of most pressing needs on each campus whether it be a novice teacher with specific needs or a group of mentors requesting particular professional development for themselves or their novice teachers. It was clear to the district level mentor coordinators that it was just as important that the mentor experienced growth as the novice teacher grew as a teacher. Therefore, their role included communicating with both groups in order to discern needs of mentors as well as novice teachers. The mentor coordinator in District Two stated, “…I already want to do things differently for next year. The difference comes in where I
feel like I supported the mentees so much more than the mentors so somewhere along the line I realized I needed to support the mentors as much. …as soon as … it was made clear that the cognitive development of the mentor was like a two for one deal with the growth of the mentees, then I could look at it differently.” Admittedly the coordinators felt stretched thin in making sure that all constituents felt supported. The coordinator in District Two said, “I’ve felt stretched pretty thin. It’s just hard to get to so many people all the time. But unfortunately what happened was the weaker teachers got more of me and the weaker mentors got more of me than the stronger ones. That happens in a classroom with kids, it happens on a campus with teachers and it happens at a district level and it has definitely happened.” However busy the district level mentor coordinators felt, it is evident from the interviews of mentors and administrators that their support was indeed beneficial to the developmental mentoring program in District One and District Two.

While the district level coordinator in both districts seemed to offer supportive help to all participants as evidenced by the interview data, there were some concerns in District One related to this support role. As evidenced by item three in Table 13, the perception of the participants about the kinds and levels of support offered by the district varied considerably. In considering that the two emergent sub-themes related to the district level mentor coordinators’ position of ongoing monitoring and establishing and maintaining an open line of communication, it is evident that the choices listed for item three related directly to the support offered by the person in this leadership position. Other than the choice of phone and other conversations and instructional support for the
most part novice teachers, mentors and administrators responded at a greater percentage in District Two as to receiving this type of support than did the same participants in District One with only a few exceptions. This data could suggest that either these types of support were offered more readily or more often in District Two or the participants in District One were less receptive or needy of the assistance. However there were several comments made during the interviews that may suggest the prior reasoning for this finding.

While overall the sense of the level of support from the district level mentor coordinators was good in both districts, novice teachers, mentors and administrators in District One made some statements that indicated less than positive responses for the assistance offered by the coordinator in District One. As indicated by the data on the Developmental Mentoring Evaluation Survey item three in Table 13 only 28.1% of novice teachers, 69.2% of mentors and 60% of administrators in District One identified school visits as a form of district level support. On the other hand 100% of novice teachers, 83.9% of mentors and 100% of administrators in District Two reported the same. During an administrator interview in District One the participant stated about the interaction of the district level mentor coordinator,

I think that while we have had district level meetings scheduled sporadically throughout the year for our mentors…I think that actually coming to the campus and sitting down with that group of people on a routine basis would have been more effective.
Another administrator commented that he was unsure of what exactly the district level mentor coordinator’s role was other than maybe handling the paperwork. “I think at the district level, I think they were just mainly turning in reports.” This administrator seems to be unaware of the district level mentor coordinator’s role and ability to offer assistance when needed.

In addition to the administrators’ comments related to the district level mentor coordinator, a novice teacher in District One also commented on the lack of support felt by the person in this leadership role. This novice teacher stated, “My district mentor was useless to me because I had my school mentor for support, I would ask for help and did not get an answer. My school mentor was great.” Further this novice teacher suggested that the district level mentor coordinator would stop by, unannounced, unscheduled and she felt, “…Okay, I’m busy so I can’t tell you what I need right now.” Without a planned time for conferencing novice teachers may not be prepared to have a detailed conversation with the district level mentor coordinator.

While there were certainly not exceedingly large numbers of concerns related to the role the district level mentor coordinator filled in District One, these were important to share as this role is an integral part of the infrastructure system in both districts. There were only several negative comments made about the district level mentor coordinator in District One, but there were no equally concerning issues in District Two. This misinterpretation of the role of the district level mentor coordinator may have interfered with the mentoring work in District One.
Barriers Related to Leadership

The literature is replete with findings that, “Mentoring programs vary significantly in quality, commitment of resources and level of support provided to novice teachers. These programs will produce benefits for beginning teachers and ultimately for their students only if they are well designed, well supported, and invest substantially in the professional development of the mentors” (Resta, 2006, p. 104). It is evident from this data that the barriers related to infrastructure can notably affect the mentoring program.

Mentoring Not a Priority

Watkins (2005) writes that providing time for the mentor to meet with the novice should be a priority of principals, it is this time that allows for the successful cooperation between the two. But what happens when the hectic pace of the school day interferes with the work of mentoring? What happens when principals lose sight of the importance of mentoring and opt to reassign time originally dedicated to mentoring to other daily tasks? This occurred in District One with enough frequency that it was one of the issues discussed in a focus group interview as well as a separate individual interview later.

During a focus group interview one mentor described the problem like this, “That it’s not on a priority list. Like if it’s not on, if it’s not on the administrative list as a priority then something is always going to fall first. Oh, we give you time for that. And true, but it is not ever a priority and not ever something that they don’t see is important something will always get bumped and knock your time off.” Two other mentors in this focus group session agreed with this comment. This conversation continued with the
mentors describing how they would plan to meet with their novice teacher for part of the observation cycle, make plans on their campus to have either the novice teacher’s or their own class covered, arrive at school prepared to meet with the novice teacher only to be told that they needed the substitute, or other professional who was going to cover their class to take the place of another teacher who was going to be out because the district was short on substitute teachers. One of the mentors in the focus group said, “You put it on your calendar and wait for somebody to bump you. You just wait for it to get changed.” Another mentor in this same focus group interview described the situation like this, “We had a permanent substitute on our campus this year but you know then you come in in the morning planned for an observation, the teacher is ready and the mentor is ready, then oh, we had to pull the sub to put them in a class, sorry you don’t get to do that today.” During an individual interview another mentor commented on the same issues, “We just get bumped to the bottom of the list,” referring to a low level of administrative support on her campus for mentoring.

One mentor indicated that she had even been called to cover a class for lack of enough substitute teachers in the district during her period that was dedicated for mentoring. She described the situation as,

For little things like subbing. You have this extra conference time so you can go sub today because we are ten subs short today. To – you know, I’m all for team planning, I’m all for those things, but all those things become much higher priority than this. So that time that was originally given was
not really the time that was truly allocated. It’s there in theory but it’s
never really there.

Another mentor in this focus group session agreed with this comment as well. She
continued by saying, “I’m a little nervous to say no when someone calls to ask me to
sub.” She further indicated that she felt like she needed administrative backing
supporting her right to say no when someone asks her to strike her mentoring duties
from the calendar in order to substitute teach in a classroom during her mentoring
period.

Another way in which mentoring seems to be less of a priority as other issues is
illustrated well by one mentor, “…they have so many other things, GT online and all
these things. I mean really do they have to do it all during their first semester? How else
can we structure it so that’s not what they’re, that they have so much, them I’m giving
them one more thing to do, where this becomes a priority and couldn’t those things wait
a while, while we grow a little bit when it is time. I think it goes back to priorities.” This
mentor felt as if the district would put “growing the teacher” as a top priority then the
other tasks associated with beginning to teach could occur with relative ease soon after.

It is clear that while funding to provide substitutes was part of the plan to allow
mentors time to meet with their novice teachers in both District One and District Two,
the mentors in District One shared that using this time for mentoring tasks was not
always the reality. Oftentimes, those who were chosen to mentor because they had a
more flexible schedule, as mentioned in the supports section previously, are often used
to cover classes when the substitute shortage occurs leaving mentors to feel as if
mentoring is not a priority for their administrators. The mentors expressed their concerns that if administrators were to make mentoring a priority on their campuses then the mentors may be less likely to be pulled to carry out non-mentoring tasks during their dedicated mentoring time. While this issue did not arise in conversation with the mentors in District Two it cannot be assumed that this issue was either present or missing, just not discussed.

**Component Three: Mutual Decision Making**

The Center for Comprehensive School Reform and Improvement (2007) identified that teachers have historically been allowed to make almost all instructional decisions within their classrooms, but have been allowed much less influence in other school function decisions. This lack of decision making experiences has been cited as one reason for job dissatisfaction resulting in greater attrition in the teaching profession (Ingersoll, 2001a; 2001b; Johnson, 2006; The Center for Comprehensive School Reform and Improvement, 2007). There were no conversations about mutual decision making during the interviews. There are several possible explanations for this. This is a new program in both districts. Many of the decisions were made quite hastily at the onset of implementation due to the late notification of the grant award as discussed previously. There was little time for ongoing discussion about decisions related to the implementation of the developmental mentoring program in District One and in District Two as the academic school year was only a week away at the time the districts were notified that they would be receiving monies to participate. Furthermore, there were no questions in the interview protocol specifically addressing mutual decision making by
participants in the districts. Simple comments that may have emerged from the interview data about decision making involved mainly administration and the district level mentor coordinator discussing novice teacher and mentor matching and ratio issues. Once again these elements of the program were not easily manipulated due to the late notification of grant award for both districts.

Clearly little formal mutual decision making occurred during this first year of implementation of the developmental mentoring program in District One and District Two. While there was a lack of mutual decision making occurring during the implementation of this new program in both districts, it is evident from the current literature that involving participants in the decision making will strengthen the program and outcomes of any change process. In this case, further consideration of how all stakeholders in the developmental mentoring program may be involved in the mutual decision making related to program elements could increase the positive outcomes in both districts.

**Component Four: Ongoing Professional Development**

Smithey and Evertson (2003) report, “While the careful mentoring of new teachers holds promise for retaining them in teaching, learning to mentor well is a complex endeavor in which mentors simultaneously assume many roles and initiate varying activities and interactions with the protégés” (p. 3). Further Thies-Sprinthall (1986) suggests that, “… it is not reasonable to assume that minimally trained classroom teachers can achieve a level of competence to provide differentiated intensive supervision” (p. 18) without adequate mentor professional development. Further, mentor training has been
determined to be one of the crucial elements in the success of induction programs (Carter & Foster, 2007). For District One and District Two, mentor professional development was indeed an important component of the entire developmental mentoring program. Along with the three days of mentor training early in the school year, a follow-up day of training by the Mentoring Collaborative for Research and Developmental as well as ongoing support by the district level mentor coordinator were part of the planned mentor professional development during this implementation year. Several items on the Developmental Mentoring Evaluation Survey focused on this element. Table 14 includes the items related to mentor professional development.

Ongoing Professional Development Related Items and Responses on the Developmental Mentoring Evaluation Survey

Odell (2006) suggests that providing mentors with ongoing quality professional development is essential for realizing quality mentoring. In the case of the developmental mentoring program that District One and District Two participated, ongoing mentor professional development was an important element of the entire program. Several items on the Developmental Mentoring Evaluation Survey focused on gathering data on the participants’ perceptions of the mentor training that was provided as well as suggestions for possible training opportunities in the future.

Current Training

Item one in Table 14 was a multiple focus item on the training that was provided during this first year of the developmental mentoring program in District One and District Two. Depending on which group the participant belonged to, the item asked
Table 14. Ongoing Professional Development Related Items and Responses on Developmental Mentoring Evaluation Survey

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Sub-items Identifying Best Description of Mentoring Practices</th>
<th>District One Novice</th>
<th>District One Mentor</th>
<th>District One Admin.</th>
<th>District Two Novice</th>
<th>District Two Mentor</th>
<th>District Two Admin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. (Novice) I could tell that my mentor was trained in the following:</td>
<td>Use of the COPAT</td>
<td>56.3</td>
<td>65.4*</td>
<td>100*</td>
<td>83.8</td>
<td>83.9*</td>
<td>94.7*</td>
</tr>
<tr>
<td></td>
<td>Learning styles</td>
<td>65.6</td>
<td>53.8</td>
<td>80</td>
<td>70.8</td>
<td>22.6</td>
<td>84.2</td>
</tr>
<tr>
<td>(Mentor) Training areas that were beneficial to me</td>
<td>Conferencing skills</td>
<td>65.6</td>
<td>50</td>
<td>100*</td>
<td>87.5</td>
<td>54.8</td>
<td>94.7*</td>
</tr>
<tr>
<td></td>
<td>Retention information</td>
<td>40.6</td>
<td>11.5</td>
<td>80</td>
<td>7.5</td>
<td>3.2</td>
<td>84.2</td>
</tr>
<tr>
<td>(Administrator) Mentors were trained in the following areas</td>
<td>Observation skills</td>
<td>71.9*</td>
<td>42.3</td>
<td>100*</td>
<td>95.8*</td>
<td>54.8</td>
<td>94.7*</td>
</tr>
<tr>
<td></td>
<td>Coaching cycle</td>
<td>40.6</td>
<td>46.2</td>
<td>80</td>
<td>50</td>
<td>6.5</td>
<td>89.5</td>
</tr>
<tr>
<td></td>
<td>Reflection activities</td>
<td>50</td>
<td>38.5</td>
<td>100*</td>
<td>7.5</td>
<td>25.8</td>
<td>94.7*</td>
</tr>
<tr>
<td></td>
<td>Cognitive stage theory</td>
<td>37.5</td>
<td>26.0</td>
<td>60</td>
<td>37.5</td>
<td>6.5</td>
<td>78.9</td>
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<td></td>
<td>Assessment tools</td>
<td>62.5</td>
<td>19.2</td>
<td>100*</td>
<td>66.7</td>
<td>25.8</td>
<td>89.5</td>
</tr>
<tr>
<td></td>
<td>Adult learning</td>
<td>34.4</td>
<td>42.3</td>
<td>40</td>
<td>45.8</td>
<td>19.4</td>
<td>73.7</td>
</tr>
<tr>
<td></td>
<td>Other:</td>
<td>3.1</td>
<td>3.8%</td>
<td>0</td>
<td>8.3</td>
<td>9.7</td>
<td>15.8</td>
</tr>
<tr>
<td>Survey Item</td>
<td>Sub-items Identifying Best Description of Mentoring Practices</td>
<td>District One Novice</td>
<td>District One Mentor</td>
<td>District One Admin.</td>
<td>District Two Novice</td>
<td>District Two Mentor</td>
<td>District Two Admin.</td>
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<td>---------------------</td>
</tr>
<tr>
<td>2. (Novice) and (Administrators) I would personally benefit from training in the following: (Mentor) Training areas that require a great deal of practice on my part</td>
<td>Use of the COPAT</td>
<td>18.8</td>
<td>53.8*</td>
<td>20</td>
<td>33.3</td>
<td>71*</td>
<td>26.3*</td>
</tr>
<tr>
<td></td>
<td>Learning styles</td>
<td>46.9*</td>
<td>7.7</td>
<td>20</td>
<td>50</td>
<td>12.9</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>Conferencing skills</td>
<td>25</td>
<td>23.1</td>
<td>0</td>
<td>25</td>
<td>29</td>
<td>15.8</td>
</tr>
<tr>
<td></td>
<td>Retention information</td>
<td>34.4</td>
<td>3.8</td>
<td>20</td>
<td>41.7</td>
<td>9.7</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>Observation skills</td>
<td>31.3</td>
<td>23.1</td>
<td>0</td>
<td>37.5</td>
<td>35.5</td>
<td>26.3*</td>
</tr>
<tr>
<td></td>
<td>Coaching cycle</td>
<td>21.9</td>
<td>23.1</td>
<td>0</td>
<td>29.2</td>
<td>16.1</td>
<td>21.1</td>
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<td></td>
<td>Reflection activities</td>
<td>43.8</td>
<td>26.9</td>
<td>40*</td>
<td>20.8</td>
<td>22.6</td>
<td>26.3*</td>
</tr>
<tr>
<td></td>
<td>Cognitive stage theory</td>
<td>25</td>
<td>11.5</td>
<td>20</td>
<td>41.7</td>
<td>16.1</td>
<td>0</td>
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<td></td>
<td>Assessment tools</td>
<td>37.5</td>
<td>7.7</td>
<td>0</td>
<td>54.2*</td>
<td>19.4</td>
<td>26.3*</td>
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<tr>
<td></td>
<td>Adult learning</td>
<td>12.5</td>
<td>19.2</td>
<td>40*</td>
<td>29.2</td>
<td>16.1</td>
<td>21.1</td>
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<td></td>
<td>Other:</td>
<td>3.1</td>
<td>3.8</td>
<td>0</td>
<td>0</td>
<td>3.2</td>
<td>10.5</td>
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<tr>
<td>Survey Item</td>
<td>Sub-items Identifying Best Description of Mentoring Practices</td>
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<td>District One Mentor</td>
<td>District One Admin.</td>
<td>District Two Novice</td>
<td>District Two Mentor</td>
<td>District Two Admin.</td>
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<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------</td>
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<td>---------------------</td>
</tr>
<tr>
<td>3. I would assess my own growth as a mentor to be (check all that apply)</td>
<td>Appropriate</td>
<td>N/A</td>
<td>50*</td>
<td>N/A</td>
<td>N/A</td>
<td>58.1*</td>
<td>N/A</td>
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<tr>
<td></td>
<td>Less than I expected</td>
<td></td>
<td>15.4</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>More than I expected</td>
<td></td>
<td>11.5</td>
<td></td>
<td>19.4</td>
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<td></td>
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<tr>
<td></td>
<td>Very high</td>
<td></td>
<td>0</td>
<td>3.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High, with more to learn</td>
<td></td>
<td>30.8</td>
<td>19.4</td>
<td></td>
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</tbody>
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Table 14. Continued

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Sub-items Identifying Best Description of Mentoring Practices</th>
<th>District One Novice</th>
<th>District One Mentor</th>
<th>District One Admin.</th>
<th>District Two Novice</th>
<th>District Two Mentor</th>
<th>District Two Admin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. District mentor preparation (training) met my personal mentoring growth needs through</td>
<td>Active involvement</td>
<td>N/A</td>
<td>46.2</td>
<td>N/A</td>
<td>48.4</td>
<td>N/A</td>
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<tr>
<td></td>
<td>Significant practice</td>
<td>19.2</td>
<td></td>
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<tr>
<td></td>
<td>Hands-on activities</td>
<td>42.3</td>
<td></td>
<td>54.8</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Appropriate level</td>
<td>26.9</td>
<td></td>
<td>19.4</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>Relevant materials</td>
<td>65.4</td>
<td></td>
<td>45.2</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Useful strategies</td>
<td>53.8</td>
<td></td>
<td>38.7</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>Useful mentor manual</td>
<td>76.9</td>
<td></td>
<td>48.4</td>
<td></td>
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<tr>
<td></td>
<td>Support</td>
<td>50</td>
<td></td>
<td>48.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experienced Trainers</td>
<td>57.7</td>
<td></td>
<td>45.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Challenge</td>
<td>19.2</td>
<td></td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other:</td>
<td>7.7</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Survey Item</td>
<td>Sub-items Identifying Best Description of Mentoring Practices</td>
<td>District One Novice</td>
<td>District One Mentor</td>
<td>District One Admin.</td>
<td>District Two Novice</td>
<td>District Two Mentor</td>
<td>District Two Admin.</td>
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</tr>
<tr>
<td>5. Training areas that I wish to re-visit in Year 2</td>
<td>Use of the COPAT</td>
<td>N/A</td>
<td>19.2</td>
<td>N/A</td>
<td>51.6</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learning styles</td>
<td>11.5</td>
<td></td>
<td>3.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conferencing skills</td>
<td>19.2</td>
<td></td>
<td>22.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retention information</td>
<td>7.7</td>
<td></td>
<td>9.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Observation skills</td>
<td>19.2</td>
<td></td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coaching cycle</td>
<td>23.1</td>
<td></td>
<td>41.9</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Reflection activities</td>
<td>19.2</td>
<td></td>
<td>19.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cognitive stage theory</td>
<td>26.9*</td>
<td></td>
<td>19.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assessment tools</td>
<td>15.4</td>
<td></td>
<td>12.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adult learning</td>
<td>23.1</td>
<td></td>
<td>22.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Instructional coaching plan</td>
<td>26.9*</td>
<td></td>
<td>45.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other:</td>
<td>3</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
participants to identify either their perceptions of the kind of training mentors had received (novice teachers), the training areas that were beneficial (mentors) and areas of training provided to mentors (administrators). A list of choices was provided on the survey including: use of the COPAT; learning styles; conferencing skills; retention information; observation skills; coaching cycle; reflection activities; cognitive stage theory; assessment tools; adult learning; and other.

Novice teachers in both districts identified with greatest frequency that it was evident to them that mentor teachers of both districts had been trained in the area of observation skills at 71.9% frequency in District One and 95.8% frequency in District Two, while mentor teachers in both districts identified with greatest frequency that the area of training that had been most beneficial to them was the use of the COPAT observation instrument at 65.4% frequency in District One and 83.9% frequency in District Two. While novice teachers and mentors in both districts identified one area of training that was either evident or beneficial with greatest frequency, administrators in both districts identified several areas with equally high frequency. In District One 100% of administrators identified that mentors had received training on use of the COPAT; conferencing skills, observation skills, reflection activities, and assessment tools. Administrators in District Two responded with 94.7% frequency that mentors had received training on the use of the COPAT; conferencing skills, observation skills; and reflection activities. While novice teachers and mentors identified some of the same areas the administrators did, the frequency of identification was different. Possibly
novice teachers and mentors identified observation skills and use of the COPAT respectively because these are the two areas that most impacted their experiences.

Item two in Table 14 was a multiple part item as well. Novice teachers and administrators were asked to respond to the areas of training they might personally benefit from the most while mentors were asked which one of the training areas listed required a great deal of practice on their part. Training areas listed included: use of the COPAT; learning styles; conferencing skills; retention information; observation skills; coaching cycle; reflection activities; cognitive stage theory; assessment tools; adult learning; and other. Mentors in both District One and District Two identified the area that consumes a great deal of their time with greatest frequency is the use of the COPAT with mentors in District One reporting at 53.8% frequency and those in District Two at 71% frequency. While mentors in both districts reported similar areas of needed practice, novice teachers and administrators in both districts reported different areas of personal need. Novice teachers in District One responded with 46.9% frequency that they would benefit most from training on learning styles while 54.2% novice teachers in District Two responded that they would benefit from training on assessment tools. Once again administrators in both districts reported several areas of training that would benefit their own practice. In District One, 40% of administrators responded that more training on reflection activities and adult learning would be beneficial. Administrators in District Two responded with 26.3% frequency that they would benefit from training on the use of the COPAT; observation skills; reflection activities; and assessment tools.
Personal Response to Training

The last three items in Table 14 were only included on the surveys given to mentors. Items three, four and five focused specifically on the mentor training provided along with areas for future training. Item three in Table 14 asked mentors only to respond to the perceptions of their own growth during this experience. Mentors in both District One and District Two responded with greatest frequency that they viewed their growth as appropriate. In District One 50% of mentors and in District Two 58.1% of mentors noted their growth was appropriate. No mentors in District One responded that their growth was very high while only one mentor in District Two responded this way. Another choice for responding to this item was high, with more to learn. Almost one third of the Mentors in District One responded that their learning was high with more to learn, while only one fifth mentors in District Two responded the same way.

Item four in Table 14 asked mentors only to respond to how the mentor training provided met their own personal growth needs. Choices provided included: active involvement; significant practice; hands-on activities; appropriate level; relevant materials; useful strategies; useful mentor manual; support; experienced trainers; challenge; and other. Mentors in District One responded with 76.9% frequency that the useful mentor manual was most helpful to them and 65.4% frequency that the relevant materials were helpful as well. Mentors in District Two responded with 54.8% frequency that the hands-on activities that were part of the mentor training were most useful to them. Further, mentors in District Two indicated with 48.4% frequency that active involvement, the useful mentor manual, support and experienced trainers were helpful as
well. In addition to the current training that was offered during year one of the program, mentors were asked to identify areas of future training as well.

*Future Training*

The last item in Table 14 asked mentors only to respond to areas of training they deemed important to revisit in year two of the program. Choices provided for participants to identify included: use of the COPAT; learning styles; conferencing skills; retention information; observation skills; coaching cycle; reflection activities; cognitive stage theory; assessment tools; adult learning; instructional coaching plan; and other. Mentors in District One did not respond with very high frequency to any one of the choices indicated for this item. At the highest frequency, 26.9% of mentors in District One indicated that they wished to revisit, cognitive stage theory, and instructional coaching plans. All other choices for mentors in District One represented less than one quarter of the participants. In District Two, however, more than one half of participants, 51.6%, responded that they wished to revisit the use of the COPAT during year two training. Additionally, 45.2% of mentors in District Two responded that they wished to revisit the instructional coaching plan and 41.9% responded that they wished to revisit the coaching cycle. While mentors in District One did indicated an interest in areas related to the meeting the individual needs of the novice teacher including the use of the COPAT, and the instructional coaching plan, their interest represented approximately one quarter of the participants. Whereas, the interest exhibited by the mentors in District Two represented close to one half of the participants for future training in the same areas. This data suggest that there is more interest in District Two for further training in
the developmental mentoring components focused on creating individual growth plans for novice teachers.

**Ongoing Professional Development**

“There seems to be a wide variety of quality, focus and training of new mentors” (Basile, 2006, p. 16). True, different programs with different foci devote various resources and attention to different parts of their mentoring programs. However, Carter and Foster (2007) write “…training of the mentor is the most crucial element in the success of the induction/ support/ mentoring program” (p. 43). In the case of District One and District Two in this study, mentors in both districts benefited from the same developmental mentor training program as described in Chapter III of this study. The same material, pacing and highly experienced trainers with one constant trainer between the two district trainings were provided to mentors and administrators in both districts. Interestingly, the mentors in both districts, as evidenced by the Developmental Mentoring Evaluation Survey data as well as the interview data perceived the benefits of the training differently. A variety of responses indicate that the mentor training supported their work as mentors while also interfering. The following paragraphs describe these supports and barriers.

**Supports Related to Ongoing Professional Development**

There were several aspects of the mentor training that proved to be supportive for the mentors who were working with novice teachers during their beginning years of teaching. The following paragraphs describe the areas of ongoing professional
development that supported the work of the developmental mentoring program as well as interfered with the same.

**District and Campus Level Supports**

The ongoing professional development provided in both District One and District Two allowed mentors to gain understandings in basic components of developmental mentoring. Administrators and mentors in both districts identified the need for training as the developmental mentoring program continued throughout the year. When asked what was needed from the district or campus level in order for mentors to be successful in their roles as mentors, an administrator in District Two simply answered, “training.” Not only did mentors and administrators receive developmental mentoring training and the onset of the program as well as during the year from the MCRLD, but training was offered at the district and campus level as well as discussed previously in the Leadership section of this chapter. In particular, mentors in District One identified that the ongoing after school sessions supported them. As particular needs arose, mentors were able to meet in groups after school to address those needs. A mentor in District One stated, “The after school sessions, I thought those were really good because there were some different concerns that had come up that could be addressed.”

**MCRLD Level Supports**

When mentors and administrators in both districts were asked about how they have used the mentor training they had received, some responded first by acknowledging that the training was good, “…it’s good information,” said one mentor in District Two. Another mentor indicated that the training reminded her about how important it was for
her to continue reflecting and growing and learning herself. In particular, mentors, administrators and district level coordinators identified a number of areas of the training that were especially helpful. One mentor in District One shared in a mentor focus group interview that the mentor training had been so beneficial for her campus. There was one mentor who was new to mentoring who came away from the training with a better understanding as well as a raised level of self confidence related to her new role working with the novice teacher. For another veteran mentor, who was new to developmental mentoring, the new information on individualized growth plans for the novice based on their current needs gave this mentor a good amount of information to reflect on her own practice. For this mentor describing the benefits for her campus, the mentor training reminded her about how important it was to conduct the learning and teaching styles inventories early on in the semester as one means of gaining information about the novice teacher she would be working with. Not only did the mentor training aid in building skill and self confidence in the mentors in District One and District Two, the materials provided at the training proved to be a helpful support as well.

Mentors in both District One and District Two identified the binder provided at the training to be particularly helpful. A mentor in District One stated, “I mean the binder is amazing. Every question is pretty much answered right there.” When mentors left the training, the materials that they may need during their mentoring year were readily available in the training binder provided during the initial professional development opportunity before the school year began. Another mentor in District Two indicated, “… but with all the training, to me the binder was very well organized.” The
training binder provided support to the mentors. Relevant materials and useful mentor manual were two choices provided on the Developmental Mentoring Evaluation Survey for item four in Table 14. When participants were asked to identify what helped them during the training 53% of mentors in District One and 45% in District Two identified the relevant materials. Sixty-three percent of mentors in District One and 48% in District Two identified the useful mentor manual as helpful. These numbers coincide with the interview data showing that the training materials were a supportive part of infrastructure related to this developmental mentoring program. In addition, some of the components of the mentors training proved to be supportive as well.

As part of the mentor training, participants were involved in a variety of activities to help prepare them for their new role as mentor. After all Hughes suggests, “Working with adults is different from working with children; mentors need to be trained in the new responsibilities they will be asked to assume” (2006, p. 262). Just because mentors have had sometimes extensive classroom experience, the work to be carried out as a mentor is significantly different as they work with other adults. Part of the mentor training involved active role-playing as a means of preparing the mentors for their upcoming work with other adults. One mentor in District One identified this unique aspect of the mentor training as particularly helpful.

I enjoyed the role-playing a lot. I enjoyed the practicing a lot because sometimes it is not natural to sit down with another adult who is educated and has the job and try to teach her something that she may think she already knows. So I enjoyed that. Those were really good pieces.
While role-playing in professional developmental would generally be considered significant practice, participants maybe did not understand this term and the association to role-playing. On the Developmental Mentoring Evaluation Survey significant practice was listed as a choice in identifying how the training benefited the mentors the most. Only 16% of mentors in District One and 23% of mentors in District Two identified significant practice as useful. However, the next item listed on the survey was hands-on activities. This more common term for activity during professional development did show greater frequency of response from mentors in both districts. About one-third of mentors in District One and more than one half of mentors in District Two identified this choice as being especially helpful in their learning. This finding better represents the interview data on the active role playing participants found to be useful in the training. Along with the role-playing, mentors also identified learning about the COPAT classroom observation tool has supportive in their work as mentors.

During a mentor focus group interview, the mentor teachers discussed that learning about the COPAT observational tool was especially helpful. This training component was equally identifiable in the Developmental Mentoring Evaluation Survey data as well. Mentors and administrators identified the COPAT as an area that was obviously part of the training, an area for more training, and an area that requires much practice on the part of the mentor. In much the same vain as the comment made in the previous paragraph, mentors must develop self confidence in working with other adults as well as some well developed skills in helping other adults grow and mature as teachers. In thinking about the mentor teacher’s role of going into a novice teacher’s
classroom to observe the novice teacher teaching and then to make suggestions based on that observation is very different from anything typically accomplished during a regular teaching day. One mentor participating in one of the focus group interviews in District Two commented, “I learned, watching the observations, and the people scoring the COPATs helped me in having a little bit of security in venturing out and doing it myself, attempting it myself actually then doing it myself.” Other mentors agreed that this takes not only self confidence but also the skills needed to carry out the observation successfully in order to benefit the novice teacher. While mentors in District Two identified the training component that involved watching others complete an observation using the COPAT observation tool as helpful, the mentors in District One identified the training on the conferencing cycles around the observation as helpful parts of the training.

During a mentor focus group interview in District One, the training associated with the conferencing cycles that occur around the observation were identified as particularly helpful. One mentor related the pre and post conferences that were part of the mentor training as helpful as these are not typically conducted when doing a Professional Developmental and Appraisal System (PDAS) observation that is the most commonly used observation and assessment tool for classroom teachers in Texas. The training on these types of conferences helped the mentors to see how they were related to the observation experience. One mentor in District One commented, “I think with the first conferences and pre-conferences because doing PDAS evaluations we don’t always take the time to go through all the things with those steps. I think it has definitely helped
out in that process, because we carry through all those steps.” Other mentors in the focus group interview agreed. One said, “I was going to say the same thing, the pre and post. I think going through that process is the thing that is the most difficult in compared to the past.” In comparing the developmental mentoring process to the sort of buddy or support system offered in the past, this mentor not only identified that this part of the training was beneficial for mentors but also for the novice teachers.

**Barriers Related to Ongoing Professional Development**

**Time to Attend Training**

As the district level mentor coordinator in District One described the mentor training provided the issue of time, having enough time to attend mentor training emerged as a barrier. While the first two days of training occurred before the school year began, a third day occurred soon after the school year had begun. The fourth day was scheduled to occur sometime later. However, “…because of time constraints, that I mentioned before [in discussing the late notification of the grand award] what we did is form a core group of mentors to go out to work with the other mentors to get an additional two days of training for all,” commented the district level mentor coordinator in District One. Further this coordinator indicated that finding the time for additional district level training and support was difficult. “…we were able to pull them out for training. Many of the campuses would meet in small clusters of mentors” to accomplish the needed training while trying to address the issue of having enough time. The district level mentor coordinator in District Two indicated a barrier with the ongoing professional development as well. In District Two the district level mentor coordinator
indicated that the trainings and communication with mentors within the district seemed to “…drop off since Christmas.” While the coordinators in both districts described how the limit on available time affected the opportunities to provide additional ongoing professional development, the mentor teachers responded to being pulled away from their classroom duties. One mentor in District Two indicated feeling, “Very overwhelmed, it was a lot, and I mean we were taken out of the classroom a lot. I felt like we needed to be at school helping the novice teachers and being here and it was hurting our kids at the same time being taken out. I think we were taken out three times.” The pressure of being pulled from their classrooms was shared by mentors in both District One and District Two. Time continues to be an issue in many aspects of mentoring. A further discussion of this barrier will occur in the next major section of this chapter.

Use of the COPAT

As indicated by the Developmental Mentoring Evaluation Survey the COPAT observation instrument was a frequently identified as an important component of developmental mentoring. Novice teachers indicated that they could tell that mentors had been trained in observation skills while mentors and administrators identified that the training of the COPAT was beneficial to them in their mentoring work. Additionally mentors in District Two identified using the COPAT as an area of training they would benefit from most during year two of the program.
Unclear Training and Materials

While there were many comments indicating that the mentoring training and associated materials were especially helpful, there were some mentors and administrators in both districts who indicated that the training and training materials were somewhat unclear suggesting another barrier related to ongoing professional development. A mentor in District Two said, “I think the training was good, just sometimes hard to follow.”

Create a Core Team

In thinking about the future of developmental mentoring in their district, a group of mentors suggested that it may be useful to create a group of trained core mentors who could support the program alleviating the need to retrain mentors every year. This group suggested, “…if you had a core team of mentors who was really involved with the and really knowledgeable with the program rather than having a new teacher every year serve a mentor each year. As the developmental mentoring program is sustained in District One and District Two the idea of a core group of mentors is certainly a possibility to consider as the program continues.

Component Five: Resources

Mentoring is an expensive but well worth the investment (Combs, 2003; Fulton, Yoon & Lee, 2005). Resta (2006) reports that mentoring programs vary significantly in quality, commitment of resources and level of support provided to novice teachers. These programs will produce benefits for beginning teachers and ultimately for their students only if they are
well designed, well supported, and invest substantially in the professional development of mentors (p. 104).

There were two items on the Developmental Mentoring Evaluation Survey and a variety of emergent themes from the interview data associated with supports and barriers for the combined developmental mentoring component of resources. Table 15 shows the two items related to resources on the Developmental Mentoring Evaluation Survey. The following paragraphs describe these two items.

*Resources Related Items and Responses on the Developmental Mentoring Evaluation Survey*

The NEA Foundation (2001) acknowledges the importance of providing adequate, dedicated time to the mentoring of novice teachers so that quality growth by both the novice teacher and the mentor can be realized. The Foundation reports, “Efficacy of mentoring is linked to the amount of time that a mentor and protégé work together” (p. 6). Items one and two on the Developmental Mentoring Evaluation Survey asked novice teachers, mentors and administrators to respond to their perceptions of how the need for time was addressed during the first year of this developmental mentoring program. While 100% of administrators in both districts reported that there was time provided in the schedule designated for mentoring, as indicated by item one in Table 15, novice teachers and mentors responded quite differently. A little over one half of novice teachers in District One reported that there was time designated for mentoring in their schedule responding at 53.1% frequency. However, those reporting that there was not
Table 15. Resources Related Items and Responses on Developmental Mentoring Evaluation Survey

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Sub-items Identifying Best Description of Mentoring Practices</th>
<th>District One Novice</th>
<th>District One Mentor</th>
<th>District One Admin.</th>
<th>District Two Novice</th>
<th>District Two Mentor</th>
<th>District Two Admin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Time was provided in the schedule designated for mentoring: to meet, to observe and to conference</td>
<td>Yes</td>
<td>53.1*</td>
<td>42.3</td>
<td>100*</td>
<td>41.7</td>
<td>38.7</td>
<td>100*</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>43.8</td>
<td>46.2*</td>
<td>0</td>
<td>58.3*</td>
<td>61.3*</td>
<td>0</td>
</tr>
<tr>
<td>2. My schedule accommodates time to observe my mentor/mentee while he/she is teaching</td>
<td>Yes</td>
<td>25</td>
<td>51.5*</td>
<td>100*</td>
<td>33.3</td>
<td>45.2</td>
<td>95*</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>75*</td>
<td>38.5</td>
<td>0</td>
<td>62.5*</td>
<td>54.8*</td>
<td>5.3</td>
</tr>
</tbody>
</table>

(Administrator) I have time for concerns/feedback
time designated in their schedule for mentoring were nearly one half of the novice teachers at 43.8% frequency. Mentor teachers in both districts responded with greatest frequency that there was not time dedicated in their schedule for mentoring activities with mentors in District One responding at 46.2% frequency and in District Two at 61.3% frequency. Likewise, 58.3% of novice teachers in District Two indicated that there was not dedicated time in their schedule to participate in mentoring activities. Interestingly, administrators in both districts responded at a much higher frequency than either novice teachers or mentors when asked about dedicated time for mentoring: to meet; to observe and to conference. Overall, it seems that for those involved directly with the mentoring relationship, there does not seem to be enough time designated in their schedules to effectively carry out the activities that support developmental mentoring.

Item two on Table 15 is a two part question asking novice teachers and mentors to respond to whether or not there is time in their schedule to accommodate observing each other teaching and asks administrators if there is enough time to meet with novice teachers and mentors to address concerns and offer feedback. Administrators in both districts responded with greatest frequency to their item with 100% frequency in District One and 95% frequency in District Two that they did, in fact have enough time in their schedules to meet with novice teachers and mentors to address concerns and offer feedback. Similarly, 61.5% of mentors in District One responded that they did have time in their schedule to accommodate observing their novice teacher teaching. However, novice teachers in District One as well as novice teachers and mentors in District Two
reported with greatest frequency that they did not have time in their schedules to accommodate observing their novice or mentor while teaching. Seventy-five percent of novices in District One, 62.5% of novices in District Two and 54.8% of mentors in District Two responded negatively to item two in Table 15.

This data on the resource time indicates that administrators in both districts tend to perceive that ample time is built into all key participants’ schedules so that effective mentoring activities may occur including meeting together, observing each other, and conferencing. However, those directly involved with these activities for the most part reported that there did not seem to be enough time dedicated for these activities. Obviously a lack of adequate time to carry out the activities associated with positive gains in the novice teacher.

**Supports Related to Resources**

*Creating Time*

Adequate time to carry out the tasks associated with mentoring a novice teacher is a well documented necessity in quality mentoring programs. Smithey and Evertson (2003) indicated that programs should “provide valuable time for mentors to address the concerns of new teachers and to help new teachers develop effective management and instructional skills” (p. 22). In both District One and District Two, provisions were made that allowed mentors special arrangements to create time for mentoring. Interviews with administrators and mentors provide descriptions of how substitute teachers were used to help provide more time to mentors for mentoring. In addition, the selection of mentors with more flexible schedules allowed for additional time for mentoring as well.
Funding was set aside to provide substitute teachers to cover mentors’ classes so that they could meet with their novice teachers. One mentor stated, “I think time, which I felt was provided for us if we took the opportunity because we had a few different emails that if we needed a sub we could get a substitute.” Another mentor indicated, “[The mentor coordinator] had been good about getting subs for me it’s a matter of remembering to ask for that sub, she can provide it, you should avail yourself of it.” On another campus, another mentor described a permanent substitute teacher that had been hired specifically to aid in providing extra meaningful time for mentors and novice teachers to work together. However, as will be discussed in the barriers to mentoring in a future section of the findings, the use of this substitute was not always devoted specifically to the mentoring program; therefore this resource aimed at supporting the mentoring program did not always work as efficiently as possible. Furthermore, when looking at the data from the Developmental Mentoring Evaluation Survey in Table 14 only one novice from District One and one mentor from District One and District Two identified that they had observed their partner’s teaching while someone else covered their class. This data suggests that even though the support of having dedicated funding to hire a substitute teacher was available, this did not always happen as planned.

A second way in which the issue of providing adequate time for mentoring was met was through the use of mentors who had more flexible teaching schedules to allow for built-in time for mentoring. In District One, many mentors were chosen that currently held teacher or school support positions such as Professional Development Specialists and Literacy Coaches. The mentor coordinator in District One stated, “We have some
other positions, PDS, which gives them a bit more flexibility. There is a limit of time on
everything.” Because they did not have a regular classroom of children assigned to them,
their school day was more flexible and was supposed to allow for more time to work
with the novice teachers. In a few other cases, mentors were scheduled with a mentoring
period. While these attempts were made at scheduling additional dedicated time for
mentoring, the discussion on time in the barriers section will highlight why many of
these attempts did not always work.

**Barriers Related to Resources**

Access to adequate time to carry out the mentoring process has been a topic of
great interest in the current literature. In the case of District One and District Two the
provision of funding to allow for substitutes to cover classes as well as utilizing teachers
with flexible schedules as mentors are two attempts at providing ample time for mentors
and novice teachers to work together. However, as evidenced by the preceding
discussion, this did not always work according to the plan. The NEA Foundation (2001)
reports, “Efficacy of mentoring is linked to the amount of time that a mentor and protégé
work together. Only 36% of protégés who work with mentors only a few times a year
report substantial improvements to their instructional skills. That’s up to 88% for those
who work with a mentor at least once per week” (p. 6). It is evident from this statistic
that providing dedicated, adequate blocks of time for mentoring practices is essential to
the success of the program.


**Time**

The issue of not having enough time resounded through many of the interviews in both District One and District Two as well as in the data collected during the Developmental Mentoring Evaluation Survey. While administrators in both districts indicated with greater frequency that time was available, those participating directly in the mentoring activities, novice teachers and mentors, that demand extra time did not often report the availability of adequate time. Administrators, mentors and novice teachers found the lack of adequate time to be an issue when trying to carry out the activities associated with the developmental mentoring program.

Administrators in both District One and District Two admitted that mentors, “…definitely need time. They need structured time to be able to carry out their duties.” Another administrator commented on the need to provide time during the regular school day rather than expect mentors to carry out their mentoring tasks only before or after school. This administrator said, “Maybe where we are even providing time for them out of the classroom to do that because asking them to do that at 4 or 4:30 because my teachers don’t get through until four. Even asking them to do that at 4:15 or 4:30 is rushing them to do it. I don’t know how effective that is.” While the administrators in both district identified that having adequate blocks of time is an important component of infrastructure in supporting a developmental mentoring program, the mentor teachers also identified this as an important needed component.

Mentor teachers in both District One and District Two identified the need for adequate blocks of dedicated time to the mentoring role. Mentors identified it was “just
hard” finding enough time to mentor the novice teachers who were assigned to them. One mentor even went as far to say that there had been minimal interferences with her work as a mentor this year, except for having a lack of appropriate time to effectively mentor her novice teachers. Another mentor teacher commented that a scheduled time to mentor or a dedicated conference period for mentoring would have helped alleviate the pressures she felt from lack of time. For another mentor the task of scheduling her own day in combination with meeting with the novice teacher and carrying out the mentoring process was a scheduling nightmare further identifying that this alone was very overwhelming. Sadly enough one mentor even commented that the time constraints made her feel inadequate as a mentor, “Because I’m a classroom teacher with this amount of time. I don’t feel adequate.” Not only did the administrators and mentor teachers feel the pressure to follow through with developmental mentoring without adequate time, but the novice teachers identified this as a need as well.

While administrators, novice teachers and mentors were able to identify the need for more time, the mentor teachers were able to identify exactly why the time was needed, what tasks related to mentoring needed adequate time to be completed effectively. McNally and Martin (1998) reported a possible reason why dedicated time is needed in a mentoring program, “…mentors suggest that one hour per week timetabled for meetings between the mentor and the novice teacher was one time when a review of the previous week’s teaching and target setting for next week could and did take place. Novice teachers were required to reflect and look ahead to possible future targets along with the mentor” (p. 5). Administrators and mentors participating in the developmental
mentoring program in District One and District Two identified reasons why time was needed to mentor as well. Participants reported needing adequate time to conduct observations, plan and conference with their novice, and complete required paperwork.

*Time to Conduct Observations*

Administrators and mentor teachers in both District One and District Two identified the need for more time to go into the novice teachers classrooms to observe the novice teachers in action as well as allowing time for the novice teacher to observe more practiced teachers in action. Not only did this theme emerge in the interview data, the data collected with the Developmental Mentoring Evaluation Survey indicates that novice teachers in District One as well as novice teachers and mentors in District Two did not perceive adequate time to be built into their schedule to allow for observing each other teaching. An administrator in District Two in response to a question about what kinds of assistance were needed said, “Time, time, they have to have time to go into those classrooms and work those teachers, they have to have time to go in and observe in the classroom and then they need time to sit down and work with and meet with them to share those suggestions.” To allow for this extra time needed, during the school day, both District One and District Two provided funding to hire substitute teachers to cover for both mentors and novice teachers. An administrator in District One described, “Also, I think that we need to look at maybe allocating time for those observations, I think that they were trying to do a lot of that during their conference periods and I think what would be more effective, I’ve used it on my campus before is where we give both of them a day and took one day and get a sub and half the day that sub is in one room so
she can go observe the teacher and the other half observe each other…” While both districts offered substitute teachers as a way to increase the amount of time available for mentoring, the mentors did not always find this support feasible. A mentor in District One explained that it was more difficult to request the substitute teacher, and then plan according to the time frame the substitute was available. Oftentimes, the substitute was only needed for one or two class periods for any particular mentor and novice pair, therefore the induction office requested that several mentors on the same campus request the substitute for the same day, then schedule the substitute’s time around the needs of several mentors. This became very overwhelming to try to schedule so it was “easier to jimmie something for one period than to have a massive overhaul for one day or do.” Not only was the issue for planning for the substitute teacher’s time an obstacle in carrying out the mentoring role, but so was scheduling the observations and conference periods within the confines of the regular school day.

*Time to Plan and Conference*

Another essential component of the coaching cycle that should occur before and after the observation is a conference with the novice teacher. Administrators, mentors and novice teachers identified the need for time to conference and plan as a barrier during the developmental mentoring program this year. Administrators in both districts commented that mentors need to be given adequate time, quality time, for the mentors and novice teachers to get together on a regular basis. Interestingly, administrators in both districts reported on the Developmental Mentoring Evaluation Survey that adequate time was designated in the novice teachers’ and mentors’ schedule to accommodate
meeting together, observing each other, and conferencing. However, novice teachers and mentors did not respond the same way on the Developmental Mentoring Evaluation Survey. Further, the mentors interviewed identified particular examples and reasons why this provision of time to conference and plan is important.

One mentor described finding the time as a fight, “We really have to fight for that time when you have to have the pre-conference and the post-conference. Another mentor identified her barrier as, “That’s my problem as a classroom teacher, I am primarily a classroom teacher, but I have this one period for mentoring. I can’t meet them very well, I can sure observe but it is very difficult getting together. I don’t find my situation one to recommend to others. Yet another mentor described her difficult finding enough time to conference, “…it’s just that I have the one class period for mentoring, but it’s no a common period with anyone else’s so I can’t meet with them then, so I go stand out to meet with [my novice], I go stand out in front of the building when he is on duty, that way I know he is pinned down for thirty minutes and I’m going to get to talk to him unless I forget and double book myself for something else… I’ve done this for four years now and by now I still don’t feel adequate in this situation. I don’t feel like I’ve done the job.” Two other mentors identified having a common time for planning and conferencing as a barrier. “That has been a disadvantage of mine. I think if the district could ensure that we have a common planning period or common meeting time so that we had more time to work with them.” Another mentor is this focus group session added that they time needed to be during the school day, not just before or after school. Mentors in both districts identified the need for adequate time for meeting with
their novice teachers to conduct pre-conferences and post-conferences as well as quality time to plan with their novice teachers as a barrier to effectively mentoring. Even the novice teachers felt this as a barrier to their developing relationship with their mentor teachers.

During novice teacher focus group interviews in both District One and District Two the need for a common meeting time emerged as a barrier. The novice teachers viewed the mentors’ lack of time as a particular challenge in their ability to work collaboratively with each other. In District One a novice teacher said that most of the conversations she had with her mentor occurred in the parking lot during their duty times. The novice said, “Mainly, I guess it would be time. She [the mentor] was in a different grade level and we did not have the same time period, the same conference times so also I would say we are not in the same part of the building and just to go to her room was a good five minutes’ walk so it was a pretty good distance. So it was during parking lot duty that we were discussing the students and we did most of our chit-chatting and conversations.” Likewise, in a novice focus group session in District Two a similar concern emerged that there was little shared common open time for conferencing. This novice teacher continued by explaining that it was difficult to get enough time to talk, “so it’s been talking for a few minutes in the morning,” only for her mentor and herself. Obviously a lack of quality time for the mentors and novice teachers to conference and plan together existed in both District One and District Two. This need was evidenced by comments made by administrators, mentors and novice teachers as a concern within the context of the developmental mentoring program.
Time to Complete Required Paperwork

Not only did mentor teachers feel the need for additional time in order to complete the mentoring tasks associated with working directly with the novice teachers, but also felt they needed additional time to complete the paperwork associated with the role. While the mentors in a focus group session in District One discussed the importance of the paperwork as a means of measuring the progress of the program, they felt as if completing it all was a hindrance. Mentor teachers in District One and District Two discussed their concerns about the amount and detail of the paperwork associated with the mentoring role. “I think one of the things too, it was the number of surveys, but also too it was the detail of the surveys and the details of the forms we had to fill out that the two coupled together made it a bit overwhelming.” Another mentor further described the level of paperwork in conjunction with the paperwork related to her school role as overwhelming and difficult to manage, “…I think for me and I could say for anybody who is in a position where they are maybe not in a classroom but they are also a mentor for a classroom teacher just the amount of paperwork you are required to fill out in addition to all the other paperwork you’re having to fill out. I don’t know what changes would have to be made, but it’s you know looking at that paperwork every six weeks and every semester to get ready to turn in is just an awful lot.” Not only did the mentors find the paperwork to be a large task needed extra time, but administrators recognized this need as well. Administrators in both districts commented on the need to allow extra time for mentors to complete and collected the associated paperwork as well. “…I think allocating the time for them to sit down and doing that and even know that the
information is going out to them would have been helpful for us. So I think that providing that time for them to take care of all those responsibilities because you don’t want the mentoring to be about the paperwork you want the mentoring to be about the teacher.” Eloquently said, this administrator’s comments illustrate clearly why mentors need adequate time to complete all tasks associated with the role of mentoring. Their main focus should be growing the novice. While the other tasks associated with the role are important, they should have adequate, quality time to finish those tasks and focus on the novice.

*Mentors Have a Full Plate*

Another barrier related to the resource of time that emerged in the interview data was associated with the fact that those usually chosen to be mentors on school campuses are probably those teachers who are either volunteered or volunteer themselves to serve in varied capacities. Several mentors and administrators termed this a “full plate.” Odell (2006) writes, “The labor intensive nature of adding mentoring responsibilities to excellent experienced teachers’ already full plates is also a time problem” (p. 209). The participants in both District One and District Two spoke often of this time constraint related barrier to the developmental mentoring program.

The district level mentor coordinators identified the mentor full plate problem by describing teachers who would usually be chosen as a mentor to be some of the busiest people in the school.

At the elementary level some of the busiest people were asked to be mentors who were also the strongest people on the team and sometimes it
is your strong people who are always your busiest. You know the quote, to get something done, ask a busy person.

The coordinator in District One said,

The best people, the most committed people, the most altruistic people make the best mentors but they’re also the people who tend to be most involved in the day to day coordination of the campus. Because they are committed people they want to make a difference for everyone, teachers, students, parents, everyone there. So finding the right people and ensuring them they have enough time to devote to their duties has always been sort of a tight rope walk.

The mentor coordinator in District Two further commented to say the full plate problem was more of an issue at the secondary level,” I know at the secondary level student case load was one barrier. Teachers with more classes, more preps and more students found this [the developmental mentoring program] much more intense.” The mentor coordinators were not the only ones who commented on the overly full agenda held by many mentors in both districts.

Administrators identified this as a barrier to the developmental mentoring program as well. An administrator in District One talked about how he thought he had allowed enough extra time for his mentors to carry out their duties, but in retrospect he realized it really was not enough. When asked about barriers he responded,

I think number one is the four letter word, time. I thought I did a good job this year by providing subs, to allow my mentors release time to go
through the full cycle, but then I found out that that wasn’t really enough. I know they needed extra release time to do their jobs most effectively, but, on an elementary campus, that’s really difficult to provide an extra release time for mentor teachers, because they do have their classroom responsibilities too.

Likewise an administrator in District Two described one particular mentor as having a full plate as well. “It does take time and that was hard for them to take because she’s my team leaders and she’s also my ESL…lead teacher for our campus. And she’s had her hands full with everything.” It is obvious from these comments that the district level coordinators as well as the administrators in both District One and District Two identify the large number of responsibilities that mentors have not only as mentors but as contributing members of the school campuses where they teach. Mentors also identified the additional workload as a barrier to their work in their multiple roles.

Mentors in District One and District Two commented quite often about the heavy work load they have added by being a mentor to their already busy schedule. Word like overwhelmed and tight schedule where used by the mentors to describe their new role. However, these words were used when the mentors were talking about their role as mentor in conjunction with their school role. One mentor described her work as the testing coordinator which she called “glorified secretary work” like sharpening pencils, preparing scantrons for testing, compiling lists of students to go to after school tutorials… as getting in the way of her work as a mentor. Another mentor felt overwhelmed balancing her work as a mentor with her work as a classroom teacher.
When asked about barriers she responded, “Very overwhelmed, it was a lot, and I mean we were taken out of the classroom a lot. I felt like we needed to be at school helping the novice teachers and being here and it was hurting our kids at the same time being taken out. I think we were taken out three times.” This mentor has clearly struggled with the time associated with mentoring taking away from her students in her classroom. While mentors were feeling this tug-of-war between their classroom duties and their role as a mentor, some of the novice teachers felt this pull as well.

Novice teachers in District One commented that they too felt that the many responsibilities held by the mentors interfered with the mentors’ ability to support them effectively. In response to the question about barriers one novice responded, “It is time consuming for them. And then they have their regular job on top of it.” Another novice indicated that her mentor teacher’s numerous responsibilities caused her to not want to interrupt and ask for the help she needed,

I saw that she was very busy with a lot of other stuff. It is not that she does not want to help me but it is that she is really busy because she has a lot of duties and things to do and sometimes I feel like I don’t want to bother her and I can do it myself or I can go around and ask because I don’t want to bother her. She would say, whenever you need something, please call and I will be there but it is another worry, I can do it by myself because I saw that she has a lot of things to do, many duties.

It seems that this mentor’s busy load has caused her not seek help when needed. In this case the novice has begun to take care of the mentor in some ways by trying not to add
to her busy schedule. Possibly the most clearly illustrated example of a mentor full plate came from another novice teacher. When asked about barriers this novice truthfully responded,

I think part of my mentor’s problem was she had too many responsibilities. If you’re going to be a mentor teacher your primary focus should be on mentoring novice teachers. You shouldn’t have the responsibility of going to all kinds of department meetings; you should be available to your novice to help them get through problems quickly while the iron is hot so to speak. You know if I had a real problem or if I had a real breakthrough about something. I’d want to talk with her about getting it right then and there. But it may be days before she had a hole in her schedule when she can sit down and talk with me.

Could it be that the reason that only novice teachers in District One indicated the feeling like their mentor teachers’ had too many responsibilities to carry out their mentor duties as well because of the increased mentor to novice teacher ratio. It was in District One that many of the mentor to novice teacher matches were at a one-to-three ratio whereas in District Two a strict one-to-one ratio was followed. Regardless of the reason, it is apparent that several novice teachers felt as if the mentor teachers’ full plate or heavy additional responsibilities interfered with the growth of the novice teacher. As novice teachers described their experiences with a very busy mentor, hesitation for asking for assistance and frustration with the partnership was evident in their comments.
Certainly, mentor teacher’s lack of adequate time to carry out their mentoring duties whether related to poorly matched schedules, too much responsibility involved with the task, or conflicting roles between mentoring and their regular teaching position, the growth of the novice and the mentor can be negatively impacted. As evidenced from this interview data, providing adequate, dedicated, quality time for the role of mentoring is essential to supporting the developmental mentoring program.

**Component Six: Accountability and Measurement**

Accountability and measurement are identified as critical components in several of the contributing bodies of research that allowed the crosswalk model of combined developmental mentoring components to be compiled. At the root of accountability and measurement is the evolving need to evaluate new programs as they are implemented and carried out in a way that measures relative success. If needed, the changes can be made if the evaluation indicates that something within the system is not functioning fully in order to make the implementation or process more effective (Adelman & Taylor, 2003; McLeskey & Waldron, 2006). Mentors and administrators in both districts were provided an organizational structure to aid in completing the required mentoring tasks. A list of activities, practices and due dates around which they were to complete those activities with each district’s novice teacher provided a plan for accomplishing as well as a record of novice teacher and mentor work with each other. In addition, data was collected throughout the year as a means of formative evaluation of the novice teachers’, mentors’ and overall program effectiveness through pre and post assessments, novice teacher and mentor journal entries, as well as four COPAT classroom observation
instruments from each novice teacher pair. Data collected from the Developmental Mentoring Evaluation Survey as well as interview conversations provide a snapshot of how accountability and measurement was carried out in this particular program in District One and District Two.

**Accountability and Measurement Related Items and Responses on the Developmental Mentoring Evaluation Survey**

Table 16 contains data from the Developmental Mentoring Evaluation Survey that addresses program accountability and measurement. This table looks somewhat different from the previous tables representing data from the Developmental Mentoring Evaluation Survey because the previous tables represent data from part one of the survey, while this data represents data from part two. In part two of the Developmental Mentoring Evaluation Survey, participants were not only asked to rank the relative importance of the item listed, but also identify whether or not the practice listed is evident or not evident at their campus or in their district. For reporting purposes, the two highest ranking of relative importance will be discussed along with whether or not this practice seemed to be evident or not to the participants. Further, not all rows of participant responses will add up to the n for each sub-group as some participants chose not to answer all items. All items in Table 16 were included on the mentor teacher and administrator surveys therefore responses for these two groups of participants in both District One and District Two will be discussed.
**Importance of Including on Developmental Mentoring Evaluation Survey**

Item one in Table 16 asked mentors and administrators to identify how important having the novice teacher’s teaching practice a part of the program evaluation and whether or not that was evident at their campus or in their district. Mentors in both districts responded similarly to this item. While a few responded that the novice’s growth is not necessarily important in program evaluation, the majority of responses indicated that this was indeed an important aspect of the program evaluation, the majority of responses indicated that this was indeed an important aspect of the program evaluation. Seventeen of the twenty-two mentors in District One responded that it was either very important or important to include novice growth in the program evaluation. All mentors in District One reported that this element was evident on their campus or in their district. In District Two 96.2% of mentors responded in the same manner. All administrators surveyed in both district reported that inclusion on the novice’s growth was very important or important in the program evaluation. Four of the five administrators surveyed in District One indicated that this element was evident and all administrators in District Two indicated that this practice was evident at the campus or district level. Overall, mentors and administrators in both district identified that novice growth is an important element to be included in the program evaluation. Moreover this practice seems to be evident in both districts.
Table 16. Accountability and Measurement Related Items and Responses on Developmental Mentoring Evaluation Survey

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<thead>
<tr>
<th>Program Purposes</th>
<th>District Participant n=</th>
<th>Importance (Rank 1-5)</th>
<th>#Evident</th>
<th>Not Evident Percentage</th>
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<tr>
<td></td>
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<tr>
<td></td>
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<td>0</td>
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<td></td>
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Table 16. Continued

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<th>#Evident</th>
<th>Percentage</th>
<th>Not Evident</th>
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</thead>
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2. Program evaluation includes effectiveness of mentoring practice

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<td></td>
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<tr>
<td>Admin.</td>
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Table 16. Continued

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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Percentage</td>
</tr>
<tr>
<td>3. Program evaluation includes effectiveness of mentoring program strategies</td>
<td>District One Mentor n=24</td>
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<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>District One Admin. n=5</td>
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<td>0</td>
<td>0</td>
</tr>
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</tr>
<tr>
<td></td>
<td>District Two Admin. n=19</td>
<td>1</td>
<td>0</td>
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</table>

<p>|          | District One Mentor n=24 | 87.5                   |           |             |
|          | District One Admin. n=5  | 80                     |           |             |
|          | District Two Mentor n=29 | 93.1                   |           |             |
|          | District Two Admin. n=19 | 89.5                   |           |             |</p>
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<th>Importance (Rank 1-5)</th>
<th># Evident Percentage</th>
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<td>1=lowest 5 highest</td>
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<td></td>
</tr>
<tr>
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</tr>
<tr>
<td>District One</td>
<td>Admin. n=5</td>
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<td>0</td>
</tr>
<tr>
<td>District Two</td>
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<td>Admin. n=19</td>
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<td>16</td>
<td>1</td>
</tr>
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</table>

4. Data for evaluation are collected continuously from a wide variety of stakeholders including mentors, novices, administrators and others.
Item two in Table 16 asked mentors and administrators to identify the relative importance of including effectiveness of mentoring practice on the program evaluation and whether or not this was evident on their campus or in the district. All administrators in District One and all but one administrators in District Two identified that mentor effectiveness an important element in program evaluation. Four of the five administrators surveyed in District One indicated that this was evident on their campuses or in their district while all but two administrators in District Two indicated the same. While mentors also responded as a group in much the same manner as the administrators on this item, there seemed to be a greater variance in their responses. There were several mentors in each district that felt that mentor effectiveness was not an especially important element for program evaluation. However, the majority of mentors in both districts did identify mentor effectiveness as very important or important in evaluating the program. Seventeen of the twenty-three mentors in District One and 20 of the 29 mentors in District Two indicated mentor effectiveness as relatively important in evaluating the mentoring program. Likewise 91.3% of mentors in District One and 96.5% of mentors in District Two indicated that this element was evident on their campus or in their district. Like the first item in Table 16 administrators tended to indicate greater importance for including this item on program evaluation measures than did mentors in either district. However, overall it is clear that the majority of participants surveyed view the element of mentor effectiveness as important in evaluating program effectiveness.
Item three in Table 16 related to importance of including the element in the program evaluation is item three. Participants were asked to identify the relative importance of including the effectiveness of mentoring program strategies in the program evaluation. Nineteen of the twenty-four mentors surveyed in District One indicated that including the effectiveness of mentoring program strategies to be either very important or important for program evaluation. Additionally 87.5% of mentors in this district indicated that effectiveness of mentoring program strategies was evident on their campus or in their district. All administrators in District One indicated that including the element of mentoring program strategies effectiveness on program evaluation as important. Four of the five administrators in District One also indicated that this element was present on their campus or in the district. Most mentors, 20 of the 29 surveyed, in District Two also indicated that the effectiveness of mentoring program strategies was an important component of program evaluation with 93.1% indicating that this element was evident on their campus or in their district. Administrators in District Two, like administrators in District One, indicated relative importance of this element as well with 18 of the 19 administrators ranking mentoring program strategies effectiveness as very important or important for including in program evaluation. All but two administrators in District Two indicated that this element was present either on their campus or in the district. It is evident from the data for item three in Table 16 that the majority of mentors and administrators in both District One and District Two view the inclusion of the effectiveness of mentoring program strategies as important on program evaluation measures. It is also apparent from the data that this element seems to also be
evident in both districts. Along with this data on the relative importance of including particular elements on program evaluation, also included in the data on Table 16 are participant responses to how data was collected throughout the program.

**Ongoing Data Collection**

The fourth item on Table 16 focuses on how the formative data was collected throughout the program. Participants were asked to respond to how important it was that data that the evaluation was collected continuously from a wide variety of stakeholders including mentors, novices, administrators and others. In addition, participants were queried as to whether or not this practice is evident on their campus or in their district. The majority of administrators in both districts indicated that ongoing data collection from all stakeholders was relatively important for program evaluation with all administrators in District One and 17 of the 19 administrators surveyed in District Two responding that this element is either very important or important. Likewise, all administrators in District One and 84.2% of administrators in District Two indicated that this practice was evident at either the campus or district level. While for the most part mentors also agreed that this was an important element to include in program evaluation, there were some mentors in both districts that indicated that this element was less important. Six of the twenty-four mentors in District One and nine of the twenty-nine mentors in District Two felt that this element was either moderately important or less important to include on program evaluation. However, 18 of the 24 mentors in District One and 20 of the 29 mentors in District Two indicated that this was an important element to consider in evaluating the program. Also, when asked to identify
whether or not this element was evident at the campus or district level, 95.8% of mentors in District One and 84.2% of mentors in District Two indicated that it was indeed evident. The data for item four in Table 16 indicates that continuous collection of data from a wide variety of stakeholders is important to be included in program evaluation and is a practice that is evident at the campus or district level. This Developmental Mentoring Evaluation Survey data in conjunction with the interview responses provide a glimpse into the accountability and measurement component of infrastructure in the developmental mentoring program in District One and District Two.

The interview responses provided by participants offer additional information regarding the accountability and measurement related components in the developmental mentoring program in districts One and Two. When district level mentor coordinator and administrators in both districts were asked to describe the means of formative assessment associated with the developmental mentoring program, two themes emerged. The first theme which can be viewed as a support, focused on the many layers of support people in place in each district that allowed for consistent checking on the progress of the novice teachers and mentors involved with the program. As a barrier, the second theme that emerged was the amount of paperwork associated with the program accountability and measurement.

Supports Related to Accountability and Measurement

Within the structure of the developmental mentoring program there are a series of layers of support people. As administrators and district level mentor coordinators were asked in interviews about the formative assessment for the developmental
mentoring program discussions of how this data was collected along with who assisted in the collection were common foci of the conversations. The district level mentor coordinator, administrators and campus level lead mentors all provided support as informal and formal evaluation was carried out.

**Informal and Formal Conferences**

Administrators commented that periodic conferences with both novice teachers and mentors as a means of checking on both participants’ progress. Administrators in both districts spoke often of benefiting from the conversations they had with their mentors, indicating it was during this conversations that specific needs of the novice teachers often surfaced. One administrator in District One said, “Typically before an observation…we would meet with the mentor to find out what has been going on.” Another administrator in District Two indicated that he often sat down with the novice teacher and the mentor to discuss the unique needs of that novice teacher especially when the novice teacher may be struggling in a particular area. Another administrator in District One commented on how an associate administrator served as a lead for the mentoring that took place on their campus. This associate administrator reported back on the progress of the novice teachers and mentors as well as checked to make sure the observations were completed in a timely manner.

Administrators in both districts also indicated that they were able to check on the progress of the mentors through conversations with the novice teachers. Administrators stated that they could ask the novices about their relationship with their mentors and felt as though they received truthful responses. One administrator in District One said she
could ask, “… do you feel that you are getting what you need? And they are pretty honest; they say oh yes it going great or no, it is counterproductive.” Likewise an administrator in District Two stated that if a novice teacher was feeling frustrated the most accepted plan was to take that concern to their mentor. However, when there was maybe a poor novice teacher to mentor match or the issue was with the mentor herself then, “… novices could report directly to me if needed.” Another administrator in District Two indicated that the two building principals would conduct informal walk-throughs in an attempt to find out how the novice teachers were doing as well as how the mentors were progressing as helping teachers.

*District Level Mentor Coordinator Support*

The district level mentor coordinators also served as another layer of support as well as an additional set of eyes and ears to gather data informally about how everything was going. The mentor coordinator in District Two said in response to the interview question addressing kinds of formative assessment conducted on novices, “…I was the only monitoring practice. I would send out emails and calls went out to meet with the new teachers. I met with the new teachers and mentors only during the school day during their planning time….I would check in with them during the interview [conference], are you doing this and doing this and write down what they were doing. If it wasn’t happening I was very gentle I think in saying let’s try to do this next time.” This coordinator went on to say that her informal assessment with mentors seemed to be quite different than that with the novice teachers. “I checked in on the mentors during the meetings and with emails but looking back I think sometimes they weren’t that truthful.
You know if they didn’t have to see my face, it was easier to say in email that stuff when it really wasn’t true.” The district level mentor coordinator in District One also responded similarly to the same question on the interview. Formative assessment as described by the coordinator in District One involved ongoing survey data collected throughout the year. She also identified that, “...lots of communication, face to face meetings with mentors and novices, communication with the principals” occurred as a means of understanding how novice teachers and mentors were progressing throughout the year.

*Use of Lead Mentors*

Another layer of support that also served as a means of collected data on the progress of the program was identified by the district level coordinator and the administrators in District One. Mentors during a focus group interview as well as a mentor in an individual interview commented on how the personnel designated as the lead mentor on each campus played a critical role in monitoring the progress of the novice teachers and mentors. One administrator in District One stated, “On my campus, we had someone who was responsible for monitoring our mentoring. We are on a big campus and we have lots of mentors and lots of mentees so my [lead mentor] was responsible for monitoring and seeing that mentoring was occurring and staying in contact with them. It was a non-threatening environment where they could contact her if they were having challenges and difficulties with something and she could let me know if there were problems.” The mentors during the focus group interview also commented on how the lead mentor on the campuses really helped facilitate communication and
carry through of the mentoring process. This lead mentor was also available to help ensure that the appropriate documentation was being kept throughout the year.

Clearly from this interview data, the varying levels of support people throughout the developmental mentoring program in both districts not only served to offer assistance when needed for novice teachers, mentors and administrators, but also served a vital role in monitoring the progress of the program and the program participants. This additional support aided in ensuring that the appropriate mentoring practices were being used, needs were being met, and the needed documentation was being kept as a record of the progress of those participating in the developmental mentoring program in District One and District Two.

**Barriers Related to Accountability and Measurement**

The issue that arose that could have been perceived to be a barrier was the amount of paperwork required by those participating in the program. This barrier was discussed in some detail in the previous section on resources. Novice teachers and mentors discussed the issue around not having enough time to complete the required paperwork as a barrier to completing the mentoring tasks. The district level mentor coordinator in District One said, “Lots of things like surveys were sent out, email communications, face to face meetings, this could be a full time job really, just keeping up with this grant. Lots and lots of paperwork, and not just me, I have a half time secretary and she spent a great percentage of her time doing things related to the grant as well to keep track of everything.” The district level mentor coordinator and administrators in District One and District Two listed the plethora of data sources used
throughout the year. Some of those identified include: INTASC surveys; personal preference surveys; field notes; emails; retention numbers; contract renewal statistics; informal surveys; face to face meetings; a minimum of two COPATs per semester; journal entries; logs of novice teacher and mentor conferences; paragraph completion; Survey of Reflections; CBAM; and coaching plans. The sheer number of data sources put a strain on the participants trying to complete these along with teaching and mentoring. Interestingly, the majority of participants indicated on the Program Evaluation that ongoing data collection from a variety of stakeholders was very important or important for program evaluation, once the participants became actively involved in this data collection it tended to be overwhelming.

Component Seven: Clear Program Purpose

One of the key components of infrastructure identified by the National Mentoring Framework is the establishment of clear program purposes. The importance of this component is evident in this statement from the National Mentoring Framework, “Establishing clear program purposes will help participants to develop the professional focus of quality mentoring programs” (Dynak, Schwille, & Nagel, 2000, p. 39). A clear program purpose allows for all participants to focus their energies on similar interests throughout the program. Several items on the Developmental Mentoring Evaluation Survey were designed to collect participant’s perceptions on the combined mentoring component of clear program purposes. Table 17 presents four items from the Developmental Mentoring Evaluation Survey specifically related to clear program purposes. Table 17 contains not only ranking information on the relative importance of
the item listed, but also the frequency of response from participants of whether or not that component is evident at their campus or in their district. All numbers in each row may not total the entire number of participants indicated by the n= in the second column as all participants did not answer all items.

**Clear Program Purpose Related Items and Responses on the Developmental Mentoring Evaluation Survey**

*Establishing and Articulating Program Purposes*

Item one in Table 17 asked novice teachers, mentors and administrators to rank the importance of having established written mentoring program purposes. Less than one half of the novice teachers in District One ranked this element as either very important or important while only two fewer ranked this element as only moderately important. A little over one half of the novice teachers indicated that this element was evident at their campus or in their district at 58.6% responding evident. Eighteen of the twenty-five mentors in District One ranked having established written mentoring program purposes as very important or important while 80% indicated that this was evident at the campus or district level. Only two of the five administrators surveyed in District One ranked established program purposes as very important or important while 60% of the same group indicated that this element was evident. The rankings in District Two were quite similar to those reported in District One. Sixteen of the twenty-four novice teachers in District Two ranked established program purposes as very important or important while one quarter of this group ranked this element as only moderately important. Novice
Table 17. Clear Program Purpose Related Items and Responses on Developmental Mentoring Evaluation Survey

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<thead>
<tr>
<th>Program Purposes</th>
<th>District Participant</th>
<th>Importance (Rank 1-5)</th>
<th># Evident Percentag e</th>
<th>Not Evident</th>
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<td>8</td>
</tr>
<tr>
<td>District Two</td>
<td>n=19</td>
<td>0 1 3 5 10</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Admin.</td>
<td></td>
<td></td>
<td>73.7</td>
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</tr>
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</table>
### Table 17. Continued

<table>
<thead>
<tr>
<th>Program Purposes</th>
<th>District Participant</th>
<th>Importance (Rank 1-5)</th>
<th># Evident Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 2 3 4 5</td>
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<tr>
<td>Mentoring</td>
<td>n=27</td>
<td>2 5 12 5 3</td>
<td>55.6</td>
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<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Novice</td>
<td>n=27</td>
<td>2 5 12 5 3</td>
<td>55.6</td>
</tr>
<tr>
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<td>64</td>
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<td>Mentor</td>
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<td>3 8 0 5 6</td>
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<tr>
<td>Novice</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>Mentor</td>
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<td></td>
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<tr>
<td>District Two</td>
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<td>83.3</td>
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<tr>
<td>Admin.</td>
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</table>

2. Mentoring program purposes can be articulated by stakeholders.
Table 17. Continued

<table>
<thead>
<tr>
<th>Program Purposes</th>
<th>District Participant</th>
<th>Importance (Rank 1-5)</th>
<th># Evident</th>
<th>Not Evident</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>District One</td>
<td>1 4 10 7 5</td>
<td>19</td>
<td>12</td>
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<tr>
<td></td>
<td>Novice n=27</td>
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<td>70.4</td>
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<td></td>
<td>District One</td>
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<tr>
<td></td>
<td>Mentor n=24</td>
<td></td>
<td>62.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>District One</td>
<td>0 0 2 1 2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Admin. n=5</td>
<td></td>
<td>60</td>
<td></td>
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<tr>
<td></td>
<td>District Two</td>
<td>0 3 5 6 8</td>
<td>17</td>
<td>6</td>
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<td></td>
<td>Novice n=24</td>
<td></td>
<td>70.8</td>
<td></td>
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<td></td>
<td>District Two</td>
<td>1 6 12 6 7</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Mentor n=31</td>
<td></td>
<td>70.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>District Two</td>
<td>0 2 4 7 6</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Admin. n=19</td>
<td></td>
<td>73.7</td>
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</tr>
</tbody>
</table>

3. Written mentoring program purposes are regularly reflected in administrative and mentor-novice decisions.
<table>
<thead>
<tr>
<th>Program Purposes</th>
<th>District Participant</th>
<th>Importance (Rank 1-5)</th>
<th># Evident</th>
<th>Not Evident</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1=lowest 2 3 4 5</td>
<td>Evident</td>
<td>Percentage</td>
</tr>
<tr>
<td>4. Mentoring</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td>75.8</td>
</tr>
<tr>
<td>Program purposes are aligned with other school or district improvement efforts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District One</td>
<td>Novice n=29</td>
<td>1 3 7 10 8</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td>District One</td>
<td>Mentor n=27</td>
<td>1 1 5 6 14</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>District One</td>
<td>Admin. n=5</td>
<td>0 0 1 2 2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>District Two</td>
<td>Novice n=24</td>
<td>1 1 4 8 7</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>District Two</td>
<td>Mentor n=31</td>
<td>2 2 10 8 9</td>
<td>22</td>
<td>10</td>
</tr>
<tr>
<td>District Two</td>
<td>Admin. n=19</td>
<td>0 0 2 5 12</td>
<td>15</td>
<td>1</td>
</tr>
</tbody>
</table>

District One: Novice n=29, 75.8% Evident, 7% Not Evident
District One: Mentor n=27, 74.1% Evident
District One: Admin. n=5, 100% Evident
District Two: Novice n=24, 58.3% Evident
District Two: Mentor n=31, 70.9% Evident
District Two: Admin. n=19, 78.9% Evident
teachers in District One indicated with 66.7% frequency that this element was evident either at their campus or in their district. Slightly over one half of the mentors in District Two ranked this element as very important or important while over one third indicated that established program purposes was only moderately important. Mentors in District indicated that this element was evident at the campus or district level with 80.6% frequency. Fifteen of the nineteen administrators surveyed in District Two indicated that established written program purposes were very important or important while 73.7% of this group indicated that this element was evident at their campus or in the district. Whereas item one in Table 17 specifically focused on whether or not written program purposes were established as part of the developmental mentoring program in District One and District Two, item two was designed to ascertain whether all participants could articulate them.

Novice teachers in both districts responded in much the same way to item two in Table 17 even though their rankings were somewhat different. In general, their rankings suggest that ability of all stakeholders to articulate the program purposes is only moderately important. Seven of the twenty-seven novice teachers in District One indicated that this element was less important, 12 of the 27 indicated that it was only moderately important and eight of the 27 responded that all stakeholders being able to articulate program purposes as very important or important. Likewise, in District Two novice teachers either indicated that this element was either important or not. Eleven of the twenty-four novices in District Two assigned the lowest two rankings or the highest two rankings with no participants in this group ranking this element as only moderately
important. However, the split between the two extreme rankings indicates a moderate response on average for the entire group. Likewise, these two novice teacher groups reported whether or not this element is evident or not at the campus or district level similarly. Novice teachers in District One indicated with 55.6% frequency that this element was present while only 50% in District Two indicated the same. Eighteen of the twenty-five mentors surveyed in District One ranked the ability to articulate program purposes as very important or important while 64% indicated that this element was evident. Mentor teachers in District Two however ranked this element with greatest frequency only moderately important with 10 of the 31 participants in this group indicating a ranking of three. Mentors in District Two indicated that this element was evident at the campus or district level at 74.2% frequency. All administrators in District One and all but one administrator in District Two ranked the ability of all stakeholders to articulate program purposes at least moderately important with the majority ranking this element as either very important or important. Eighty percent of administrators in District One and 83.3% of administrators in District Two indicated that this element is evident at the campus or district level.

Utilization of Program Purposes

The last two items in Table 17 asked participants to identify how the program purposes were used. Item three in Table 17 was designed to collect participants’ perceptions on how important it is that written mentoring program purposes were regularly reflected in administrative and mentor-novice decisions. Novice teachers and mentors in District One and mentors in District Two ranked the use of program purposes
in other school related decisions as only moderately important with 10 of the 27 novices in District One, nine of the twenty-four mentors in District One and 12 of the 31 mentors in District Two ranking this item a three on the ranking scale. In District One novice teachers indicated at 70.4% frequency and mentors at 62.5% frequency that this element was evident at the campus or district level with mentors in District Two reporting at only a slightly greater frequency of 70.8% of evidence of this element in that district. The majority of administrators in District One and District Two ranked the use of program purposes in other decisions as very important or important with three of the five administrators in District One and 13 of the 19 in District Two ranking it as either very important or important. There was a slight difference in how administrators in the two districts reported the evidence of this element. Sixty percent of administrators in District One and 73.7% of administrators in District Two indicated that this element was present at the campus or district level. The majority of mentors in District Two ranked the use of program purposes in administrative and mentor-novice decisions as only moderately important with 12 of the 31 participants assigning a ranking of three. Mentors in District Two indicated that this element was present at their campus or in the district at 70.9% frequency. Item three specifically focused on how the program purposes were used in other decision making processes while item four addresses the importance of aligning these program purposes with other school and district improvement efforts.

Item four in Table 17 asked participants to identify the relative importance of aligning written mentoring program purposes with other school and district improvement efforts. The majority of participants in both districts other than the mentors in District
Two identified this element as either very important or important. This data represents 18 of the 29 novice teachers in District One, 20 of the 27 mentors in District One, four of the five administrators in District One, 15 of the 24 novice teachers in District Two and 17 of the 19 administrators in District Two. Mentors in District Two ranked the alignment of program purposes with other school or district improvement efforts as only moderately important with one-third of the participants assigning a ranking of three. Greater than 50% of participants in each group did report that this element was evident at the campus or district level with 75.8% of novice teachers in District One, 74.1% of mentors in District One, 100% of administrators in District One, 58.3% of novice teachers in District Two, 70.9% of mentors in District Two and 78.9% of administrators in District Two indicating this practice as evident on the survey.

From this data for the items listed in Table 17, participants perceived the identification of and use of program purposes to be at least moderately important. Similarly, participants indicated that the items related to program purposes were for the most part evident at the campus or district level. This Developmental Mentoring Evaluation Survey data in conjunction with the emergent themes related to program purposes allow the participants perceptions of this combined developmental mentoring infrastructure component to be illustrated clearly. Following is a discussion of the supports and barriers related to clear program purpose.

**Supports Related to Clear Program Purpose**

Through the interview conversations with the administrators and mentor teachers in District One and District Two it is evident that a strong sense of purpose coupled with
expectations had been established with the inception of the developmental mentoring program in both districts. Administrators from both districts fully expected their mentor teachers to carry through with the work of mentoring following the guidelines established during training. Furthermore, the mentors felt successful because of the clear focus provided by the developmental mentoring program.

Administrators in both districts clearly expected that the mentor teachers who had been matched to the novice teachers and who had participated in the mentor training to implement the model and follow through with the training they had received. One administrator in District One simply said, “I expected they’d do it.” In another administrator interview, the participant said, “I expected them to go in and use it of course, and to provide me with feedback if there were problems or any concerns about it.” In more detail, however, another administrator in District Two said this about his expectations. “Basically I wanted them to get in there and help those teachers develop, to grow those teachers to what we expect on our campus.” Yet another administrator in District One commented on the expectations there, “My expectation was that they would analyze where their teachers were, and utilize the strategies from the training to help the teachers proceed through the stages of their learning.” It was evident from the administrators’ comments about mentor’s expected use of the training they had received that if a teacher had been assigned a novice teacher that they follow through with the expectations of the program. Mentor teachers felt this level of expectation coupled with clear program expectations aided in their work with their novice teachers.
Mentor teachers in District Two commented repeatedly how the clear program expectations and purposes aided in their work as mentors. “It has all been clearly defined. When I’ve done it [mentoring] in the past, there were not clearly defined responsibilities so it was hard to know. I like this because it tells you exactly what you have to do and even if it seems like a lot of paperwork, at least we knew what was expected.” The same mentor identified that the developmental mentoring program gave her a clear focus, “We had direction. I fell very solid about the direction.” Another mentor in District Two added to this comment by clarifying the difference between the previous mentoring programs that she had participated in, “It seems like it [the developmental mentoring program] is more instructionally focused and it should be rather than just clerical. …It was more dealing with instruction which will make more of an impact on our school and our kids.” Additionally, several mentors in District Two discussed the observation tool presented during the mentor training and a required element to the developmental mentoring program as being of particular support in helping them focus their mentoring. One mentor in particular indicated that the observation instrument helped focus her mentoring, “I think the evaluation tool has helped me focus on different aspects when I am in the classroom. Not only has it helped me work with them, it has helped me grow as well.” It is evident in District Two that the clear program purposes and expectations have helped focus the work of the mentors. While there were no comments on clear program purpose and expectations as a support from mentors in District One, it cannot be assumed that this component was either absent or present in this study for those mentors.
Barriers Related to Clear Program Purpose

The clear program purpose and expectations was identified as a strong support for the developmental mentoring program by participants in District One and District Two. However, a few identified that more clear expectations for the mentor as far as paperwork and other requirements would have benefited their work during the year. Because there were numerous requirements to complete such as observations, pre and post-conferences, and surveys both at the beginning of the year as well as at the end, the mentor teachers commented that it would have been helpful to have a checklist of all the requirements at the beginning of the year. One mentor said, “The only thing I thought was kind of confusing, I would have loved at the beginning to have a list of this is what you need to turn in and this is when it is due. And I thought there was a lot of confusion with others and with myself as far as, now we need what, and it’s due, and I think that in late November or December we finally received that checklist and I thought I my gosh we were supposed to do that…” Another mentor felt like there was quite a bit of confusion because of the late notice of the mentor training, as a result of course of the late notification to the districts that the grant had been awarded. This mentor indicated that it would be more helpful if the district would decide who the mentors were going to be then provide the training well before the school year begins, “…and this wouldn’t just be thrown on them. I think that could be a support if teachers already know what to expect, this is what the program entails of you.” Clearly the late notification and subsequent late notification by the districts to the mentor teachers who would be participating in the mentor training right before school started was stressful to some of
the mentor teachers. This barrier to successful implementation and maintenance of the developmental program that District One and District Two participated in impacted the mentors’ feelings about being a part of the innovation.

Summary and Analysis of Question One

The purpose of question one in this study was to gather information about the particular issues that either supported or interfered with the work of those involved in the developmental mentoring program in District One and District Two. As evidenced by the wealth of data used to address question one, all seven components on the crosswalk model proposed late in Chapter II are important elements of infrastructure related to implementing and maintaining a developmental mentoring program. Each one of the components on the crosswalk model including: Collaboration; Leadership; Mutual Decision Making; Ongoing Professional Development; Provision of Resources; Accountability and Measurement; and Clear Program Purpose; were related to both supports and barriers to carrying out the developmental mentoring program. In considering the combination of survey and interview data, there were some noteworthy similarities and differences between District One and District Two. A summary of these findings is presented next along with an analysis of in particular the infrastructure components that the two districts shared as well as how the two districts differed.

Collaboration

Collaboration on the crosswalk model involves a variety of means for many different stakeholders to work together within the developmental mentoring program from larger entities such as universities working with school districts to the intricacies of
how the mentor and novice teacher build a relationship and work together. The major findings associated with the combined developmental infrastructure components for collaboration are listed below.

- Novice teachers and mentors in District One identified using the online and hard-copy learning style instruments as a means for getting to know each other. Mentors in District One also identified eating lunch together at school as a means of getting to know each other. Novice teachers and mentors in District Two identified the same use of the learning style inventories along with eating lunch together at school as a means of building their relationship.

- Novice teachers in District One identified their relationship as professional, but not close while mentors in District One characterized their relationship with their novice as close, both professional and personal. Both novice teachers and mentors in District Two characterized their relationship with each other as close, both professional and personal.

- Novice teachers in District One indicated that they met with their mentors for formal conferencing with a variety of frequencies while mentors in the same district identified meeting with their novices once per week. Both novice teachers and mentors in District Two identified meeting together for formal conferences at a variety of frequencies depending on the need.

- The findings for informal conferences mirrored that of informal conferences. Mentors in District One and novice teachers and mentors in District Two reported meeting for informal conferences three or more times per week while
novice teachers in District One indicated that the frequency of informal conferences varied depending on need.

- Mentors in District One and novice teachers and mentors in District Two identified that most conferences were held before or after school. Novice teachers in District One indicated that most conferences were held during a common planning period.

- Administrators, mentors and novice teachers in District One reported a variety of different numbers of novice teachers assigned to mentors. Administrators, mentors and novice teachers in District Two all reported a strict one to one ratio for novice teachers and mentors.

- Administrators in both District One and District Two reported that mentors and novice teachers were matched by mentor expertise. Novice teachers and mentors in District One indicated that they were matched according to subject area. Novice teachers and mentors in District Two indicated that they were matched according to grade level.

- Administrators in both districts identified while not always attainable, having novice teachers and mentors matched according to same grade level, same subject, same department, same school in close proximity to each other was preferable.

- The one to one ratio for novice teachers and mentors in District Two was a supportive component of infrastructure for those participating in the developmental mentoring program.
• The increased ratio of more than one to one novice teacher to mentor was a barrier in District Two. However, administrators in District One did indicate that a one to one ratio was preferable.

• Poor matching such as assigning novice teachers to mentors who are not on the same team or grade level was found to be a barrier.

• Lack of close classroom proximity proved to be a barrier related to infrastructure when mentors were not readily able to meet with their novice teachers due to great distance between the two.

An analysis of this data indicates some discrepancies between District One and District Two as well as between groups of participants in the same district. Except for the item related to how the novice teachers and mentors got to know each other, the novice teachers and mentors in District One replied with different responses for each item while the novice teachers and mentors in District Two replied similarly for each of the items in Table 1. When asked to characterize the novice teacher and mentor relationship, the novice teachers and mentors in District Two indicated that their relationship could be described as close, both professional and personal. However, when novice teachers and mentors in District One were asked the same item, their answers varied. Novice teachers characterized their relationship as close professionally but not personally, while mentors indicated that their relationships were close, both professionally and personally. Could it be in District Two where each mentor was assigned just one novice teacher the pairs’ ability to build a professionally and
personally close relationship occurred more easily, than in District One where mentors were sometimes assigned as many as five novice teachers?

Likewise, when novice teachers and mentors were asked to describe the conferencing habits for both formal and informal meetings, novice teachers and mentors in District Two reported the same frequency of conferences as well as when the conferences occurred within several points difference on the frequency table. However, novice teachers and mentors in District One reported different responses for these three items. This data suggests that the participants’ perceptions about their experiences in the developmental mentoring program in District Two were much more similar between the novice teachers and mentors than those same two groups in District One.

Administrators in both districts identified the importance of a good match between mentor and novice teacher as well as keeping the ratio between mentors and novice teachers low as a support to the developmental mentoring program. While ideal matching and a low ratio were not always achievable, these two forms of support were identified by those responsible for making the matches between novice teachers and mentors including the element of keeping the ratio low.

While administrators in both districts acknowledged the importance of a one to one novice teacher to mentor ratio, this practice did not occur in District One. A variety of reasons were given by administrators and the district level mentor coordinator and for utilizing a increased mentor to novice teacher ratio, sometimes up to one to five. However, it was the mentors and novice teachers, those directly involved with the mentoring relationship to report the difficulties associated with this increased ratio.
Clearly a ratio of one to one provides a level of support in implementing and maintaining the developmental mentoring program.

Undoubtedly, the element of collaboration as identified in the cross walk model of combined developmental mentoring infrastructure provides a number of items to be considered when implementing or working to maintain the program. Careful consideration of matching novice teachers to mentors as well as keeping the ratio between the two low has proven to be critical in promoting feelings of success for all participants. Likewise, it seems to be evident that when the mentor to novice teacher ratio is low participants report more similar perceptions about the experience including how they would describe their relationship, their conferencing habits, and the overall success of the mentoring relationship.

Leadership

As identified in the literature, leadership is necessary in a developmental mentoring program. On the crosswalk model, leadership is characterized by a supportive and positive leader who has a firm understanding of the foundations of the mentor’s role. In addition, from the literature on systemic change infrastructure leadership entails more than just the campus administration to include other key individuals. For this study the leadership of campus principals along with the district level mentor coordinators has been found to be both supportive and a barrier when carrying out the developmental mentoring work. The major findings associated with the combined developmental infrastructure component for collaboration are listed below.
• Novice teachers and mentors in both districts agreed that the campus principals held high expectations for the mentors at their campus.

• Novice teachers in both districts reported that they did not know if most of the district level mentor coordinator’s responsibilities were dedicated to the mentoring program. The majority of mentors in both districts reported that they did believe that most of the district level mentor coordinator’s responsibilities were dedicated to the mentoring program. Administrators in both districts agreed with the mentors.

• The district level mentor coordinator was seen by all participants to be especially supportive to the work of the developmental mentoring program through the provision of ongoing consistent monitoring as well as opening the line of communication between all participants.

• There were a some less positive responses to the work of the district level mentor coordinator in District One.

• Novice teachers, mentors and administrators in District One identified emails and access to mentor training as forms of district level support. Novice teachers and mentors in District Two identified emails also as a form of district level support. However almost all of group in addition to administrators also reported that school visits were also a form of district level support.

• Mentors in District One reported that they had met with other mentors to discuss their mentoring role while administrators in the same district reported that they had met with mentors to discuss the novices’ growth. Mentors and
administrators in District Two reported that they had not met with a group of mentors.

- Mentors in District One reported that they had met with administrators to discuss the progress of the novice teachers while administrators reported they had met to discuss mentoring concerns, progress of the novices, and the role of the mentor. Mentors and administrators in District Two reported that they had met together to discuss the progress of the novice teachers.

- Administrators in District One reported that they perceived their role to be that of facilitator and model of reflective practice, conferencing skills, and classroom observation skills while administrators in District Two reported that their role was facilitator and model of classroom observation skills.

- Slightly over one-half of the administrators in District One reported that they did have a process in place for supervising mentors while slightly under one-half of administrators in District Two reported that they did not have such a process in place.

- Administrators in District One reported that their role in the mentor program was to facilitate the process of selecting mentors and matching them to novice teachers while the administrators in District Two reported that their role in the program involved scheduling time for mentors to carry out mentoring responsibilities.
• Mentors in District One reported that a barrier related to leadership involved administration in this district did not view the developmental mentoring program as a priority.

An analysis of these findings helps illustrate the importance of the role of leadership in the developmental mentoring program as a component of the combined infrastructure model. Clearly there were some commonalities among the perceptions of all participants in both districts. Overall, participants viewed the principals’ expectations for mentors as high. In addition, mentors and administrators in both districts perceived the district level mentor coordinator’s role to be mostly dedicated to the mentoring program. These two findings indicate that the initial professional development with the leadership in the districts these roles were defined and expectations were identified by those involved. While novice teachers in either district indicated that they did not know if the coordinator’s role was mostly dedicated to the mentoring program, is this an expectation for novice teacher understanding? Novice teachers are focused on understanding their own roles rather than others’. This extended understanding of others’ roles will come as cognitive structures are built and cognitive development ensues. Cleary these two expectations were similar among participants in both districts. However, there were some differences between the districts and participants within each group.

Overall, the perception of the role of the district level mentor coordinator was seen as a support, another layer of leadership infrastructure that was a positive influence on the work of the developmental mentoring program. The ongoing consistent monitoring and open line of communication established and maintained by the
coordinator was identified as supportive in both districts. Administrators also identified that this position allowed for someone to be solely focused on the mentoring program without being swayed by the other administrative duties related to running a school. Additionally, administrators identified that the central location of this leadership support allowed for an unbiased, multi-campus perception when addressing concerns of the novice teachers, mentors and administrators. However, there were concerns by some about the role the district level mentor coordinator served in District One.

While there were only outstanding positive comments by participants in District Two about the role the district level mentor coordinator served, this is not the case in District One. The concerns ranged from a lack of understanding what this role’s responsibilities entailed to concerns about how the responsibilities were carried out. A major concern was related to the reduced amount of face-to-face contact made by the district level mentor coordinator with participants in District One. Other comments indicated that when there were face-to-face meetings sometimes those would occur unannounced and occurred when it was not convenient for the novice teacher. There were not an overbearing number of concerns related to the role of district level mentor coordinator in District One, but there were some while there were no concerns related to the same leadership role in District Two.

In relation to the district level support, mentors and administrators in District One identified that emails were a strong support as a means of keeping the lines of communication open. Mentors and administrators in District Two also identified emails as a form of support. However, the form of support identified most frequently was face –
to-face meetings as supportive in District Two. The coordinator in District Two said herself that it is much easier to stretch the truth about progress and requirements in an email and not so easy when looking someone in the face. Whereas emails are convenient for those sending and those responding as they can occur at any time during the day, even after hours and can be responded to according to individual schedules, face-to-face meetings tend to be more honest and straightforward. During a face-to-face meeting body language in combination with facial expressions add to the meaning of the conversation. These subtleties are lost when the more convenient electronic conversations are had instead. A lack of or reduced number of face-to-face meetings certainly can interfere with the effectiveness of the developmental mentoring program as inefficient communications can affect a number of participants at the same time.

Another barrier that impacted the work of this developmental mentoring program related to leadership occurred just in District One. Mentor teachers in District One discussed openly and frequently that not all administrators in the district viewed the developmental mentoring program as a priority. Administrator responses to developmental mentoring in relation to state-wide standardized testing, student behavior and all the other issues in the hectic school day gave mentors the perception that all the other needs of the school were more important that the mentoring. These perceptions stemmed from administrators’ choices to ask mentors to substitute teach in other classrooms during their off period which was dedicated to mentoring. Moreover, when administrators would cancel the substitute teacher who had been scheduled to cover the mentor’s and novice’s class so that the observation cycle could be carried out to cover
another class due to substitute teacher shortages in the district, the mentor’s perceptions of the administrator’s view of the importance of the developmental mentoring program would wane. Clearly, when the administrator lacks focus for the work of the developmental mentoring program, the work of the mentor with the novice teacher will suffer as leader expectations often set the tone for others’ expectations for themselves.

Clearly, the infrastructure component of leadership is a critical element in implementing and maintaining a developmental mentoring program. Leadership which holds high expectations, whose role is dedicated to the support of the program and sets priorities accordingly, can provide a level of support that can increase effectiveness of all participants involved in the program. Participants’ ability to effectively mentor novice teachers in the developmental mentoring program may be reduced or stifled when any of these aspects of leadership is absent.

Mutual Decision Making

Teacher empowerment through participation in school-wide decision making is a key means of improving workplace conditions thus increasing retention. In fact, lack of decision making ability has been found to be one of the reasons teachers report for leaving the profession. While no conversation occurred during the individual or focus group interviews, as explained previously, there were several items on the Developmental Mentoring Evaluation Survey related to decision-making in the developmental mentoring program. The major findings associated with the combined developmental infrastructure component for mutual decision making are listed below.
Novice teachers in both districts indicated that they did not know how mentors were selected while mentors indicated that they had been chosen based on their leadership skills and in District Two also their excellent teaching skills. Administrators indicated that mentors had been selected based on their excellent teaching skills, mentor leadership skills and expressed interest in mentoring.

Novice teachers and mentors in both districts responded that they were unaware if there were written criteria for mentor selection. Administrators in both districts responded that there were no written criteria for mentor selection tied to the developmental mentoring program.

Novice teachers and mentors in both districts indicated that they did not know if written criteria for mentor selection were not known to the faculty. Administrators in both districts indicated that written mentor selection criteria were not known to the faculty.

From these findings it is evident that little mutual decision making occurred during this implementation year of the developmental mentoring program. Possible reasons this occurred as explained earlier include: the late notification of the grant award for both districts caused hasty decisions; mentors in one district had been assigned previously to the grant notification as new hires were assigned to campuses; there were not questions specifically designed to have participants discuss the decision-making process within the program. Whatever the reasons given for little mutual decision making that occurred during year one, it is clear from the current literature, that involving participants in the decision making process increases teacher empowerment.
leading to greater job satisfaction. In this case, involving participants in the decision-making processes related to the developmental mentoring program may increase effectiveness of all involved in the program.

As a beginning step, making the written criteria for mentor selection available and known to all participants would increase an awareness of how this decision is made on participating campuses at a minimum. The Developmental Mentoring Evaluation Survey data suggests that participants for the most part are unaware of the processes involved in assigning mentors. At a higher level, increasing participant decision making in other areas of the program will also increase the likelihood that all involved will take on more ownership and responsibility for the program success.

*Ongoing Professional Development*

The importance of professional development for mentors helping novice teachers grow and develop cannot be refuted. In fact, inclusion of ongoing professional development was indicated as a critical element in the literature on Improving Workplace Conditions, Project CREATE and in the National Mentoring Framework that were used to develop the proposed Combined Infrastructure Component model in Chapter II of this study. The major findings associated with the combined developmental infrastructure component of ongoing professional development are listed below.

- Novice teachers in both districts indicated that it was evident to them that their mentors had received training on observational skills.
• Mentors in both districts indicated that the most beneficial part of the mentoring training they had participated in was the use of the COPAT observational instrument.

• Novice teachers in District One indicated that they would benefit most from further training on learning styles while novice teachers in District Two indicated they would benefit most from further training on assessment tools.

• Administrators in District One indicated that they would benefit from additional training on reflection activities and adult learning; administrators in District Two indicated that they would benefit from further training on use of the COPAT, observation skills, reflection activities, and assessment tools.

• Mentors in both districts reported that the use of the COPAT consumes a noteworthy amount of their time.

• Mentors in both districts viewed their amount of growth as appropriate.

• Mentors in District One responded that the useful mentor manual and the relevant materials were the most helpful to them during the training while mentors in District Two responded that the hands-on activities were most helpful to them.

• Less than one quarter of all mentors in District One indicated any need for further training. Almost one half of the mentors in District Two indicated the need for further training in the areas of use of the COPAT; the instructional coaching plan; and the coaching cycle.
Overall, the mentor training was perceived to be a supportive component of infrastructure for the developmental mentoring program in District One and District Two. Identified as particularly helpful were the hands-on activities and role-playing as these two types of experiences provided meaningful practice for the participants during the training. Participants also identified that learning about how to use the COPAT observational instrument in conjunction with the conferencing cycle as highly useful in their work as a mentor. Additionally, the relevant materials and helpful binder were identified as particular strengths of the mentoring program.

A barrier associated with ongoing professional development related to a lack of time to attend the training. Particularly once the school year began. Teachers felt troubled by needing to leave the classroom in order to attend further training.

Further training is needed on the use of the COPAT. Mentors and administrators identified the need to see demonstrations on how to not only use the instruments, but also how to score it and share the results with their novice teachers.

While the mentor training was generally believed to be a support related to the infrastructure component of ongoing professional development, there were a few participants who felt the training was confusing and the associated materials were cumbersome and not helpful in their role as mentor. While overall the mentor training was viewed as a support, for some participants it was believed to interfere with their work.
• Mentors suggested maintaining a core group of mentors in their district rather than training new mentors each year.

An analysis of the data related to the combined infrastructure component of professional development aids in identifying what was supportive in the current mentor training, what may have interfered with the participant’s progress in the mentoring program as well as areas for further training as the program grows in both districts. The data also illustrates some commonalities and differences between the participant’s perceptions in both districts as well.

All participants discussed with some frequency the mentor training that they had attended. Novice teachers and administrators in both districts described the types of training that their mentors had evidently received. Novice teachers indicated that their mentors had evidently received training on observation skills while administrators in both district indicated that mentors were obviously trained in the use of the COPAT; conferencing skills; observation skills; reflection activities with the greatest combined frequencies. In thinking about the interactions between mentors and their novices during the year, the growth of the novice was focused around the classroom observations and the data collected on the COPAT. When mentors asked about the part of the mentor training that was most beneficial, they responded with the use of the COPAT which was also the item identified as consuming a notable amount of their time. These responses are uniquely tied together therefore it is not surprising that all participants identified the items related to the coaching cycle: the observation, use of the COPAT; and conferencing. Further, it is really not surprising that novice teachers and mentors
identified interrelated activities that are central to the functioning of the mentoring relationship.

Overall, the mentor training was viewed as beneficial by most participants. A variety of characteristics of the mentor training were identified as especially helpful including; the relevant materials, the mentor handbook; the hands-on activities; and the role-playing exercises. In particular, mentors identified learning how to use the COPAT observational instrument as an especially useful part of the training applicable to their work as mentors. However, there were some participants that felt as if the training itself and related materials were confusing and burdensome identifying that the manual was difficult to use and they were not really sure what to take away from the training as skills needed in the novice teacher and mentor relationship. One barrier related to mentor training involved the lack of time needed to attend ongoing mentor training. Mentors felt a struggle between continuing their professional development and being away from their classrooms for the amount of time needed.

Another issue related to the training reported by the mentors was the feeling that the training on the use of the COPAT needed to be strengthened. On several occasions mentors described what would have helped them more in learning to use the COPAT included the use of demonstration observations, data collection and post-conferencing. Additionally, mentors indicated that they felt the training on how to use the COPAT came too late in the year, suggesting that this part of the training be moved to one of the initial three days before the school year begins. It is not unexpected then that further
training on how to use the COPAT was identified as a need of mentors and administrators particularly in District Two.

The topic of further training produced interesting findings as well. While novice teachers and administrators in both districts identified a number of areas for future training including learning styles and assessment tools for novices and reflection activities, adult learning, use of the COPAT, observation skills, and reflection activities for administrators. Mentors responded much more sparingly about training needs for the future. Less than one quarter of all mentors in District One indicated any one need for further training that were listed on the Developmental Mentoring Evaluation Survey while nearly one half of the mentors in District Two indicated further training in the areas of use of the COPAT; the instructional coaching plan and the coaching cycle was needed. It is interesting that the mentors in District One were either not aware of the additional training needed or did not feel as if further training was needed. At any rate, the mentors in District Two were more responsive to the planning of further training indicated several areas of additional need.

For the most part, the mentor training provided to mentors and administrators proved to be a useful component of infrastructure related to the developmental mentoring program. Participants identified areas that were beneficial as well as areas for needed improvement as the program continues in both districts. Also identified through this data are areas to be considered as further training is planned.
Resources

No doubt having adequate time and funding to provide for a developmental mentoring program is a necessity. The literature is replete with findings that indicate the amount of resources dedicated to a mentoring program has a correlation to the effectiveness and quality of the program outcomes. Providing adequate resources including time and funding was indicated as a critical element in the literature on Improving Workplace Conditions, Project CREATE and Systemic Change studies that were used in developing the proposed Combined Infrastructure Component model in Chapter II of this study. The major findings associated with the combined developmental infrastructure component related to resources are listed below.

- Administrators in both districts reported adequate time provided in the schedule for mentoring. However, novice and mentor teachers in both districts indicated that there was not enough time designated in their schedule for mentoring activities.

- Administrators also indicated that there was enough time in their schedules to accommodate for meeting with novice teachers and administrators to address concerns.

- While a little over one half of the mentors in District One indicated they had enough time to carry out observations on their novice teachers, novice teachers in District One, as well as novice teachers and mentors in District Two indicated that there was not enough time in their schedules to observe each other teaching.
• Supports related to the infrastructure component of resources included the various ways participants worked to create time to fulfill the requirements of the mentoring program. Funding was available in both districts to allow for hiring of substitute teachers to cover the novice teachers’ and mentors’ classes in order to allow for the mentoring activities to occur. Also, some mentors were assigned more flexible teaching schedules with either an extra conference period dedicated to mentoring, or a reduced teaching assignment allowing for extra time for mentoring.

• Access to adequate time was the major barrier related to resources in both District One and District Two. Participants reported needed more time to conduct observations, to plan and conference, and time to complete the required paperwork. Mentors also indicated that they needed time specifically for attending ongoing mentor professional development as described more fully in the previous section. Each of these reasons given by mentors and administrators in both districts were discussed often and abundantly during interviews.

• Mentors, administrators and district level mentor coordinators identified another barrier related to time as well. Many times the people who are chosen to be mentors are those who already have a very full schedule. This busy schedule was termed “full plate” by participants. Mentors, administrators and district level coordinators in both districts spoke of how the mentor’s busy schedules could interfere with the mentoring work occurring.
• While mentors, administrators and district level mentor coordinators discussed the busy schedules of the mentors, only novice teachers in District One discussed the “full plate” issue as a barrier in their mentoring experience.

• While the funding was available for providing substitute teachers to aid in creating time for the mentoring relationship, a barrier associated with this support was highlighted by one mentor. The funding sources were sometimes unclear making it difficult to communicate with the substitute office which entity would pay for the resource.

• An additional barrier identified by one mentor in District Two was the issue of not having enough video cameras in the district to make the requirement of video-taping four observations achievable.

Many times money, for example mentor stipends is a popular topic when people are asked about barriers related to resources in a mentor program. However in this study, an analysis of the data on supports and barriers related to the combined infrastructure component of resources indicates that the major barrier found in District One and District Two to be lack of adequate time dedicated particularly to the mentoring program for novice teachers and mentors. Obviously the lack of adequate, dedicated time to accomplish the many activities involved in the developmental mentoring program will affect the efficacy and outcomes of the program. In this study, the lack of time proved to be a considerable barrier in mentoring the novice teachers in both districts. Participants indicated they needed more time to observe each other teaching, time for the novice teacher and mentor to plan together, time to conduct pre-conference before an
observation and post-conferences afterwards, and time to complete the paperwork required of the program. In addition mentors indicated that they needed more time to attend training that did not remove them from the classroom when students were present as described fully in the section titled ongoing professional development. Related to this lack of time is the issue of the mentor’s “full plate.” As identified by both district level mentor coordinators those teachers usually selected to fulfill the mentoring role are also the teachers on the campus that take on leadership roles, serve as department chairs, team leaders, volunteer for extra committees and the like. Therefore, when the complex time consuming task of mentoring is added to their schedules, mentors become busier than ever. Interestingly, while mentors, administrators and district level mentor coordinators spoke about the “full plate” in both districts during interviews, novice teachers only in District One discussed the same. Could it be the already busy schedule of mentor types, coupled with more than one novice teacher, as is the situation in District One, added to the novice’s perceptions of the mentor’s “full plate”? While just the perception of the business of the mentor by the novice would not necessarily be considered a barrier, the business interfering with the mentoring relationship would. Novice teachers in District One did describe their reactions to the “full plate” of their mentors in a way that suggested that sometimes they opted to not bother their mentor and just tried to work through issues on their own. When this occurred in District One, the mentor’s “full plate” did become a barrier to the program.

Another interesting discrepancy between participants within the districts was the administrators’ perceptions of time compared to that of the novice teachers’ and
mentors’. Almost all administrators reported that there was adequate time dedicated in all participants’ schedules to accommodate the mentoring relationship. However, novice teachers and mentors reported greatly different perceptions. Both novice teachers and mentors in both districts reported not having adequate dedicated time for mentoring. It is not surprising that administrators, who see the model conceptually, would perceive there to be adequate time. On the other hand, novice teachers and mentors who are actively involved in the mentoring relationship while also fulfilling their role as a classroom teacher would sense that there was a lack of adequate, dedicated time. After all, it is the novice teachers and mentors whose time is consumed with the additional roles of mentoring and being mentored.

Clearly all participant groups indicated that having adequate, dedicated time for mentoring is a necessary infrastructure component that can impact not only the outcomes of the program but also the feelings of success of the participants. Those involved in implementing and maintaining a developmental mentoring program would increase the likelihood of program success with the creation of adequate, dedicated blocks of time for carrying out the mentoring of novice teachers and provision of ongoing professional development of mentors, administrators and district level mentor coordinators.

Accountability and Measurement

As previously discussed, at the crux of program accountability is the evolving need to evaluate newly implemented programs in a means that allows for ongoing improvement. Accountability and measurement was indicated as a critical element in the literature on Systemic Change, Project CREATE and in the National Mentoring
Framework that was used to develop the proposed Combined Infrastructure Component model in Chapter II of this study. The major findings associated with the combined developmental infrastructure component of accountability and measurements are listed below.

- A majority of mentors and all administrators in both district indicated that including the novice teacher’s growth in the program evaluation. Likewise almost all mentors and administrators in both districts indicated that this practice was evident at the campus or district level.

- All administrators in District One and a majority of administrators in District Two indicated that mentor effectiveness was an important element of the program evaluation as did mentors in both districts. Both groups of participants in both districts also indicated that this practice was evident at the campus or district level.

- Almost all mentors and administrators in both districts indicated that including mentoring program strategies as an important element on the program evaluation while also indicated that this practice was evident at either the campus or district level.

- The majority of administrators and many of the mentors in both district indicated that collecting ongoing program evaluation from a variety of stakeholders throughout the year was important and was indeed evident at the campus or district level.
• Supports related to accountability and measurement as identified through individual and focus group interviews with participants involved in the multiple layers of support people involved with the program. Administrators, district level mentor coordinators and even lead mentors on each campus served an important role in gathering informal and formal data about how the novices, mentors and the program were progressing.

• The most prominent barrier related to accountability and measurement that was discussed with some frequency was the increased, seemingly overwhelming amount of paperwork expected of the novice teachers and mentors.

An analysis of this data suggests that participants in both districts valued the program evaluation components addressed. The majority of participants in both districts agreed that the inclusion of novice growth, mentor effectiveness and mentoring program strategies were all important areas to be included on the program evaluation. This same group also indicated that this practice was evident at the campus or district level for the most part. Additionally, the majority of participants indicated that they thought it was important that a variety of data was collected from a variety of stakeholders throughout the year for program evaluation and this is what was occurring on their campuses or at the district level.

The program evaluation was accomplished by a number of layers of support people in the program. While the formal program evaluation was designed and conducted by the MCRLD staff, less formal ongoing assessments of all participants’ progress and needs were identified through a constant interaction between the
participants and MCRLD staff. Principals reported having conversations with novices about their concerns and needs, with mentors about novice growth, the role of the mentor, and mentor needs, with district level mentor coordinators about novice and mentor needs and concerns leading to a more clear understanding of the state of the participants at particular campuses. Likewise, district level mentor coordinators discussed how meeting with novice groups, mentor groups and combinations of these participants helped them understand current areas of strengths as well as areas of need who were in turn in contact with the MCRLD staff who were designing the next learning experiences for the participants. In addition to these conferences, a variety of surveys were administered pre and post implementation year as a means of collecting even more data. These informal assessments served an important role as formative assessment throughout the year that added depth to the end of year program evaluation. Of course along with this ongoing data collection from a variety of stakeholder an increased amount of paperwork came as well.

The amount of paperwork required of novices, mentors, administrators and even district level mentor coordinators was indicated by all groups as a barrier related to program evaluation. Members from each of the participant groups discussed at some point the increased amount of paperwork required as a result of participating in this developmental mentoring program. Even though on the program evaluation the participant groups indicated that the areas included were important and data collection from all groups was equally important, the amount of paperwork required of them was reported to be overwhelming, sometimes even without purpose in their eyes.
It is clear that the program evaluation holds an importance not only to program
designers, but also to program improvement. In the case of the developmental mentoring
program the formal and informal parts of the program evaluation were deemed important
and useful. However, the amount of paperwork required of all participants in this case
seemed to be overwhelming. It is important for the infrastructure component of program
evaluation to remain a support to the program implementation and maintenance rather
than cause interference with those participating so that it can be used for continual
program evolution and improvement.

Clear Program Purposes

The establishment of clear program purposes helps all participants focus on the
work central to the program. In the case of the developmental mentoring program, clear
program purposes allows all participants to focus on the work of inducting novice
teachers into the teaching profession with the goal of keeping quality new teachers in the
classroom. There were several ways in which clear program purposes were identified as
a support or a barrier within the developmental mentoring program. The findings related
to clear program purposes are listed below.

- Only about one half of participants in both districts indicated that having written
  mentoring program purposes as important with a few more indicating that his
  practice was evident at the campus or district level.
- There were a variety of beliefs about the importance of stakeholders being able to
  articulate program purposes. Novice teachers in both districts indicated that this
  element was only moderately important with novices in District One ranking this
item in the mid-range and novices in District Two ranking this item either important or not important. In District One only about one half of novices reported that this practice was evident at the campus or district level while almost all of the novices in District Two indicated the same. Almost three quarters of the mentors in District One indicated the ability to articulate program purposes as important while only one third of the mentors in District Two did the same. However the majority of mentors in both districts indicated that this practice was evident at the campus or district level. All administrators in District One and almost all in District Two indicated articulation of program purposes by all stakeholders as important and the majority indicated this practice was evident at the campus or district level.

- Novice teachers and mentors in District One and mentors in District Two indicated that use of the written program purposes in other school related decisions as only moderately important. About two thirds of these participants indicated that this practice was evident. Novice teachers in District Two indicated that the use of the program purposes in other school related decisions as moderately important to important. The majority of mentors in both districts indicated that the use of the written program purposes in other school related decisions as important. Sixty percent of administrators in District One and 82% of administrators in District Two indicated that this practice was evident at the campus or district level.
The majority of all participants except the mentors in District Two indicated that aligning written mentoring program purposes to other school and district improvement plans as important with more than one half of all participants indicating this practice evident at the campus or district level. Mentors in District Two on the other hand indicated that the alignment of written program purposes in campus and district improvement initiatives as only moderately important.

The supports related to clear program purposes included clear expectations set by campus principals and district level mentor coordinators. Further, the mentors described frequently how the clear expectations, for example four video-taped lesson observations with the accompanying COPAT observations instruments as an aid in their understandings of what their role entailed.

As a barrier, mentors described a desire to have even more clear program purposes as an aid to their work. Some mentors reported receiving a list of expectations, but not until late fall. Indicating that this late notification of expectations did cause some alarm in participants as some of the required activities had not yet been completed, or not completed according to the schedule.

An analysis of the data related to clear program purposes illustrates the strong desire for participants to not only have established program purposes, but to also be given these expectations at the onset of the program. Not only did the participants actively involved in the developmental mentoring program want expectations, but they also indicated that these expectations were moderately important or important to the
success of the mentoring program. An interesting finding is associated with how mentors in the two districts responded to the question about how important it was that all stakeholders be able to articulate the written program purposes. Almost three quarters of the mentors in District One indicated that this was important while only one third of the mentors in District Two reported the same. What caused this difference in understanding the importance of being able to discuss the purposes behind the work participants were engaged in? Could unfamiliarity with the program purposes cause fewer participants to indicate this item as important? If a participant was uncertain about the program purposes would they be less likely to identify this item as important? Certainly all of these options are a possibility. For now we know that this was one difference indicated between the groups of mentors in each district.

Clearly, there were both supports and barriers that either aided or interfered with the progress of the developmental mentoring program. For each of the components of the infrastructure model proposed in Chapter II of this study, supports and barriers were identified through participant interviews and Developmental Mentoring Evaluation Survey data. As evidenced by the wealth of data used to address this question, all seven components on the proposed crosswalk model are important elements of infrastructure related to implementing and maintaining a developmental mentoring program. Each one of the components on the cross walk model including: Collaboration; Leadership; Mutual Decision Making; Ongoing Professional Development; Provision of Resources; Accountability and Measurement; and Clear Program Purpose; were related to both supports and barriers to carrying out the developmental mentoring program.
Major barriers related to the implementation of the developmental mentoring program in District One and District Two included an increased ratio of novice teacher to mentors in District One, poor novice teacher to mentor matching, administrators in District One did not view the mentoring program as a priority, little or no mutual decision making by participants for program implementation and maintenance, lack of adequate time devoted to mentoring, some reports of the mentor training and materials being confusing and overwhelming, and overwhelming amounts of paperwork related to program evaluation. Some of the most noteworthy supports identified through the participant interviews and Developmental Mentoring Evaluation Survey were strong novice teacher and mentor relationships, a one to one novice teacher and mentor ratio in District Two, support from a district level mentor coordinator even though there were some concerns in District One, training areas including the use of the COPAT and the coaching cycle, and funding available for substitute teachers as a means of creating time for mentoring work. The barriers and supports indicated played an important role in the resulting developmental outcomes of the mentoring program.

**Question Two**

The purpose of question two in this study was to identify how the developmental mentoring program outcomes differed between District One and District Two both from a developmental construct and best practices standpoint. In order to address this question findings from the Developmental Mentoring Evaluation Survey will be used to describe the outcomes of the developmental mentoring program in District One and District Two.
The developmental mentoring framework is a complex system involving a variety of interrelated events as well as a number of key individuals. While the goal of the developmental mentoring program is retention of highly qualified new classroom teachers, a variety of other outcomes are expected as well because of the theoretical underpinnings, the developmental constructs that shape the program. Some of these underpinnings include:

- Growth is seen in stages in multiple domains.
- All parties involved in new roles and interactions are subject to growth.
- Growth is associated with less complex to more complex reasoning, decision-making, concerns, classroom management, reflection, and the mentor’s provision of support.
- Conceptual level increases with increasing interpersonal maturity and increases in understanding of oneself and others.

Practices related to higher levels in mentoring may be observed through mentors and novices being able to examine alternatives in problem-solving situations, take risks in trying new methodology and skill building and demonstrate behaviors related to valuing collaboration with students, colleagues and other educators. These practices for mentors are most clearly evident as mentors are able to differentiate mentoring support, move from higher levels of structure to lower levels, and develop plans that support novices’ growth needs. In order to determine quality of mentoring practices in District One and District Two an analysis of the frequency of use of “Best Practices” follows.
Utilization of “Best Practices”

Understanding how participants in District One and District Two implemented identified program “Best Practices” helps identify quality practices currently utilized in both districts. After looking at the individuals in a developmental mentoring program it may appear reasonable to assess the success of the program based solely on the growth outcomes of the individual mentors and novices; but the ultimate success of the program can be seen through the lens of program practices which underlie the development of mentors and novice teachers. Those program outcomes must be examined from a “Best Practices” stance, including the measure of those practices against the national standards as well as the professional development model espoused in Chapter II of this study.

Outcome and developmental framework practices that can be measured and that could be compared between programs and or districts include:

- Types of activities in which the mentor and novice engage in order to establish a meaningful relationship.
- Time schedules and organizational formats designed to accommodate the mentoring practices.
- Specific observation tools that both stabilize and standardize the classroom observation and conferencing cycle.
- Identification of minimal standards required of effective coaching plans that focus on formative procedures, improvement in instruction, and a coaching cycle that includes multiple, but differentiated goals.
• Selection of mentors based on developmental criteria, with mentor/novice ratio of one to one or an appropriate match of numbers and available time to carry out all functions with complimentary assignments.

• A comprehensive program plan with stated objectives, a system of management with a designative individual with assigned responsibilities to the program and a collaborative approach to the learning endeavors of the program including administrators, mentors and novices.

• A training model that encompasses the necessary skills and developmental dispositions that will maximize knowledge and performance in all areas of the mentor’s functions, ensuring that training is on-going, appropriate and includes assessment strategies for mentors to use. Included in the training is a strand for administrators and an orientations for novices on what to expect from the program.

• A specific plan to increase, improve and institutionalize reflective practices within the habits of educators.

• An evaluation that incorporates the developmental practices of mentors, the collaborative efforts of administrators, mentors, novices and the district level mentor coordinator, and the overall success of the program outcomes.

In order to clarify expectations and guide participants in the newly implemented developmental mentoring program, a list of “Best Practices” were provided to participants in District One and District Two. The list of “Best Practices” found in Table 18 further delineates the nine items previously listed that identify a quality program.
Table 18. Best Practice Expectations

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<tr>
<td>1.</td>
<td>Mentors were provided a list of activities and due dates around which they were to complete the listed activities with their novice teacher.</td>
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<td>2.</td>
<td>Mentors were asked to meet with administrators to keep them informed of the progress of the novice.</td>
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<tr>
<td>3.</td>
<td>Administrators were asked to meet with their team of campus mentors, minimally once per semester.</td>
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<td>4.</td>
<td>Administrators were asked to examine the school schedules to maximize the opportunity for mentor and novice to meet.</td>
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<td>5.</td>
<td>Participants (administrators, mentors, and mentees) were asked to engage in all levels of analysis and evaluation of their own mentoring or teaching practices; as well as, the program implementation of the system-wide mentoring program.</td>
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<tr>
<td>6.</td>
<td>Engage in a “Getting Acquainted Conference”. This was omitted because of the late start in the fall of 2007.</td>
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<tr>
<td>7.</td>
<td>Conduct a “Nitty Gritty” conference (mentor initiated).</td>
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<td>8.</td>
<td>Complete (novices) a COPAT on their videotaped lesson.</td>
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<td>9.</td>
<td>Use the COPAT instrument during formal observations.</td>
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<td>10.</td>
<td>Complete four formal observations (minimally) with two in each semester. This would include both a pre-conference and a post-conference.</td>
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<tr>
<td>11.</td>
<td>Complete (mentors) a Coaching Plan on the novice after the first observation and update as needed.</td>
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<tr>
<td>12.</td>
<td>Engage in weekly written reflections using “stem” format. This included the mentors responding to the novices electronically.</td>
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Table 18. Continued

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<td>13.</td>
<td>Chart the teaching progress of the novice on CBAM graphs to be examined at the end of the year.</td>
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<tr>
<td>14.</td>
<td>Provide appropriate support and challenge through reflection responses (mentors).</td>
</tr>
<tr>
<td>15.</td>
<td>Videotape the first conference (mentors) as part of the conference cycle and complete an analysis form on that conference as a way to reflect on their own practice.</td>
</tr>
<tr>
<td>16.</td>
<td>Meet weekly (minimum) with the novice teacher.</td>
</tr>
<tr>
<td>17.</td>
<td>Utilize materials from the mentor training manual which indentified the practice formats and processes.</td>
</tr>
</tbody>
</table>

Note. This list of “Best Practices” was taken directly from the program guidelines from the MRCLD.

In an attempt to discern the outcomes related to the suppositions just presented, the data from the end of year Developmental Mentoring Evaluation Survey will be used to allow for consideration of district involvement of each of the “Best Practices” when a matching item was indicated on the Developmental Mentoring Evaluation Survey.

As previously discussed, participants in both districts were given a list of expectations for program involvement framed around “Best Practices” on which the program was designed. These “Best Practices” expectations were designed to aid participants in fulfilling their role in the program successfully. For this analysis, Developmental Mentoring Evaluation Survey items were matched to “Best Practices” when possible. For each item that matched from the Developmental Mentoring Evaluation Survey and “Best Practices” list, frequencies and were run. Table 19 contains
Table 19. Analysis of “Best Practices” Expectations Between District One and District Two

<table>
<thead>
<tr>
<th>Best Practice</th>
<th>District</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mentors were provided a list of activities and due dates around which they were to complete the listed activities with their novice teacher.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2. Mentors were asked to meet with administrators to keep them informed of the progress of the novice.</td>
<td>One</td>
<td>76.9</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>54.8</td>
</tr>
<tr>
<td>3. Administrators were asked to meet with their team of campus mentors, minimally once per semester.</td>
<td>One</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>42.1</td>
</tr>
<tr>
<td>4. Administrators were asked to examine the school schedules to maximize the opportunity for mentor and novice to meet.</td>
<td>One</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>100</td>
</tr>
<tr>
<td>5. Participants (administrators, mentors, and mentees) were asked to engage in all levels of analysis and evaluation of their own mentoring or teaching practices: as well as, the program implementation of the system-wide mentoring program</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6. Engage in a “Getting Acquainted Conference”. This was omitted because of the late start in the fall of 2007.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>7. Conduct a “Nitty Gritty” conference (mentor initiated).</td>
<td>One</td>
<td>84.6</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>64.5</td>
</tr>
<tr>
<td>8. Complete learning and teaching style inventories in a pre and post session. Complete on self (mentor) first to learn about the instruments and have an understanding of self styles; after which the novice teacher would complete the same inventories.</td>
<td>One</td>
<td>76.9</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>45.2</td>
</tr>
</tbody>
</table>
### Table 19. Continued

<table>
<thead>
<tr>
<th>Best Practice</th>
<th>District</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Videotape (mentors complete) themselves teaching so as to practice using the COPAT and also share practices with the novice.</td>
<td>One</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>38.7</td>
</tr>
<tr>
<td>10. Complete (mentors) a COPAT on their videotaped lesson.</td>
<td>One</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>25.8</td>
</tr>
<tr>
<td>11. Videotape (novices complete) themselves teaching a lesson to increase analysis skills of both the novice and mentor. Novices were to analyze with the mentor, the taped lesson using a COPAT.</td>
<td>One</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>41.9</td>
</tr>
<tr>
<td>12. Hold (mentors) an instructional conference with the novice to learn about the COPAT and its uses.</td>
<td>One</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>77.4</td>
</tr>
<tr>
<td>13. Complete (novices) a COPAT on their videotaped lesson.</td>
<td>One</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>41.9</td>
</tr>
<tr>
<td>14. Use the COPAT instrument during formal observations.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>15. Complete four formal observations (minimally) with two in each semester.</td>
<td>One</td>
<td>92.3</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>71</td>
</tr>
<tr>
<td>This would include both a pre-conference</td>
<td>One</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>32.3</td>
</tr>
<tr>
<td>and post-conference.</td>
<td>One</td>
<td>61.5</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>64.5</td>
</tr>
<tr>
<td>16. Complete (mentors) a Coaching Plan on the novice after the first observation and update as needed.</td>
<td>One</td>
<td>34.6</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>12.9</td>
</tr>
<tr>
<td>Best Practice</td>
<td>District</td>
<td>Frequency</td>
</tr>
<tr>
<td>---------------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td>17. Engage in weekly written reflections using a “stem” format. This included the mentors responding to the novices electronically.</td>
<td>Mentors</td>
<td>One</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two</td>
</tr>
<tr>
<td></td>
<td>Novices</td>
<td>One</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two</td>
</tr>
<tr>
<td>18. Chart the teaching progress of the novice on CBAM graphs to be examined at the end of the year.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>19. Provide appropriate support and challenge through reflection responses (mentors).</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>20. Videotape the first conference (mentors) as part of the conference cycle and complete an analysis form on that conference as a way to reflect on their own practice.</td>
<td></td>
<td>One</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two</td>
</tr>
<tr>
<td>21. Meet weekly (minimum) with the novice teacher.</td>
<td></td>
<td>One</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two</td>
</tr>
<tr>
<td>22. Utilize materials from the mentor training manual which identified the practice formats and practice.</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
the findings from this analysis. The “Best Practice” is identified along with corresponding frequencies. When no match occurred between “Best Practices” and the Developmental Mentoring Evaluation Survey an X is recorded in the district column indicating no analysis for that item was conducted.

Sixteen of the 22 expectations listed on the “Best Practices” could be matched to items on the Developmental Mentoring Evaluation Survey thus were analyzed as a means of better understanding “Best Practices” usage in District One and District Two. The following paragraphs will describe the findings for each of the “Best Practices.”

“Best Practice” 1 and 2

While the first “Best Practices” on the expectations did not have a match on the Developmental Mentoring Evaluation Survey, the second “Best Practices” did. The second “Best Practices” states, “Mentors were asked to meet with administrators to keep them informed of the progress of the novice.” On the mentor Developmental Mentoring Evaluation Survey mentors were asked to indicate the purposes of their meetings with administrators. A number of choices were listed for this item including: mentoring concerns; progress of the novice teacher(s); progress of the mentor program; my role as a mentor; and did not meet. While all of the choices provided, except ‘did not meet’ are valid reasons for meeting with administration in the context of the developmental mentoring program, the one reason identified as a “Best Practice” was meeting as a mentor and administrator team to discuss the progress of the novice teacher. In District One 76.9% of the mentors indicated that this had occurred with 54.8% of the mentors in
District Two indicating the same. Administrators were also asked to meet with teams of campus mentors as well.

“Best Practice” 3

The third “Best Practice” stated, “Administrators were asked to meet with their team of campus mentors, minimally once per semester. The item on the Developmental Mentoring Evaluation Survey that most closely matched this expectation asked administrators to indicate what topics were discussed when meeting with a team of campus mentors including: mentoring concerns; progress of the novice teachers; progress of the mentors’ practice; mentor/novice relationships; and did not meet. Although the minimum established expectation, for this “Best Practice” of meeting at least once per semester cannot be measured with this Developmental Mentoring Evaluation Survey item an analysis of the data does indicate whether or not these types of meetings occurred. Sixty percent of administrators in District One and 42.1% of administrators in District Two indicated meeting for a variety of reasons. While there is no way to determine if these meetings occurred at the minimum frequency of at least once per semester, this data does suggest that meetings between administrators and mentors occurred in both districts.

“Best Practice” 4

Administrators were also asked to examine the school schedule to maximize the opportunity for mentor and novices to meet. Like the previously discussed “Best Practice” there was not an exact match for this expectation on the Developmental Mentoring Evaluation Survey, as administrators were not specifically asked if they did
examine the schedule, how they arranged the schedule or what resulted from the changes. Administrators were asked, however, if time was designated in the schedule for mentors and novice teachers to meet, to observe and to conference. Mentors and novice teachers were asked this same question. Interestingly, the participant groups had very different perceptions related to this survey item. Administrators in both districts indicated, with 100% frequency that time was indeed provided to carry out the mentoring activities. However, mentors and novice teachers reported considerably different perceptions for this item. Novice teachers in District One indicated with 53.1% frequency that there was enough time while novice teachers in District Two indicated at 41.7% frequency the same. Mentors in District One responded with 42.3% frequency that there was enough time while only 38.7% of mentors in District Two responded likewise. This data suggests that those directly involved with the developmental mentoring activities of meeting, observing and conferencing, the novice teacher and mentors, perceive there to be considerably less adequate time dedicated to mentoring than do the administrators in both districts.

“Best Practice” 5

The next “Best Practices” expectation listed involved all participants, administrators, mentors and novice teachers engage in all levels of analysis and evaluation of not only their own mentoring practices, but also system-wide mentoring program progress. “Best Practices” Six through 22 indicate the ways participants may accomplish this expectation. Therefore, there is no analysis for this item; it only serves as a header for the subsequent expectations.
“Best Practice” 6 and 7

The next two “Best Practices” expectations involved implementing two specialized conferences related to developmental mentoring. “Best Practice” six was deleted from the expectations for this initial year as the grant that provided funding for this program in both districts was awarded late in the summer break and many novice teacher and mentor relationships had already been established. “Best Practice” seven, “Conduct a ‘Nitty Gritty’ conference” remained an expectation for year one of the program. There was an exact match for this expectation on the Developmental Mentoring Evaluation Survey. Mentors were asked to identify the types of conferences that they had held with their novice teacher(s). Choices for mentors to pick on the survey included: Getting to Know You Conference; Nitty Gritty Conference; Instructional Conference; Pre-observation Conference; Post-observation Conference; and Formative Assessment Conference. While each of these conferences is important to the entire developmental mentoring support cycle, one identified as a “Best Practice” was the Nitty Gritty Conference. In District One 84.6% of mentors indicated that they had initiated this type of conference with their novice and 64.5% of mentors in District Two indicating the same. This data suggests mentors in District One employed the Nitty Gritty conference type slightly more frequently than did mentors in District Two.

“Best Practice” 8

In addition to the Getting Acquainted Conference and Nitty Gritty Conference, another means for establishing the novice teacher and mentor relationship involves using learning and teaching style inventories. “Best Practices” indicates that mentors first
complete the inventories in an attempt to develop and understanding of self styles and the inventories, and then have their novices teachers do the same. There was a match for this “Best Practice” expectation on the novice teacher and mentor Developmental Mentoring Evaluation Survey. Novice teachers were asked about ways they got to know their mentor teacher while mentors were asked the same about how they got to know their novice. Choices on the novice survey included: completed the online and hard-copy learning style instruments for myself; participated in an off-campus time together with my mentor; ate lunch together at school; and other. Choices provided on the mentor survey included: completed the online and hard-copy learning style instruments for myself; asked novice teacher to complete the online and hard-copy learning style instruments; planned an off-campus time together; ate lunch together; and other. For this particular analysis, responses provided by novice teacher and mentors for either completing the online and hard-copy learning style instruments and by mentors for asking their novice to complete the instruments were tallied together to get a mean for this practice in each district. In District One 76.9% of novice teachers and mentors combined indicated that they had completed the learning style instruments and 45.2% of novice teachers and mentors combined in District Two indicated the same.

“Best Practice” 9, 10, 11, 12 and 13

The next five “Best Practices” expectations matched exactly to survey items on the novice teacher and mentor surveys. The crux of this item on the survey was to identify how novice teachers were introduced to the observation experience and observation tool, the COPAT. Novices were asked about the ways in which they were
introduced to the classroom observations. Choices provided on the survey included: I videotaped myself teaching; we analyzed one of my videotaped lessons; I watched a lesson that my mentor taught; my mentor conducted an Instructional Conference using the COPAT; my mentor teacher videotaped one of his/her classroom lessons that we analyzed using the COPAT; and other. Indeed each of these practices provide valuable experiences in introducing the novice to the observation as well as the observation instrument, however three “Best Practices” were identified within choices given to participants. A discussion of “Best Practices” nine, ten, eleven twelve and thirteen with corresponding data and analysis of each expectation follows as each of these expectations is correlated with the same Developmental Mentoring Evaluation Survey item.

The ninth expectation on the “Best Practices” list states, “Videotape (mentors complete) themselves teaching so as to practice using the COPAT and also share practices with the novice.” An exact match to this expectation occurred on the Developmental Mentoring Evaluation Survey item related to how the novice was introduced to the observation The “Best Practice” is identified as the next to last choice; my mentor teacher videotaped one of his/her classroom lessons that we analyzed using the COPAT. While only 3.8% of novices in District One indicated that this was one way of being introduced to the particulars of the observations, 38.7% of novices indicated the same in District Two.

The tenth “Best Practice” expectation involved mentors completing a COPAT on one of their own videotaped lessons. Like the previous “Best Practice” this expectation
had an exact match on the Developmental Mentoring Evaluation Survey item just mentioned with the second choice, “We analyzed one of my videotaped lessons.” No mentors in District One indicated the use of this practice while 25.8% of mentors in District Two indicated use of this practice. This data suggests that only mentors in District Two utilized videotaping their own teaching then using the COPAT observation tool to analyze the teaching episode. Further the data suggests this practice was not used at all in District One.

The eleventh “Best Practice” expectation also matched this same Developmental Mentoring Evaluation Survey item as the previous two. This “Best Practice” involved novices videotaping their own teaching then analyzing the teaching episode, using the COPAT, with their mentor teacher. In District One, 3.8% of novices indicated that this had occurred while 41.9% of novices in District Two indicated the same.

Matched to the same survey item, the twelfth “Best Practice” expectation also focused on how novice teachers were introduced to the classroom observation. The expectation states, “Hold (mentors) an instructional conference with the novice to learn about the COPAT and its uses.” One hundred percent of mentors in District One reported that this strategy had been used. In District Two 77.4% reported using this strategy.

The final “Best Practice” expectation matched to this same item on the Developmental Mentoring Evaluation Survey involved novices completing a COPAT on their own videotaped lesson. This expectation matched the second choice given on the
novice teacher survey. Only 3.8% of novice teachers in District One indicated using this approach while 41.9% of novices in District Two indicating the same.

“Best Practice” 14 and 15

Formal observations, using the COPAT observation instrument, including a pre-conference and a post-conference are identified as one of the best practices in the developmental mentoring program. The fourteenth “Best Practice” identified the use of the COPAT instrument during formal observations as an expected practice in the program. There were not matched items on the Developmental Mentoring Evaluation Survey for this expectation therefore it will not be analyzed. However, the next “Best Practice” expectation states “Complete four formal observations (minimally) with two in each semester. This would include both a pre-conference and a post-conference. Three items on the mentor Developmental Mentoring Evaluation Survey matched this expectation. Because this expectation is matched to three survey items, each item will be address separately. First, mentors were asked to indicate how many formal observations they had completed during the year including a pre-conference and a post-conference. In District One, mentors responded with 92.3% frequency that this had occurred. In District Two, mentors responded with 71% frequency that this had occurred. Two other items on the Developmental Mentoring Evaluation Survey prove to be useful in understanding this practice in District One and District Two further. Mentors were also asked on the Developmental Mentoring Evaluation Survey how often the utilized the pre-conference and post-conference either before or after a classroom observation. They were given the choices of always, most of the time, occasionally and never. In District One 50% of the
mentors indicated always conducting a pre-conference and 61.5% always conducting a post-conference. In District Two 32.2% of mentors indicated always conducting a pre-conference and 64.5% always conducting a post-conference around a classroom observation. The combined data suggests that more mentors in District One than in District Two had completed the minimum expectation of completing at least four formal classroom observations of their novice teacher. Further, the data suggests that several more mentors in District One than in District Two always conduct a pre-conference and about the same numbers of mentors in both districts always conduct a post-conference. Once this observation cycle of two conferences and the actual classroom observation is complete, the next “Best Practice” expectation is possible.

“Best Practice” 16

The next “Best Practice” expectation follows the previously discussed observation cycle. “Best Practice” indicates that following the first formal observation cycle, mentors need to create a coaching plan on the novice and update thereafter as needed. There is an exact match on the Developmental Mentoring Evaluation Survey for this expectation. Mentors were asked to indicate when they developed a coaching plan for their novice. Choices from which to pick included: after the first observation; after the second observation; after the third observation; after the fourth observation; and I have not developed a coaching plan. “Best Practices” indicates that the mentor strategy of creating a coaching plan for the novice occurs after the first formal cycle. In District One 34.6% of mentors reported completing a coaching cycle after the first observation of their novice while 12.9% of mentors in District Two reported the same. This data
suggests that mentors developed coaching plans after the first observation almost twice as often in District One than in District Two.

“Best Practice” 17

The seventeenth “Best Practice” expectation involved mentors and novice teacher engaging in written reflection at least weekly using a “stem” format. Both novice teachers and mentors were asked to indicate how often they participated in written reflection with either their novice or mentor. In District One, 11.5% of mentors indicated that they had been involved in weekly written reflections with their novice. In District Two, 64.5% of mentors indicated the same. This data suggests that weekly written “stem” reflection occurs more often in District Two than in District One with mentors and novice teachers.

“Best Practice” 18 and 19

The next two “Best Practice” expectations do not have a matching item on the Developmental Mentoring Evaluation Survey therefore they will not be addressed here.

“Best Practice” 20

The twentieth “Best Practice” expectation focuses on building reflection on practice for mentors. The expectation states “Videotape the first conference (mentors) as part of the conference cycle and complete an analysis form on that conference as a way to reflect on their own practice.” The matching item on the mentor Developmental Mentoring Evaluation Survey asks mentors to identify the ways in which they have analyzed their conferencing skills. Choices from which mentors could pick included: I videotaped one of my first conferences; I reviewed a videotape of a conference and
completed an assessment of the conference; I had a peer observe me or my videotape of a conference; and I discussed conferencing with my novice teacher(s).” Each of these approaches may aid in building reflection and skill in the mentor, however the “Best Practice” indicates that the second choice above represents quality practice. In District One 19.2% of mentors reported using this approach to developing their conferencing skills. In District Two 38.7% of mentors indicated using this approach to developing their conferencing skills. This data suggests that in District Two, this practice occurs about twice as often as it does in District One.

“Best Practice” 21 and 22

“Best Practice” 21 indicates that meeting weekly (minimally) with the novice teacher as quality practice. On the mentor survey, mentors were asked to identify how often they met with their novice teacher both informally and formally. These two items were combined to determine that virtually all mentors in both districts met at least weekly with their novice teachers with mentors in District One responding with 100% frequency and mentors in District Two responding with 96.8% frequency. This data suggests that this “Best Practice” expectation is almost always followed in both districts.

The last “Best Practice” expectation, use of training materials, did not match with any item on the Developmental Mentoring Evaluation Survey therefore will not be analyzed or reported here.

Summary and Analysis of Question Two

The purpose of question two in this study was to gather information the developmental mentoring outcomes of participants in the program in District One and
District Two. Developmental Mentoring Evaluation Survey data were analyzed according to “Best Practices” as identified by the developmental mentoring program. “Best Practice” use does not only indicate program strategy use, but also implementation of “Best Practices” by participants in the program. “Best Practices” were matched with Developmental Mentoring Evaluation Survey items when a match could be made. Frequencies were run on these matched survey items as a way of measuring the use of “Best Practices” in each district. Of the twenty-two “Best Practices” 16 could be matched to Developmental Mentoring Evaluation Survey items from either the administrator, mentor or novice teacher surveys and therefore analyzed using descriptive statistics. The differences in use of “Best Practices” in District One and District Two just discussed suggest equal but different use of the expected “Best Practices” in both districts.

**Summary**

The purpose of this chapter was to present the research findings to address the following research questions:

1. What district level infrastructure components may have aided or interfered with attaining the developmental mentoring goals in the two districts?
2. How do the developmental mentoring program outcomes differ between the two districts both from a developmental construct and best practices standpoint?

Data collected from individual and focus group interviews as well as the Developmental Mentoring Evaluation Survey; from groups of participants representing all stakeholders
was used. The data in this chapter is presented in two major sections, each addressing the questions posed.

The first major section addressed question one. In an attempt to identify the infrastructure components that may have either aided or interfered with the developmental mentoring program in District One and District Two, qualitative interview data as well as descriptive Developmental Mentoring Evaluation Survey data were considered. These findings were used to describe supports and barriers related to the seven proposed infrastructure components. For each of the seven proposed infrastructure components, Collaboration; Leadership; Mutual Decision Making; Ongoing Professional Development; Resources; Accountability and Measurement; and Clear Program Purposes frequency of participant responses was combined with the interview comments to identify the related supports and barriers. As indicated by the findings, all seven infrastructure components seemed to be critical to the implementation and sustainability of the developmental mentoring program.

The second major section of this chapter addressed question two focused on identify the differences between District One and District Two developmental mentoring program outcomes from both a developmental construct and best practices standpoint.

Analyzing the Developmental Mentoring Evaluation Survey items that had a direct match with any of the “Best Practices” expectations for participating in the developmental mentoring program were considered. When items existed on the Developmental Mentoring Evaluation Survey that matched one or more of the “Best Practices” expectations, descriptive statistics were used to analyze the difference
between District One and District Two. For each of the matches between the Developmental Mentoring Evaluation Survey and “Best Practices” the frequency of participant responses were calculated. Sixteen of the 22 total “Best Practices” were matched to Developmental Mentoring Evaluation Survey items and thus analyzed.

“Best Practices” provide a picture of what practices were implemented along with the frequency and relative quality of mentoring practices employed in each district. This information along with the data suggesting barriers and supports related to the developmental mentoring program when combined allow for some suppositions about program outcomes.
CHAPTER V

RECOMMENDATIONS, IMPLICATIONS, AND CONCLUSIONS

Chapter V presents a summary of this study and the conclusions drawn from the data presented in Chapter IV. There are four sections in Chapter V: a summary of the study; major findings; recommendations for further research; and conclusions.

Summary of the Study

Theoretical Framework

Mentoring novice teachers through the induction years is a complex and important endeavor, no doubt. Cognitive developmental theory and dimensions of teacher change which serve as the theoretical framework for developmental mentoring hold an important role in focusing the work of the mentor and others involved in the mentoring of novice teachers.

Piaget’s foundational work on stage theory with children has contributed significantly to subsequent theory creation in adult cognitive development. Theorists David Hunt (1971) and Lawrence Kohlberg (1969) based work on adult cognitive developmental growth on Piaget’s underlying assumption that people proceed through a series of universal and predictable stages with each stage increasing in complexity. The major difference between children’s progression through developmental stages and that of adults is that adults rarely reason through just one level at any given time. Further, adults’ upward movement through the stages, results from significant interactions with
others and the environment according to each person’s ability to synthesis new learning (Carter & Foster, 2007).

David Hunt’s work on Conceptual Systems Theory (1975) focuses on teacher growth and development as demonstrated through “…increasing conceptual complexity, increasing interpersonal maturity, and increasing understanding of oneself and others (p.222). Hunt’s Conceptual Systems Theory involves consideration of how people prefer to solve problems in human interactions. The three stages of the Conceptual Systems Theory are stage A: a concrete conceptual level involving concrete thinking and fixed rules; stage B: concrete/abstract conceptual level involving a greater awareness and openness to alternative strategies for solving problems; and stage C: abstract conceptual level where people are able to weigh and balance alternatives, take risks and value collaboration. At stage C, a high tolerance for ambiguity exists (Reiman & Thies-Sprintahll, 1998).

In addition to conceptual developmental theory, Lawrence Kohlberg’s theory of moral development and ethical reasoning further add to the theoretical framework of developmental mentoring. Like Hunt’s conceptual developmental theory, Kohlberg’s moral development and ethical reasoning theory consists of a series of qualitatively different stages that increase in complexity (Reiman & Thies-Sprinthall, 1998). Three broad categories comprise Kohlberg’s theory: pre-conventional level; conventional level; and post-conventional level. Individuals at the lowest category are characterized by decision-making based primarily on the personal stake of the decision maker. At the second level, individuals are characterized by decision-making focused on society-wide
implications. It is at the highest level, the post-conventional level that the decision maker begins to consider full reciprocity of social norms depending on the unique aspects of each situation (Kline & Salzman, 2006).

Cognitive developmental theory provides the theoretical framework for the developmental mentoring model described throughout this study. Additionally, cognitive developmental theory provides some insight into the findings from this study. In the case of District One and District Two, participants were involved in a new mentoring program. The participants were asked to follow a series of “Best Practices” in the work associated with the developmental mentoring program. It may be expected that these two groups of people who received the same training, in the same manner, coupled with identical levels of support, would demonstrate very similar outcomes. To the contrary, participants in District One and District Two demonstrated different outcomes, some greatly different. For example, in examining the level of use of reflection by participants in District One and District Two, 11.5% of mentors in District One indicated that they had participated in weekly written reflection with their novices and 64.5% of mentors in District Two indicated the same. Participating in weekly reflections with the novice teacher is a time consuming, thought provoking, yet critical component of developmental mentoring. Because practicing written reflection is not necessarily a common practice of classroom teachers, taking the risk to work collaboratively with the novice teachers, may be an indication of differing levels of cognitive development of the participants.
Another example that illustrates a difference in the participants’ interaction with the innovation “Best Practices” related to mentors analyzing their own mentoring skills through a series of activities. Mentors indicated their use of videotaping themselves teaching in conjunction with using the COPAT observational instrument as a means of developing their own practice. Far more mentors indicated using these “Best Practices” in District Two than in District One. Once again, videotaping one’s own teaching, then practicing using the observational instrument on that teaching episode does not tend to be common practice in education. Mentors who utilized this strategy for increasing capacity as a mentor demonstrated a greater willingness to take risks, and from a moral development stance, more likely to be focused on how the program was impacting others, rather than just themselves.

The participants’ conversations about the mentor training provided yet another example of differences in cognitive development. For many participants the training was viewed as a meaningful and positive experience. Other participants however, reported the training to be confusing and less helpful. These participants discussed how they would have preferred more demonstrations, either live or videotaped, along with extended time to practice particular components of the training, instead of the entire training they received. Oftentimes, people functioning with moderate to lower conceptual levels, require different forms of professional development or extended time in professional development in order to grasp new concepts. While there were no measures to indicate levels of cognitive processing of the participants, or growth in the area of cognitive development in this study, this example illustrates clearly that
participants within the program were functioning at various levels requiring a variety of approaches to ensure success. What did result however, were differing outcomes for two similarly prepared and supported groups of participants resulting from a variety of forces. Of course, differences in levels of infrastructure within the identified components may affect outcome. Difference in levels of participants’ cognitive processing may also have impacted the difference in outcomes. In addition to these cognitive developmental theories, the work on dimensions of teacher change has also contributed to the theoretical framework of this study.

Frances Fuller’s early work on dimensions of teacher change provided the foundation for later work by Hall and Loucks (1978) identifying typical levels of concern evident when individuals go through any kind of innovation or change. Like the cognitive developmental theories just discussed, the stages of concern progress from less complex, focused on self, to more complex focused on collaboration with others. At the lowest level individuals have a lack of awareness of the innovation, require further information about the innovation, or desire to know how the innovation will impact them personally. At the middle level, individuals’ concerns shift to management concerns focused primarily on how to keep up with all that is required of them as they participate in the innovation. Finally, at the highest level, individuals’ concerns shift to how the innovation affects others, how to share the innovation with others, and how to refocus the innovation to work even better.

Levels of concern as perceived by participants became evident through the individual and focus group interviews. As participants were asked to consider whether or
not adequate time was dedicated to the mentoring of novice teachers, administrators’ responses were quite different from those of the mentors and novice teachers. Administrators responded with 100% in both District One and District Two that there was adequate time dedicated for mentoring. However, mentors and novices teachers, those directly involved with the innovation, level of concern surfaced as the majority indicated that adequate dedicated time for mentoring did not exist. Ongoing conversation occurred during the mentor and novice interviews about the lack of time, which is at the management level of concern. Not only did these participants indicate that there was not enough time, but they also identified causes for lost time and the impact this had on the mentoring experience for the novice teacher.

Another example of mentors’ level of concern indicated during the interviews occurred as mentors discussed their own insecurities in conducting observations of their novices. Illustrative of the personal level of concern, mentors described feelings of inadequacy when fulfilling the “Best Practice” of conducting classroom observations of their novice teacher. One mentor described feeling fearful that her observation may not mirror the observation previously conducted by the principal therefore indicating that she was not adequately prepared to carry out this function of mentoring. Yet another mentor indicated that she felt like she needed more training in order to be qualified to observe and give feedback from the observation. These feelings of being underprepared and inadequate illustrate the personal level of concern, falling at the lower level of concerns.
It is true, that anyone participating in any new experience will naturally go through the levels of concern progressively. The developmental mentoring program in District One and District Two was new to both districts. While there were no measures specifically associated with identifying participants’ levels of concern, these examples illustrate how participants naturally move through the levels as the innovation continues.

Within the realm of creating an infrastructure to support developmental mentoring programs, these theoretical frameworks must be considered as each offers foundational constructs for the program. There is evidence to support that the cognitive developmental stage level affects individuals’ performance in complex human tasks. Individuals functioning at a higher cognitive level tend to exhibit less bias and prejudice, demonstrate increased empathy, used more indirect approaches to instruction, use a greater variety of teaching methods, able to adjust readily when flexing needs to occur, and have more accurate recall of events (Johnson & Reiman, 2006; Reiman, 1999; Thies-Sprinthall, 1986). On the other hand, individuals functioning at lower cognitive levels tend to exhibit limited ability to adapt as needed in problem-solving situations. Further, there is evidence that suggests that many new teachers will remain at the lowest level of concern, the task level, without adequate professional support provided during the induction years.

A critical implication connecting moral development and ethical decision making and this study relates to the relationship between higher moral/ethical level and implementation of innovations. Witherell and Erickson (1978) indicated that teachers processing at higher levels of moral development and ethical decision making have been
found to be more likely to initiate and participate in structural changes in the schools in which they work. In this study, the implementation and maintaining of the developmental mentoring program is considered a large scale innovation. Witherell and Erickson’s (1978) work implies that those participating in large scale innovations with higher levels of moral development and ethical decision-making skills are more likely to participate in ways that promote growth of the innovation. Furthermore, individuals processing at a more complex level of moral development and ethical decision making are more likely to initiate change measures because they are more able to see the good for the whole group based on unique circumstances of the situation. Cognitive development as well as levels of concern of all participants will directly impact the outcomes of the developmental mentoring program possibly impacting all seven components of infrastructure presented in this study.

Overview of the Problem

Attracting and retaining high quality teachers has been a considerable concern for a number of years in education. A rapidly increasing student population in conjunction with high new teacher attrition has been indicated as the single most significant factor in increasing shortages of qualified teachers nationally (Watkins, 2005). In fact, new teachers are leaving the profession at an alarming rate. As many as 30% of new teachers leave within their first three years of teaching and as many 50% leave by the end of their fifth year (Brooks-Young, 2007). Clearly, teacher attrition impacts the recruiting, hiring and training of new teachers (Brooks-Young, 2007). It is also evident that teacher
attrition negatively impacts continuity of school improvement and reform measures as well as student achievement (Ingersoll, 2001b).

New teacher induction coupled with high quality mentoring has been found to significantly reduce new teacher attrition (Russell, 2006; Wood & Waarich-Fishman, 2006). Implementing and sustaining a developmental mentoring program is a complex endeavor requiring a variety of internal supports identified as infrastructure in this study. While there is little literature directly associated with infrastructure of developmental mentoring programs, there is plentiful research on improving workplace conditions and educational systemic change that can be inferred to this study. Dissatisfaction with workplace conditions has been identified as a reason teachers leave the profession; (Jalongo & Heider, 2006) therefore, indicating research on workplace conditions as an integral perspective in creating infrastructure for developmental mentoring. Likewise, educational systemic change can be correlated with the implementation and sustaining of the developmental mentoring program, as both are large scale innovations involving many participants and are related to school-wide improvement efforts. In addition to these two sources of literature that contribute to the creation of an infrastructure model for developmental mentoring, two recent sources related to developmental mentoring and infrastructure were particularly useful. Project CREATE (Huling & Resta, 2007) related specifically to infrastructure of a mentoring program provides the only dedicated research to infrastructure of a mentoring program identifying the relative importance of particular components evident from this literature review. In addition, a national set of
standards for mentoring programs published in 2000 provides further areas suggesting infrastructure needs for developmental mentoring programs.

It is clear that in order for a developmental mentoring program to be created, implemented, and sustained a series of internal supports are necessary. Since little research has been conducted on infrastructure components, the relative importance of the components and the outcomes associated with either inclusion or deletion of particular components of infrastructure, this study intends to begin addressing this area of inquiry.

**Purpose Statement**

There is no doubt that teacher attrition related to new teachers leaving the profession prematurely, in significant numbers nonetheless, is a critical problem faced by school districts around the nation. While new teacher induction models, including the assignment of a mentor, are becoming the norm rather than the exception, the kinds of support for those involved in mentoring vary greatly from district to district. Because it is evident that infrastructure plays an important role in implementing, sustaining, and even improving innovations, what kind of infrastructure then is necessary for implementing, sustaining and even improving the developmental mentoring program? How does this infrastructure or lack thereof, impact the program and those directly involved in the functions of the program? The purpose of this study was to answer the following two research questions, in an attempt to better understand infrastructure, in relation to the developmental mentoring program.

1. What district level infrastructure components may have aided or interfered with attaining the developmental mentoring goals in the two districts?
2. How do the developmental mentoring program outcomes differ between the two districts both from a developmental construct and best practices standpoint?

The intent of this study is to create an infrastructure framework model that identifies the key components of infrastructure necessary to implement and sustain a developmental mentoring program. Information on infrastructure components along with outcomes associated with either including or excluding particular components of infrastructure is presented.

Method

This research study utilized a combination participant interviews and Developmental Mentoring Developmental Mentoring Evaluation Survey responses from groups representing all stakeholders in the developmental mentoring program in the two selected districts. The combination of interview data and data acquired from the Developmental Mentoring Developmental Mentoring Evaluation Survey was planned so that participant perception and voice may play a significant role in identifying the infrastructure necessary to implement and sustain a developmental mentoring program.

Individual and Focus Group Interviews

Representative groups of participants in each district were selected to participate in semi-structured individual or focus group interviews. The semi-structured format of the interviews allowed the participants as well as the interviewer to address the identified questions from the interview protocol as well as add to the discussion as appropriate. Interviews were audio-taped, then later transcribed. The transcribed interview data were then sorted and resorted allowing dominant themes to emerge naturally. The dominant
themes were then categorized according to the seven components of infrastructure described late in Chapter II. The interview data in conjunction with the Developmental Mentoring Developmental Mentoring Evaluation Survey data allow for a more clear illustration of how infrastructure may support or interfere with the work of the developmental mentoring program.

**Developmental Mentoring Developmental Mentoring Evaluation Survey**

All participants, administrators, mentors and novice teachers in both districts completed a Developmental Mentoring Developmental Mentoring Evaluation Survey at the end of year one. The data from those surveys were utilized to determine measureable differences in use of “Best Practices” in District One and District Two. To determine use of “Best Practices” Developmental Mentoring Evaluation Survey items were matched with program identified “Best Practices.” When there was a match between the two, frequencies of use were calculated.

**Major Findings**

Because scant research has been conducted on the infrastructure necessary for implementing and sustaining a developmental mentoring program, this study allowed several areas of current research to influence the design of a proposed framework for infrastructure. Four main sources of current literature were used to support the framework design: Improving Workplace Conditions; Educational Systemic Change; Project CREATE; and The National Framework for Mentoring. Each of these current areas provided an important contribution not only to the development of this proposed
framework, but also to mentoring and education in general. The development of this proposed framework model for a mentoring infrastructure involved combining the major tenets of each of the areas. When combined, many common areas were evident between each of the components from the aforementioned resources. The Infrastructure Framework for Mentoring Programs developed as a result of this study includes: Collaboration; Leadership; Mutual Decision Making; Ongoing Professional Development; Provision of Resources; Accountability and Measurement; and Clear Program Purposes. As evidenced, especially from the interview data, each of these components is important in the implementing and sustaining of a developmental mentoring program. Further discussion of these components will follow in the next section.

**Infrastructure Framework for Mentoring Programs**

Based on the findings from this study, the following infrastructure model has been developed. Figure 1 illustrates the essential components of the infrastructure model. The Infrastructure Framework for Mentoring Programs is framed by Cognitive Developmental Theory (Hunt, 1971; Kohlberg, 1969; Reiman & Thies-Sprinthall, 1998). The Infrastructure Framework for Mentoring Programs is also framed by district vision, goals and beliefs, as these foundational constructs drive all work in which districts engage. Each of the infrastructure components are represented along a coil.
Figure 1. Infrastructure Framework for Mentoring Programs

The coil represents balancing equal support, much like the coils that support someone lying in a bed or reduce the roughness of a road while driving like a shock absorber. While a coil is made to extend and shrink as needed, so too is the Infrastructure Framework for Mentoring Programs depending on the school district’s unique needs. For example, one school district may have a strong professional development program in place focused on the cognitive growth of the teachers, but may need additional resources to allow for meeting the needs of an extensive group of novice teachers. This framework
model allows for the coil to be stretched and condensed based on those specific needs. However, if one piece of the coil were to be removed or excluded, the coil would no longer stretch to full capacity as part of it was missing. This is true also with this framework for infrastructure. Each component is absolutely necessary in full supporting the implementation and sustaining of a developmental mentoring program. The following paragraphs describe the major findings related to each of the seven components of infrastructure identified in the Infrastructure Framework for Mentoring Programs.

Supports and Barriers

A combination of interview data and Developmental Mentoring Evaluation Survey responses indicate a number of supports and barriers related to the developmental mentoring programs in District One and District Two. In fact, for each component on the proposed infrastructure framework model, supports and barriers were indicated.

Collaboration

For the infrastructure component of collaboration, participants indicated a number of supports and barriers. Novice teacher and mentor matching specifically related to proximity and similar experiences, was identified by participants as either a support when good matching occurred or as a barrier when good matching failed. However, novice teacher to mentor ratio resulted in one of the most critical findings related to collaboration. In fact, novice teacher to mentor ratio was found to be a support in District Two and a barrier in District One. Adhering to a strict one to one ratio for
novice teachers to mentors was reported unanimously by all participants in District Two.
In District One on the other hand, administrators, mentors and novice teachers reported a
number of different ratios ranging from one to one to one mentor to three novice
teachers. This increased novice teacher to mentor ratio in District One resulted in
feelings from the novice teachers that mentors were too busy to be bothered when the
novice had a need. Likewise, the mentors had feelings of being overwhelmed. Another
finding possibly impacted by this increased novice teacher to mentor ratio involved a
difference in perceptions within participant groups in District One. Of all the survey
items included in the analysis of the infrastructure component of collaboration, mentors
and novice teachers in District Two reported similar responses. However, in District
Two novice teachers and mentors reported different responses on all but one of the
items. The increased novice teacher to mentor ratio could have impacted the
participant’s responses within groups in District One.

One key difference in perception occurred in how novice teachers and mentors
described their relationship with each other. In District Two both novice teachers and
mentors described their relationship with each other as close, both professional and
personal while the same participant groups in District One reported different responses.
Novice teachers in District One described their relationship with their mentor as
professional, but not close. Mentors in the same district described their relationship with
their novice(s) as close, both professional and personal. The increased novice teacher to
mentor ratio in District Two could have impacted the novice teacher’s perceptions
leading to a different description of their relationship than that of their mentors.
The infrastructure component of Collaboration offers a number of important elements that may either support or interfere with the developmental mentoring model which must be considered in developing and sustaining a mentoring program. Certainly careful consideration of the importance of making good matches between novice teachers and mentors including proximity, subject and grade level is important. When matching is carried out successfully the developmental mentoring program participants feel more successful. Further, the importance of keeping the novice teacher to mentor ratio low, preferably one to one, is critical to not only the novice teachers’ feelings of adequate support but also to the mentors’ feelings of success in carrying out the mentoring role.

**Leadership**

Leadership on the proposed infrastructure framework model encompasses more than just campus principals. The infrastructure component of leadership involves a variety of key individuals. In this study the leadership of the campus administration along with the district level mentor coordinators proved to be both a support and a barrier.

While campus-based administration, including principals and assistant principals, were requested to attend the administrator training, the levels of participation by administrators varied greatly between the districts. District One consisted of about twice as many campuses as District Two, but only six District One administrators attended the administrator training. In District Two on the other hand, 27 administrators attended the
mentor training indicating a greater level of involvement by those in leadership positions in District Two than in District One.

Through interview data, participants indicated that having leadership that was not only supportive, but also knowledgeable of both the mentoring program and the role of the mentor, was important to the success of the program. While novice teachers and mentors in both districts indicated that the campus administrators held high expectations for the mentors, some discrepancies of views on the level of support offered by these leaders occurred between District One and District Two.

Survey data indicates that mentors met with administrators in District One to discuss a variety of topics related to the mentoring program including the progress of the novice teacher and mentoring concerns and mentors in District Two indicating meeting with administrators to discuss the progress of the novice teacher. Identified as a “Best Practice,” mentors’ meeting with administrators was identified as a support related to the infrastructure component of leadership.

The campus administration’s attitude toward the mentoring program played an important role in this study. Mentors in District One discussed openly that the mentoring program did not seem to be a priority of administrators’ in their district. Mentors described being pulled during their dedicated mentoring conference period to substitute in another class. They also described how substitutes that were hired to cover for either themselves or the novice teacher to allow for observing and conferencing were cancelled or pulled to substitute elsewhere. These examples create a clear picture of how the administration in some schools in District One did not put mentoring at the top of their
priority list. While the literature on educational systemic change makes it clear that prioritizing school-wide initiatives creates focus where needed, this was not apparent in District One. Further, the literature makes it evident that fostering a mentoring relationship and supporting the interactions between the novice teacher and the mentors is a key way to support a mentoring program. It is also a way to produce positive outcomes. Some administrators in District One did not demonstrate this level of support for the program. This finding makes it evident that the administrators’ ability to prioritize the mentoring of novice teachers by understanding not only the importance of this induction experience, but also fully understanding the role of the mentor is a needed element of the component of infrastructure related to leadership.

Another leadership role related to the developmental mentoring program employed in both District One and District Two was a district level mentor coordinator. As identified in the literature, the mentoring program needs leadership involving someone who is ultimately responsible for the mentoring program (Odell, 2006). Both District One and District Two acknowledged this need. Overall the response to the level of support provided by the district level mentor coordinator was positive in both districts. Most of the leadership support identified by participants during interviews was that of the district level mentor coordinator rather than the campus administration. Ongoing follow through, consistent monitoring of the program and keeping an open line of communication were identified as important types of support offered from the district level. Mentors indicated that the district level mentor coordinator provided follow through after the mentor trainings in use of the mentoring strategies presented.
Administrators also indicated that the district level mentor coordinator aided in checking on the progress of both the mentors and novice teachers. Further, administrators indicated that the follow through and open line of communication provided by the district level mentor coordinator was especially supportive as the coordinator did not have allegiance to a particular campus and the support was unbiased, directly focused on the developmental mentoring program.

It is important to note that overall the role of the district level mentor coordinator was reported to be highly effective and supportive for those involved in the developmental mentoring program in District One and District Two. However, there were some comments made during interviews with participants in District One that indicated a less positive perception of this support person’s interaction with those involved in the program. Most participants in District One indicated most frequently that the type of support offered by the district level mentor coordinator occurred in the form of emails. In District Two however, most of the support came in the form of school visits. This difference could be one of the reasons for the difference in perceptions of the district level mentor coordinator support in District One from District Two.

Clearly, the infrastructure component of leadership is a critical element in implementing and sustaining a developmental mentoring program. Leadership that holds high expectations for those involved in the program as well as places mentoring at a high priority can increase the effectiveness and resulting outcomes of the program. Further, including a leadership role that is dedicated to the developmental mentoring program is
an essential component of infrastructure as well, to allow for leadership support that is focused solely on the mentoring program.

**Mutual Decision Making**

Participation in school-wide decision making falls into the infrastructure component of Mutual Decision Making. Participation in school-wide decision making has been reported as one factor in teachers’ decisions to either stay in the profession or leave (The Center for Comprehensive School Reform and Improvement, 2007). No conversation occurred during the interviews relating to mutual decision making. This lack of focus on this infrastructure component may have occurred for several reasons. First there were not questions on the interview protocol that focused participants’ attention to this type of participation in the program. Additionally, the grant which allowed funding for this mentoring program to be implemented in both districts was awarded late in the summer prior to the beginning of the program leaving little time for participant participation in the decision-making process. However, there were several items on the Developmental Mentoring Evaluation Survey that allowed participants to reflect on mentor selection in their district.

The findings from this study indicated that minimal mutual decision-making was part of the implementation of the developmental mentoring program. In fact, it was likely that no mutual-decision making Even in the area of mentor selection, where participants could be actively involved, participants were mostly either unaware of the criteria for selecting mentors or indicated that written criteria for mentor selection did not exist.
Based on these findings it is evident that while important to the infrastructure of the mentoring program, little mutual decision-making occurred between participants in District One or District Two.

*Ongoing Professional Development*

Ongoing professional development for mentors and administrators involved in the developmental mentoring program in District One and District Two was an integral part of the program design. The literature of Improving Workplace Conditions, Project CREATE and the National Mentoring Framework each indicate the important role professional development plays in increasing capacity of participants. For the mentors involved in this program, training on the use of the COPAT observation instrument was indicated as the most useful aspect of the mentor training. Mentors mentioned that having the observational tool helped them focus in on what was most important in the conferences with their novice teachers. Overall the mentor training provided to mentors and administrators in District One and District Two was perceived to be a useful component of infrastructure for the developmental mentor program.

An interesting finding in this study was how the participants responded to identifying their needs for future training. A little over one-half of the mentors in District Two indicated needing further training on the COPAT and almost one-half indicated needing further training on the coaching cycle and the instructional coaching plan. However, just over one-fourth of the mentors in District One indicated needing further training in the areas of cognitive stage theory and the instructional coaching plan. This data suggests mentors in District One either: for the most part, have a firm understanding
of the developmental mentoring strategies of developing a coaching plan, the coaching cycle and use of the observational tool the COPAT; are not aware of their future training needs; or simply for the most part, uninterested in future trainings. Nevertheless, mentors in District Two indicated with a greater frequency a desire for further training in the areas of developmental mentoring strategies focused on creating an individualized development plan for their novice teachers.

Barriers associated with the ongoing professional development component of the developmental mentoring program focused on two key areas: lack of time to attend training particularly after the school year began; and some participants reported that the training was somewhat confusing and the training materials were confusing and included more than they needed resulting in an interference in their work as mentors.

Clearly both the literature on mentoring programs and the interview data and Developmental Mentoring Evaluation Survey responses indicate that ongoing professional development for mentors, administrators, and even novice teachers is a critical component of infrastructure. Evident from these findings is the importance of insuring that the materials and trainings are relevant and clear for all participants. Also evident is the need to provide for creative planning that allows participants to attend ongoing professional development without taking them away from their own classroom responsibilities.

Resources

New teacher induction coupled with mentoring is gaining popularity across the country. However with the increasing numbers of mentoring programs, comes an ever
increasing variety out outcomes, commitment of resources and level of support (Resta, 2006). No doubt having adequate time and funding to provide quality mentoring is a necessity. Providing adequate time and the other necessary resources was indicated as a support in the literature on Improving Workplace Conditions, Project CREATE, and Educational Systemic Change. In this study, participants in District One and District Two found the infrastructure component of resources to support and interfere with their work in the program. In particular the issue of having adequate time was indicated by many participants in both districts to be a barrier in carrying out their roles in the mentoring program.

While all administrators in both districts indicated that there was plenty of time for mentors and novices to meet together, observe and conference, mentors and novice teachers in both districts disagreed with this assumption made by administrators. Mentors and novice teachers in both districts indicated that there was not enough dedicated time in the schedule to allow for quality interactions between each other. This difference in perceptions about the resource of time is important to consider when thinking about resources as one component of infrastructure. Certainly mentors and novice teachers perceived there to be inadequate amounts of time to carry out their roles in the mentoring program, possibly because they were directly involved with the mentoring tasks. Administrators on the other hand, not being directly involved in the novice teacher and mentor relationship did not sense the lack of time.

In addition to identifying the lack of time as a barrier associated with the developmental mentoring program in District One and District Two, participants
identified a number of reasons why more time was needed including: time to conduct observations; time to plan and conference; and time to complete the required paperwork. Participants in both districts also described the mentor as having a “full plate.” Odell (2006) confirms this in the literature indicating that adding the time intensive role of mentoring to a mentor’s already full schedule creates problems with time also. An interesting difference between responses from participants in District One and those in District Two involved novice teachers in District One describing their reactions to their mentors’ very full schedule. On several occasion, novice teachers in District One indicated that they would have rather tried to solve a problem on their own rather than “bother” their busy mentor for help. Still other novice teachers in District One commented that they felt that the many other responsibilities held by the mentors interfered with the mentor’s ability to support them effectively. Why is it that only novice teachers in District One made comments along these lines? Could it be that because the majority of mentors in District One were mentoring more than one novice, that this increased ratio accentuated the “full plate” of the mentors?

Although a lack of adequate time dedicated to mentoring was identified as a critical barrier to the developmental mentoring program in both districts, one resource designed to help alleviate this issue was identified by participants.

One means of addressing the need for adequate time was planned for before the developmental mentoring program ensued. In both District One and District Two funding was made available to provide for a substitute teacher to cover for either the novice teachers or the mentors so that the two could participate in the mentoring
relationship. While many participants mentioned this as a form of support, others mentioned the difficulty in securing this substitute. Reasons given for not requesting the substitute and reasons why this support sometimes actually became a barrier varied from substitute unavailability to frustration on the part of the participant who requested the substitute as they were sometimes pulled to cover other classes. The foresight to provide funding to provide substitute coverage was an excellent plan. However, the plan for the use of this resource was not always followed. If this substitute held a dedicated position, assigned to cover just for mentoring activities, guaranteed to be there when needed, this kind of resource infrastructure could have been more useful.

It is not surprising that novice teachers and mentors indicated that a lack of adequate time interfered with their work in the mentoring program as this finding is cited quite often in articles describing the needs of those involved in mentoring programs. In this study, it is evident that this need holds true as well. Complicating the problem of inadequate time, is the issue that those who choose to mentor are sometimes the busiest people on a campus. Limiting or focusing mentor’s attention to just mentoring rather than mentoring along with many other duties may help lessen the level of interference caused by lack of time, by lessening the load on mentor teachers. Also providing a dedicated substitute whose sole responsibility is to cover for those involved in mentoring may be one way to increase the use of this resource while lessening the frustration associated with utilizing the help. Certainly those involved in mentoring novice teachers need adequate, dedicated time to carry out mentoring activities successfully and effectively.
Accountability and Measurement

Ongoing improvement is the main objective of planning for and conducting program accountability. In this study, participants indicated that formative program evaluation designed to allow for continual improvement was important. The most considerable support for this infrastructure component involved the utilization of the multiple layers of support people involved in the program. Not only were administrators identified as a level of support, but the district level mentor coordinators, lead mentors and the trainers from the MRCLD were identified not only as a source of support for participants, but crucial to the formative assessment of program effectiveness. Each of these support roles provided people who were actively involved in gathering formal and informal data about how the novice teachers, mentors and the program in general was progressing.

However, intimately connected to this level infrastructure support is a barrier that interfered with many novice teacher’s and mentor’s work in the program. Repeatedly participants identified a struggle in completing the large amounts of required paperwork from surveys to documentation of novice teacher and mentor work together. While the ongoing formative and formal assessment of the developmental mentoring program provided an essential component for program improvement, the amount of paperwork was overwhelming for many participants. For this component of infrastructure to be supportive and not a barrier, careful consideration of the amount of required paperwork needs to occur. If there are parts of the paperwork that are not absolutely essential, trimming of the excess would reduce the interference felt by participants in the program.
so that the true purpose of program evaluation may remain a supportive component of infrastructure.

Clear Program Purposes

The development of clear program purposes allows participants to increase focus on the professional aspects of a quality mentoring program (Dynak, Schwille, & Nagel, 2000). Overall, participants in both districts identified having clear program purposes as important to the effective outcomes of the developmental mentoring program. While there were a number of varying beliefs about how important it was for all stakeholders to be able to articulate the program purposes, including them in the decision-making framework of the school and district was indicated as important including the incorporation of program purposes in other school and district improvement plans. Participants indicated this component of infrastructure as a support and a barrier in their experiences in the developmental mentoring program.

Mentors especially identified a strong sense of certainty related to clear program purposes as administrators, district level mentor coordinators, and the MRCLD staff set clear expectations for participants. For example, indicating the expectation that mentor teachers videotape their novice teacher teaching, for observation purposes, in conjunction with completing a COPAT observation instrument each time allowed mentors to understand what their role entailed. Mentors also indicated this infrastructure component as barrier as a list of expectations was provided to them, but provided not until late fall. While some mentors were aware of this list of expectations, the late notification cause some alarm as some required activities had not yet been completed.
It is evident that program participants want and expect to know what their role entails. In order for this component of infrastructure to remain a support rather than interference with the mentoring work, Clear Program Purposes should be provided well in advance to all participants.

**Outcomes**

Interview data was combined with Developmental Mentoring Evaluation Survey data in an attempt to identify program supports and barriers related to the seven proposed infrastructure components. The findings from this data suggest that all seven components hold an important place in the developmental mentoring program. The second level of data analysis involved investigating the outcomes of the developmental mentoring program in District One and District Two. This data allowed for conclusions about how the infrastructure components may have impacted the outcomes.

**Best Practices**

Developmental mentoring program participants were given a list of “Best Practices” designed to not only guide participation but also set expectations for program implementation. Items included in this part of the data analysis were those that had a match between the “Best Practices” and an item on the Developmental Mentoring Evaluation Survey. The use of “Best Practices” identifies not only program strategy use, but also implementation of identified program “Best Practices.”

A logical assumption that could be made when two or more districts are prepared with the same training models, materials, trainers, expectations and timelines, the program outcomes would be expected to be similar for all participants. In this study
however, outcomes differed in “Best Practice” use. What then caused this difference in outcomes in two districts where personnel were identically prepared? There were some noteworthy differences related to infrastructure that impacted the levels of participation in both districts. The major differences in infrastructure between District One and District Two that could explain these differences follow:

- District One utilized a ratio of mentor teachers to novices teachers as much as one to three. District Two utilized a strict ratio of one to one.

- Notably more administrators attended the mentor training before the onset of the program in District Two. Clearly the decision in district Two to involve both administrators from each campus proved to be substantially more beneficial than the arbitrary assignment of one administrator or substitute for the administrator as did occur in district One.

- All campuses in District Two were involved in the developmental mentoring program, while only a small fraction of campuses were involved in District One.

- District level support in District One consisted mainly of email and phone contacts while district level support in District Two included email and phone contacts, but most of the interactions involved face-to-face school visits.

- District One assigned the mentor role to a number of non-classroom support teachers impacting the matching of subject and grade level.
Recommendations for Strengthening the Developmental Mentoring Program in District One and District Two

The utilization of the components of infrastructure identified in the Infrastructure Framework for Mentoring Programs has the potential to alleviate waste of the resources of time and money as mentoring programs are created and maintained. Program planners and coordinators interested in creating programs in the best interest of all participants, novice teachers, mentors, and administrators must consider the components of infrastructure resulting from this study to avoid the possible pitfalls associated with poor planning and implementation of innovations if the best possible outcome is expected. The following recommendations can be made related to the seven components of infrastructure based on the findings from this study.

Collaboration

1. Keep mentor to novice teacher ratio one to one. Ratios greater than one to one result in a diluted experience for the novice and an overwhelming, less effective experience for the mentor.

2. Pay careful attention to matching. Attempt matches of mentor to novice teachers that include similar assignments and close classroom proximity. Matches that utilize support teachers, not currently teaching in the classroom, reduce the effectiveness of the experience for both the novice and the mentor teacher.
Leadership

1. Continue administrative training to include building beliefs about the importance of the developmental mentoring program. All building administrators who might be involved in the mentoring program should be expected to attend the training and subsequent meetings about the program.

2. Continue to employ the district level mentor coordinator.

3. Encourage district level mentor coordinator to schedule face-to-face school visits with novice teachers, mentors and administrators.

Mutual Decision Making

1. Increase the amount of mutual decision-making involving the developmental mentoring program to include all stakeholders.

Ongoing Professional Development

1. Continue mentor training for new mentors at the beginning of each school year. Continue also ongoing mentor training based on the identified needs of participants from the Developmental Mentoring Evaluation Survey.

2. Consider alternative means for creating time for mentors to participate in ongoing professional development that avoids removing them from their classrooms repeatedly.

Resources

1. Create time. Novice teachers and mentors need adequate, dedicated time to fully participate in the developmental mentoring program. Continue
working with campuses to design creative uses of time so that the mentoring relationship may be tended, while also allowing the teachers to feel successful in their classrooms.

2. Assign mentors to the mentoring of novice teachers who can dedicate their energies to mentoring.

3. The best case scenario involves providing release time from normal classroom duties and extra duties for mentors so that their time may be spent focused clearly on novice growth.

4. If a substitute teacher will be provided to allow for creative use of time, then dedicate that substitute to the developmental mentoring program.

**Accountability and Measurement**

1. Consider carefully the amount of paperwork deemed necessary for stakeholders to complete. Identify all necessary paperwork and discard the rest, so as to alleviate the overwhelming feelings participants reported.

**Clear Program Purposes**

1. Provide program expectations before the beginning of each mentoring year that clearly outlines expectations and deadlines for completing them. Then throughout the year updates on progress of expectations and deadlines provided by district level mentor coordinator and administrators.
As we prepare to look at the recommendations for further study, it is important to review the connections between the findings of this study and developmental mentoring practices which stem theoretically from cognitive developmental theory. The basic elements of developmental mentoring include: (1) Developmental mentoring involves the mentor understanding the novice teacher’s current level of cognitive processing. This can only happen when sufficient time is allotted for the mentor to get to know the novice teacher. (2) Developmental mentoring utilizes the novice’s level of cognitive processing in the coaching plan for the novice teacher (Reiman & Thies-Sprinthall, 1998). In the findings from this study, which suggests varied use of “Best Practices” in the two districts, it is important to examine the effectiveness of the mentor, particularly if the role does not receive the support necessary to develop appropriate developmental coaching plans. (3) Developmental mentoring supports growth over significant time, usually, throughout the induction period that may last through the first three years of the novice teacher’s experience in the profession. This occurrence should be regular, rather than episodic professional activities. (4) In developmental mentoring, growth tends to and will continue to occur if there is sufficient positive interaction, guidance, and support and challenge; and (5) Developmental mentoring maintains that each novice teacher is a unique individual (Odell & Huling, 2000; Reiman & Thies-Sprinthall, 1998).

The developmental model differs from many others in that it focuses on both the mentor and novice; additionally, it examines growth from multiple perspectives and in both formative and summative modes. Critical to developmental mentoring is reflective practice. It appeared that District Two participated at a higher level in support this
practice. Careful attention must be given to structured and supportive reflective experiences with a balance occurring between the practice and the reflection over a significant amount of time. Further mentor trainers must be prepared to offer supports and challenges to the new mentors so that in turn the mentors may do the same for their novice teachers. As one considers the impact of developmental mentoring it continues to be important to associate cognitive levels and mentoring that relate back to those characteristics that are typical of someone processing at higher levels: less bias and prejudice, increased empathy, greater use of indirect approaches to instruction, wider variety of teaching methods, able to respond accordingly to students needs by adjusting readily, more accurate recall of class events… as listed previously. These characteristics are equally important for mentors in relation to their work with novices. In fact, Thies-Sprinthall (1984) reports that mentors or supervisors functioning at lower cognitive levels tend to be less flexible and less responsive to their novice’s needs. Further, those mentors who function at a low conceptual levels as indicated by Hunt’s (1971; Reiman & Thies-Sprinthall, 1998) conceptual scheme tended to be quite negative in their evaluations of their novices. While measuring developmental growth was not a function of this study, it would continue to be instructive if ongoing comparison studies of different mentoring models, compared to developmental mentoring were examined for results related to best practices.
Recommendations for Further Study

1. Because this study focused on two school districts involved in that same developmental mentoring program: same training; same identified “Best Practices” and expectations; same implementation model, further study conducted with other schools involved in a variety of different mentoring programs that may add to this model for program infrastructure.

2. Mentoring is recognized as an effective tool for retaining new teachers in the profession. However, with differing amounts of support provided in different programs, the outcomes and effectiveness of the program vary. It would be interesting to collect information from administrators, mentors and novice teachers from a variety of mentoring programs both developmental and non-developmental so that results may be compared. Data collected from this sort of study may add to the understanding of “Best Practices.”

3. Because having adequate, dedicated time to participant in the many experiences associated with the mentoring relationship continues to be a major concern of novice teachers and mentors, further study in the area of alternative ways to provide the needed time is crucial. An investigation into this area may allow for the much needed ongoing professional development for novice teachers and mentors as well as the time to participate in mentoring activities while also being able to maintain their classroom responsibilities.

4. This study clearly identified the component of Mutual Decision Making as a critical element of infrastructure. However, because there was little discussion
during interviews and no items dedicated to this component on the Developmental Mentoring Evaluation Survey, further study on what constitutes Mutual Decision Making, and how to include this component in program structure could further clarify this area of developmental mentoring infrastructure.

5. As evidenced by the negative feelings portrayed by some administrators in one of the districts involved in this study, it would be beneficial to add to the literature findings related to how administrator participation impacts outcomes. Further research in the areas of the importance of administrator participation in training and the daily activities of the developmental mentoring program would add a level of support from the administrative participants as well.

6. Further study is needed to identify specific practice associated with each of the infrastructure components. This type of study would provide a needed resource for those who are designing, implementing and even working to improved existing mentoring programs.

7. Ongoing comparison studies of different mentoring models to the developmental model would continue to add to the understandings of how cognitive development plays a crucial role in the development of novice teachers.

**Conclusions**

Current literature is convincing that new teachers are leaving the profession at an alarming rate. It is also apparent that new teacher induction that is coupled with the
assignment of a well trained and supported mentor helps reduce new teacher attrition thus reducing the negative side effects of the revolving door in schools. Implementing and maintaining a developmental mentoring program is a complex endeavor involving a number of key people and interactions.

The infrastructure model designed for this study incorporated research from a number of areas. Information from literature on Improving Workplace Conditions provided addresses concerns related to common reasons given for teachers leaving the profession. The literature on Educational Systemic Change provided a background for implementing and sustaining large scale school improvement efforts. Project CREATE added information from the only current study on infrastructure related components. The National Mentoring Framework contributed information on sound mentoring practice. Each of these elements adding to the infrastructure model provided critical aspects. As evidenced from the data from this study the infrastructure components of Collaboration, Leadership, Mutual Decision Making, Resources, Ongoing Professional Development, Accountability and Measurement, and Clear Program Purposes were found to be important in the implementation and sustainability of the developmental mentoring program.

Identified “Best Practices were impacted by these infrastructure components both positively and negatively in the two districts studied in this group. A more effective infrastructure framework produces more positive outcomes identified by designated supports, greater overall participation and greater use of “Best Practices.” In particular
The findings resulting from this study are useful to those who may be designing, implementing or even working to improve a mentoring program for novice teachers. The identified infrastructure components, when carefully considered and included in the program design, may increase program effectiveness and positive outcomes for those involved in the mentoring program. This study aimed to provide an infrastructure model for mentoring programs and identify the impact associated with either including or excluding the infrastructure components from program practice. What has resulted is an infrastructure model for supporting mentoring programs that has the potential to improve the entire mentoring program for all stakeholders.
REFERENCES


Caring mentors help novice teachers stick with teaching and develop expertise.


*Journal of In-Service Education*, 33(2), 153-169.


Hall, G. E., Wallace, R. C., Jr., & Dossett, W. A. (1973). *A developmental conceptualization of the adoption process within educational institutions*. Austin, TX: Research and Development Center for Teacher Education, University of Texas.


New Teacher Center at the University of California, Santa Cruz. (2006). *NTC Research Abstracts*: Santa Cruz, CA.


APPENDIX A

RÉSUMÉS FOR MENTORING AND RESEARCH COLLABORATIVE FOR LEARNING AND DEVELOPMENT TRAINERS

Elizabeth S. Foster
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MENTORING RESEARCH COLLABORATIVE for Learning and Development
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Texas A&M University

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http://www.cehd.tamu.edu/articles/mentoring_research_collaborative

Formal Education:
Post Doc East Carolina University
Ed. D. North Carolina State University, 1988
M.Ed. North Carolina State University, 1988
B.S. Ed. Ohio University

Professional Experience:
Texas A&M University, Associate Professor 1998 – present
Pitt County Public Schools, North Carolina, Principal 1996-1998
East Carolina University, Associate Professor 1995-1997; Assistant Professor 1989-1995
Dare County Public Schools, North Carolina, Administrative Director of Curr & Inst 1982-1989
Wake County Schools, Raleigh, NC Learning Lab Coordinator, Alternative Ed-1974-1977
New Hanover County Schools, Wilmington, NC, English Teacher, 9th Grade Center 1971-1974

Professional Interests:
- Administrator and Teacher Preparation Programs
- Educational Mentoring
- Peer and Cross-age Tutoring
- Professional Development
- School and Administrative Leadership
- Professional Development Schools
- Curriculum and Pedagogy
- Inquiry as Reflection
Scholarly and Professional Activity:
- 89 presentations and 19 keynote addresses; major area of study and presentation: Mentoring
- 72 publications, including 6 books
- 32 department/college/university/system committees at TAMU and 22 professional association advisory boards and offices
- Evaluator and instructional designer on 4 grants exceeding $1,000,000
- 10 citations, Editorial service and manuscript reviewer
- $295,000 from 27 grants and contracts
- 25 awards

Honors and Awards (most recent)
Recipient, NPHA 2004 Scholar of the Year Award. (June, 2004). National Association of Peer Programs, Awarded at Annual Conference, Austin, TX.
Barbara Hollingshead  
Counselor, Rockwall ISD  
Assistant Director,  
MENTORING RESEARCH COLLABORATIVE for Learning and Development  
Texas A&M University

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Formal Education:  
Ph.D. Curriculum and Instruction, Texas A&M University, 2006  
M.A. Counseling Education, University of Texas, Permian Basin, 1986  
B.S. Biology, Stephen F. Austin State University, Nacogdoches, 1976

Professional Experience:  
Rockwall Heath High School, Heath, TX., Guidance and Counseling Department Chair 2005–present  
Lamar Middle School, Temple, TX., Lead Counselor 2003-2005  
Bryan High School, Stephen F. Austin Middle School, Bryan, TX. Counselor 1994-2003  
Permian High School, Odessa, TX. Biology Teacher, 1982-1994

Professional Certificates:  
Counselor - K-12 - Professional - Life  
Biology - Secondary 6-12 - Provisional - Life  
Psychology - Secondary 6-12 Provisional – Life

Research Interests:  
♦ Curriculum Development ♦ Teacher Retention ♦ Staff Development ♦ Mentoring and Induction
Recent Publications


Recent Presentations

Hollingshead, B. (2005, April). *Teaching and learning in rural and urban schools.* Paper presented at the fourth annual Texas Chapter of the National Association for Multicultural Education (NAME), Houston, TX.
Lucy Larrison
Executive Director for Accountability, BISD
Associate Director, MRCLD
MENTORING RESEARCH COLLABORATIVE for Learning and Development
Texas A&M University

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E-mail: larrison@bryanisd.org

http://www.cehd.tamu.edu/articles/mentoring_research_collaborative

Formal Education:
Ph D. Texas A&M University
Dissertation Title: Congruence of Perceptions Among the Principal, Mentor Teacher, and Novice Teacher Regarding the Principal’s Role in a Campus Mentoring Program.
M.Ed. Sam Houston State University

Professional Experience:
Executive Director for Accountability, Bryan ISD, 2003-present
Adjunct Professor, Texas A&M (6 years)
Administrator, Bryan High School 2002-2003
Principal, SFA Middle School, Bryan, TX 1998-2002
Principal, Huntsville, TX 1988-1997
Classroom Teacher, Science (HS & Middle)

Professional Interests:
- Administrator and Teacher Preparation Programs
- Educational Mentoring
- School and Administrative Leadership
- Professional Development
- Science Education
- Classroom Observation Practices
- Curriculum and Pedagogy
Scholarly and Professional Activity:
- Multiple presentations: Local, Regional, National
- Publications: Both refereed and non-refereed
- Multiple committee assignments, Chair of local research advisory council
- Teacher Evaluator and Trainer for Evaluation
- Trainer for Testing and Student Evaluation
- Consultant, MENTORING RESEARCH COLLABORATIVE
APPENDIX B

INTERVIEW QUESTIONS

Interview Questions for Novice Teachers

1. How would you define success in a mentoring program?

2. What indicators do you look for in yourself, that suggest you have had a successful year as a novice teacher?

3. What support/assistance/conditions do you need from the campus or district to be a successful teacher?

4. How have the reflective activities, in which you have been involved this year, aided you in YOUR development as a teacher?

5. What barriers were there this year that interfered with your working with your mentor?

6. How has your practice changed during the year, if it has, as a result of participating in this mentoring program?
Interview Questions for Mentors

1. How do you define success in a mentoring program?

2. What indicators do you look for in the novice teacher that demonstrates success?

3. What conditions within the school need to be present to support your work as a mentor?

4. What conditions within the district need to be present to support your work as a mentor?

5. What does developmental mentoring mean to you?

6. How have the reflective activities in which you have been involved aided you in your development as a mentor?

7. What is the ratio of time you spend teaching in the classroom and time spent mentoring?

8. Tell me about how you have used the mentor training you received.
Interview Questions for Administrators

1. How do you define success in a mentoring program?

2. What indicators do you look for in the novice teacher that demonstrates success?

3. What indicators do you look for in the mentor teacher that demonstrates success?

4. What conditions within the school need to be present to support the mentor in the work of mentoring? Which are present?

5. What conditions within the district need to be present to support the mentor in the work of mentoring? Which are present?

6. What does developmental mentoring mean to you?

7. How have the reflective activities in which your mentors have been involved, aided their development as a mentor?

8. Tell me about how you have used the training on developmental mentoring as an administrator?

9. What changes will you make next year as a result of this year’s experience?

10. How did you select mentors?

11. How did you match mentors to novice teachers?
Interview Questions for the District Level Mentor Coordinator

1. What was the rationale for matching mentors to mentees?

2. What is the mentor/mentee configuration in your district? How was this decision made?

3. What were the expectations for mentors regarding use of the developmental mentor training they received?

4. Did you feel the need to have a monitor procedure in place to ensure program expectations were being carried out? What monitoring practices were in place?

5. What evidence are you collecting that demonstrates formative success of the developmental mentoring program?

6. How did you select mentors?

7. How did you match mentors to novice teachers?
APPENDIX C

DEVELOPMENTAL MENTORING EVALUATION SURVEY

MENTORING RESEARCH COLLABORATIVE for Learning and Development

________ ISD Developmental Mentoring Evaluation Survey

NOVICE TEACHER
End of Year 1: 2007-2008

Code________                                         Date____________

Please Check: ___High School Teacher   ___Jr. High/Middle School Teacher   ___Elementary Teacher

The purposes of this survey are: (1) to provide information about your campus or district mentoring program, (2) to provide information about your perceptions related to components of your mentoring program. Findings from this survey will be used by the MENTORING RESEARCH COLLABORATIVE for Learning and Development, in addition to other instruments and data, to evaluate the Magnolia ISD Mentoring Program, and to prepare a report that details the evaluation with recommendations for improving the mentoring program. Findings will be available from the District Coordinator.

Part 1-Level of Use
Instructions: Please read the items in the left column and check the answers in the right column that best represent your mentoring practices and/or beliefs. You may check as many items as you wish.

<table>
<thead>
<tr>
<th>I. Examining Mentoring Practices</th>
<th>Please check the answer(s) that best describe your mentoring practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In getting to know my mentor, I engaged in the following</td>
<td>__1 Completed the on-line and hard-copy learning style instruments for myself</td>
</tr>
<tr>
<td></td>
<td>__2 Participated in an off-campus time together with my mentor</td>
</tr>
<tr>
<td></td>
<td>__3 Ate lunch together at school</td>
</tr>
<tr>
<td></td>
<td>__4 Other (describe):</td>
</tr>
<tr>
<td>2. I would describe my relationship with my mentor teacher as</td>
<td>__1 Professional, but not close</td>
</tr>
<tr>
<td></td>
<td>__2 Close, both professional and personal</td>
</tr>
<tr>
<td></td>
<td>__3 Indifferent</td>
</tr>
<tr>
<td></td>
<td>__4 Hostile</td>
</tr>
<tr>
<td></td>
<td>__5 Other:</td>
</tr>
<tr>
<td>3. Ways that I was introduced to classroom observations by my mentor included (Check all that apply)</td>
<td>__1 I videotaped myself teaching</td>
</tr>
<tr>
<td></td>
<td>__2 We analyzed one of my video taped lessons</td>
</tr>
<tr>
<td></td>
<td>__3 I watched a lesson that my mentor taught</td>
</tr>
<tr>
<td></td>
<td>__4 My mentor conducted an Instructional Conference using the COPAT</td>
</tr>
<tr>
<td></td>
<td>__5 My mentor teacher videotaped one of his/her classroom lessons that we analyzed using the COPAT</td>
</tr>
<tr>
<td></td>
<td>__6 Other:</td>
</tr>
</tbody>
</table>
4. The frequency with which I met with my mentor for conferencing **(formally)** was

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3 or more times a week</strong></td>
<td>3 or more times a week</td>
</tr>
<tr>
<td><strong>2 times a week</strong></td>
<td>2 times a week</td>
</tr>
<tr>
<td><strong>1 time a week</strong></td>
<td>1 time a week</td>
</tr>
<tr>
<td><strong>It varies from 0 to ___ (fill in) times a week</strong></td>
<td>It varies from 0 to ___ (fill in) times a week</td>
</tr>
</tbody>
</table>

5. The frequency with which I met with my mentor **informally** was

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3 or more times a week</strong></td>
<td>3 or more times a week</td>
</tr>
<tr>
<td><strong>2 times a week</strong></td>
<td>2 times a week</td>
</tr>
<tr>
<td><strong>1 time a week</strong></td>
<td>1 time a week</td>
</tr>
<tr>
<td><strong>It varies from 0 to ___ (fill in) times a week</strong></td>
<td>It varies from 0 to ___ (fill in) times a week</td>
</tr>
</tbody>
</table>

6. I met with my mentor

<table>
<thead>
<tr>
<th>Time</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 during a common planning period</strong></td>
<td>1 during a common planning period</td>
</tr>
<tr>
<td><strong>2 only when someone covered my class</strong></td>
<td>2 only when someone covered my class</td>
</tr>
<tr>
<td><strong>3 before and/or after school</strong></td>
<td>3 before and/or after school</td>
</tr>
<tr>
<td><strong>4 during lunch</strong></td>
<td>4 during lunch</td>
</tr>
<tr>
<td><strong>5 on our personal time</strong></td>
<td>5 on our personal time</td>
</tr>
</tbody>
</table>

7. I have completed (how many) formal observations with my mentor? (includes both a pre and post conference)

<table>
<thead>
<tr>
<th>Number</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>5 or more</strong></td>
<td>5 or more</td>
</tr>
</tbody>
</table>

8. When planning for a classroom observation, my mentor teacher

<table>
<thead>
<tr>
<th>Planning</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Always conducted a pre-conference</strong></td>
<td>1 Always conducted a pre-conference</td>
</tr>
<tr>
<td><strong>2 Most of the time (75%) conducted a pre-conference</strong></td>
<td>2 Most of the time (75%) conducted a pre-conference</td>
</tr>
<tr>
<td><strong>3 Occasionally (50%) conducted a pre-conference</strong></td>
<td>3 Occasionally (50%) conducted a pre-conference</td>
</tr>
<tr>
<td><strong>4 I never received a pre-conference</strong></td>
<td>4 I never received a pre-conference</td>
</tr>
</tbody>
</table>

9. When holding a pre-observation conference, I came prepared with

<table>
<thead>
<tr>
<th>Planning</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 The pre-conference planning form</strong></td>
<td>1 The pre-conference planning form</td>
</tr>
<tr>
<td><strong>2 A copy of the lesson (learning) plan</strong></td>
<td>2 A copy of the lesson (learning) plan</td>
</tr>
<tr>
<td><strong>3 Neither of the above</strong></td>
<td>3 Neither of the above</td>
</tr>
<tr>
<td>Comment:</td>
<td>Comment:</td>
</tr>
</tbody>
</table>

10. Following a classroom observation, my post-observation conference was held within

<table>
<thead>
<tr>
<th>Time</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>48 hours</strong></td>
<td>48 hours</td>
</tr>
<tr>
<td><strong>3-4 days</strong></td>
<td>3-4 days</td>
</tr>
<tr>
<td><strong>5 or more days</strong></td>
<td>5 or more days</td>
</tr>
</tbody>
</table>

11. After conducting a classroom observation my mentor

<table>
<thead>
<tr>
<th>Planning</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Always conducted a post-conference</strong></td>
<td>1 Always conducted a post-conference</td>
</tr>
<tr>
<td><strong>2 Most of the time (75%) conducted a post-conference</strong></td>
<td>2 Most of the time (75%) conducted a post-conference</td>
</tr>
<tr>
<td><strong>3 Occasionally (50%) conducted a post-conference</strong></td>
<td>3 Occasionally (50%) conducted a post-conference</td>
</tr>
<tr>
<td><strong>4 I never had a post-conference</strong></td>
<td>4 I never had a post-conference</td>
</tr>
</tbody>
</table>

12. Types of conferences that my mentor held with me (Check all that apply)

<table>
<thead>
<tr>
<th>Conference</th>
<th>Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Getting to Know You Conference</strong></td>
<td>1 Getting to Know You Conference</td>
</tr>
<tr>
<td><strong>2 Nitty Gritty Conference</strong></td>
<td>2 Nitty Gritty Conference</td>
</tr>
<tr>
<td><strong>3 Instructional Conference</strong></td>
<td>3 Instructional Conference</td>
</tr>
<tr>
<td><strong>4 Pre-observation Conference</strong></td>
<td>4 Pre-observation Conference</td>
</tr>
<tr>
<td><strong>5 Post-observation Conference</strong></td>
<td>5 Post-observation Conference</td>
</tr>
<tr>
<td><strong>6 Formative assessment Conference</strong></td>
<td>6 Formative assessment Conference</td>
</tr>
</tbody>
</table>
13. I consider the conferencing skills of my mentor to be (Check all that apply)  
<table>
<thead>
<tr>
<th></th>
<th>1 Highly skilled</th>
<th>2 Adequate</th>
<th>3 Less than adequate</th>
<th>4 No opinion</th>
</tr>
</thead>
</table>

14. I engaged in written stem reflections with my mentor (either by hand or electronically)  
<table>
<thead>
<tr>
<th></th>
<th>weekly</th>
<th>every 10-14 days</th>
<th>every 2-3 weeks</th>
<th>once a month</th>
<th>not at all</th>
</tr>
</thead>
</table>

15. My mentor developed a coaching plan for me  
<table>
<thead>
<tr>
<th></th>
<th>after the first observation</th>
<th>after the second observation</th>
<th>after the third observation</th>
<th>after the fourth observation</th>
<th>I did not have a coaching plan</th>
</tr>
</thead>
</table>

**II. Examining Program Design Practices**

Please check the answer(s) that best describe the mentoring program practices

<table>
<thead>
<tr>
<th>1. Matching of novice teacher to mentor occurs (Check all that apply)</th>
<th>Randomly</th>
<th>Informally</th>
<th>By location in the school</th>
<th>Formally</th>
<th>By proximity</th>
<th>By expertise</th>
<th>By grade level</th>
<th>By volunteerism</th>
<th>Other</th>
<th>By subject area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I don’t know</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. The number of mentors assigned to me</th>
<th>1 1</th>
<th>2 4</th>
<th>3 5</th>
<th>6 or more</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>3. The amount of time that I spend in all of the mentoring related activities per week (average over the year)</th>
<th>30 minutes-one hour</th>
<th>1-2 hours</th>
<th>3-4 hours</th>
<th>5-or more hours</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>4. Selection of mentors in my district is done using the following criteria: (Check all that apply)</th>
<th>1 Mentor’s excellent teaching skills</th>
<th>2 Rotation-everyone gets a turn</th>
<th>3 Mentor’s leadership skills</th>
<th>4 Mentor expressed an interest in mentoring</th>
<th>5 Principal makes an arbitrary decision</th>
<th>6 Other colleagues nominate a teacher as mentor</th>
<th>7 I don’t know</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>5. There is written criteria for mentor selection</th>
<th>yes</th>
<th>no</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>6. Written criteria for mentor selection is known by faculty</th>
<th>yes</th>
<th>no</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>III. Examining Program Implementation: Campus Based and District Level</th>
<th>Please check the answer(s) that best describe your mentoring program implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Time was provided in the schedule designated for mentoring: to meet, to observe and to conference</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>Comment:</td>
</tr>
</tbody>
</table>
2. **MY** schedule accommodates time to observe my mentor while he/she is teaching

   __yes__  
   __no__  
   Comment:

3. My campus based principal has high expectations for mentors in our building

   __yes__  
   __no__  
   Comment:

4. The Program Coordinator (district level) has a substantial portion or all of the assignment devoted to the mentor program.

   __Yes__  
   __No__  
   __I don’t know__

5. **District level** support for me this year included

   __School visits__  
   __District meetings__  
   __Phone conversations__  
   __Emails__  
   __Individual meeting with me (with or without my mentor present)__  
   __Observation of my teaching__  
   __Access to resources__  
   __Other:__  

   Comment:

### IV. Examining Professional Development Devoted to Mentor Skills (Training)

Please check the answer(s) that best describe your professional development experiences in mentoring

<table>
<thead>
<tr>
<th>1. I could tell that my mentor was trained in the following:</th>
<th>2. I would personally benefit from training in the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use of the COPAT</strong></td>
<td><strong>Use of the COPAT</strong></td>
</tr>
<tr>
<td><strong>Conferencing Skills information</strong></td>
<td><strong>Conferencing Skills information</strong></td>
</tr>
<tr>
<td><strong>Observation Skills</strong></td>
<td><strong>Observation Skills</strong></td>
</tr>
<tr>
<td><strong>Reflection activities theory</strong></td>
<td><strong>Reflection activities theory</strong></td>
</tr>
<tr>
<td><strong>Assessment tools</strong></td>
<td><strong>Assessment tools</strong></td>
</tr>
<tr>
<td><strong>Other:</strong></td>
<td><strong>Other:</strong></td>
</tr>
</tbody>
</table>

__Learning styles__  
__Retention__  
__Coaching cycle__  
__Cognitive stage__  
__Adult learning__
**Part 2: Level of Importance**

Instructions: Each item requires two responses. First rank (in Column A) the *importance* of each statement to you: 1 is the lowest and 5 is the highest rank that you can give each item. Then check that it is either Evident (Column B) or Not Evident (Column C) on your campus/district.

<table>
<thead>
<tr>
<th>V. Program Purposes</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Written mentoring program purposes have been established.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Mentoring program purposes can be articulated by stakeholders.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Written mentoring program purposes are regularly reflected in administrative and mentor-novice decisions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Mentoring Program purposes are aligned with other school or district improvement efforts.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VI. Mentor Selection and Mentor/Novice Matching</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A formal process of selecting mentors is followed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. A formal process of matching mentor to mentee is followed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Teaching assignments for the mentor and novice are complementary in level and/or content area.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Mentors and novices have compatible schedules that allow for frequent interaction.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VIII. Mentor Roles and Practices</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The mentor/novice collaborative work includes a variety of strategies – observations, collaborative planning and teaching, and journaling.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Interactions between mentor and novice are both formal and informal, occurring in and out of the classroom.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**MENTORING RESEARCH COLLABORATIVE for Learning and Development**

**ISD Developmental Mentoring Evaluation Survey**

**MENTOR**  
End of Year 1: 2007-2008

Code________                                             Date___________

Please Check:         ___High School Mentor     ___Jr. High/Middle School Mentor    ___Elementary Mentor

The purposes of this survey are: (1) to provide information about your campus or district mentoring program, (2) to provide information about your perceptions related to components of your mentoring program. Findings from this survey will be used by the MENTORING RESEARCH COLLABORATIVE for Learning and Development, in addition to other instruments and data, to evaluate the Magnolia ISD Mentoring Program, and to prepare a report that details the evaluation with recommendations for improving the mentoring program. Findings will be available from the District Coordinator.

**Part 1-Level of Use**

Instructions: Please read the items in the left column and check the answers in the right column that best represent your mentoring practices and/or beliefs. You may check as many items as you wish.

<table>
<thead>
<tr>
<th>1. Examining Mentoring Practices</th>
<th>Please check the answer(s) that best describe your mentoring practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In getting to know my mentee</td>
<td></td>
</tr>
<tr>
<td>(novice teacher) I engaged in the following</td>
<td></td>
</tr>
<tr>
<td>_1 Completed the on-line and hard-copy learning style instruments for myself</td>
<td></td>
</tr>
<tr>
<td>_2 Asked my novice teacher to complete the on-line and hard-copy learning style instruments</td>
<td></td>
</tr>
<tr>
<td>_3 Planned an off-campus time to get together</td>
<td></td>
</tr>
<tr>
<td>_4 Ate lunch together at school</td>
<td></td>
</tr>
<tr>
<td>_5 Other (describe):</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. I would describe my relationship with my novice teacher as</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>_1 Professional, but not close</td>
<td>_2 Close, both professional and personal</td>
</tr>
<tr>
<td>_3 Indifferent</td>
<td>_4 Hostile</td>
</tr>
<tr>
<td>_5 Other:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Ways that I introduced the novice teacher to classroom observations included (Check all that apply)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>_1 I videotaped myself teaching</td>
<td>_2 We analyzed one of my video taped lessons</td>
</tr>
<tr>
<td>_3 I taught a lesson that my novice observed</td>
<td>_4 I conducted an Instructional Conference using the COPAT</td>
</tr>
<tr>
<td>_5 My novice teacher videotaped a classroom lesson that we analyzed using the COPAT</td>
<td>_6 Other:</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>4.</td>
<td>The frequency with which I met with my novice teacher(s) for conferencing <em>formally</em> was</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>The frequency with which I met with my novice teacher(s) <em>informally</em> was</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I met with my novice teacher</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I have completed (how many) formal observations? (includes both a pre and post conference)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>When planning for a classroom observation with my novice teacher, I</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>When holding a pre-observation conference, my novice teacher came prepared with</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Following a classroom observation, I have held my post-observation conference within</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>After conducting a classroom observation of my novice teacher, I</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Types of conferences that I have held with my novice teacher(s) (Check all that apply)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Ways that I have analyzed my conferencing skills include (Check all that apply)</td>
</tr>
</tbody>
</table>
14. I engage in written stem reflections with my novice teacher (either by hand or electronically)  

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Weekly</th>
<th>Every 10-14 days</th>
<th>Every 2-3 weeks</th>
<th>Once a month</th>
<th>Not at all</th>
</tr>
</thead>
</table>

15. I have developed a coaching plan for my novice teacher  

<table>
<thead>
<tr>
<th>Observation</th>
<th>1 after the first observation</th>
<th>2 after the second observation</th>
<th>3 after the third observation</th>
<th>4 after the fourth observation</th>
<th>5 I have not developed a coaching plan</th>
</tr>
</thead>
</table>

**II. Examining Program Design Practices**

**Please check the answer(s) that best describe the mentoring program practices**

1. Matching of novice teacher to mentor occurs (Check all that apply)  

<table>
<thead>
<tr>
<th>Method</th>
<th>Randomly</th>
<th>Informally</th>
<th>By location in the school</th>
<th>Formally</th>
<th>By expertise</th>
<th>By proximity</th>
<th>By grade level</th>
<th>By volunteerism</th>
<th>By subject area</th>
<th>Other</th>
<th>I don't know</th>
</tr>
</thead>
</table>

2. The number of novice teachers to whom I am assigned  

<table>
<thead>
<tr>
<th>Number of Teachers</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6 or more</th>
</tr>
</thead>
</table>

3. The amount of time that I spend in all of the mentoring related activities per week (average over the year)  

<table>
<thead>
<tr>
<th>Time</th>
<th>30 minutes-one hour</th>
<th>1-2 hours</th>
<th>3-4 hours</th>
<th>5-or more hours</th>
</tr>
</thead>
</table>

4. Selection of mentors in my district is done using the following criteria: (Check all that apply)  

<table>
<thead>
<tr>
<th>Criteria</th>
<th>1 Mentor's excellent teaching skills</th>
<th>2 Rotation-everyone gets a turn</th>
<th>3 Mentor's leadership skills</th>
<th>4 Mentor expressed an interest in mentoring</th>
<th>5 Principal makes an arbitrary decision</th>
<th>6 Other colleagues nominate a teacher as mentor</th>
<th>7 Aspiring administrator</th>
<th>8 I don't know</th>
</tr>
</thead>
</table>

5. There is written criteria for mentor selection  

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>I don't know</th>
</tr>
</thead>
</table>

6. Written criteria for mentor selection is known by faculty  

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>I don't know</th>
</tr>
</thead>
</table>

**III. Examining Program Implementation: Campus Based and District Level**

**Please check the answer(s) that best describe your mentoring program implementation**

1. Time was provided in the schedule designated for mentoring: to meet, to observe and to conference  

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

Comment:
2. **MY** schedule accommodates time to observe my novice teacher while he/she is teaching
   - [ ] yes
   - [ ] no
   Comment:

3. My campus based principal has high expectations for mentors in our building
   - [ ] yes
   - [ ] no
   Comment:

4. I have met individually with one of the school administrators about the following mentoring areas (check all that apply)
   - [ ] 1 Mentoring concerns
   - [ ] 2 Progress of the novice teacher(s)
   - [ ] 3 Progress of the mentor program
   - [ ] 4 My role as a mentor
   - [ ] 5 Did not meet
   Comment:

5. I have met as part of a team with other mentors in the school with my principal about the following mentoring topics
   - [ ] 1 Mentoring concerns
   - [ ] 2 Progress of the novice teacher(s)
   - [ ] 3 Progress of the mentor program
   - [ ] 4 My role as a mentor
   - [ ] 5 Did not meet
   Comment:

6. The Program Coordinator (district level) has a substantial portion or all of the assignment devoted to the mentor program.
   - [ ] Yes
   - [ ] No
   - [ ] I don’t know

7. **District level** support for me this year included
   - [ ] 1 School visits
   - [ ] 2 District meetings
   - [ ] 3 Emails
   - [ ] 4 Phone conversations
   - [ ] 5 Follow up with the novice teacher
   - [ ] 6 Observation of novice teacher
   - [ ] 7 Access to resources
   - [ ] 8 Access to mentor training
   - [ ] 9 Instructional support
   - [ ] 10 Other:
   Comment:
### IV. Examining Professional Development Devoted to Mentor Skills (Training)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>Please check the answer(s) that best describe your professional development experiences in mentoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>District mentor preparation (training) met my personal mentoring growth needs through</td>
<td>[ ] active involvement</td>
<td>[ ] significant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>practice</td>
<td>appropriate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[ ] hands-on activities</td>
<td>useful</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[ ] level</td>
<td>support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[ ] relevant materials</td>
<td>challenge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>strategies</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[ ] useful mentor manual</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[ ] experienced trainers</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[ ] Other:</td>
<td></td>
</tr>
</tbody>
</table>

| 2. | I would assess my own growth as a mentor to be (Check all that apply) | [ ] appropriate | [ ] Very high |
|   |   | [ ] less than I expected | high, with |
|   |   | [ ] more to | learn |
|   |   | [ ] more than I expected |   |

| 2. | Training areas that were beneficial to me | [ ] Use of the COPAT | Learning styles |
|   |   | [ ] Conferencing Skills | Retention |
|   |   | [ ] Observation Skills | information |
|   |   | [ ] Reflection activities | Coaching cycle |
|   |   | [ ] Assessment tools | Cognitive stage |
|   |   | [ ] Other: | theory |
|   |   | [ ] Adult learning |   |

| 3. | Training areas that required a great deal of practice on my part | [ ] Use of the COPAT | Learning styles |
|   |   | [ ] Conferencing Skills | Retention |
|   |   | [ ] Observation Skills | information |
|   |   | [ ] Reflection activities | Coaching cycle |
|   |   | [ ] Assessment tools | Cognitive stage |
|   |   | [ ] Other: | theory |
|   |   | [ ] Adult learning |   |

| 4. | Training areas that I wish to re-visit in Year 2 | [ ] Use of the COPAT | Learning styles |
|   |   | [ ] Conferencing Skills | Retention |
|   |   | [ ] Observation Skills | information |
|   |   | [ ] Reflection activities | Coaching cycle |
|   |   | [ ] Assessment tools | Cognitive stage |
|   |   | [ ] Instructional Coaching Plan | Adult learning |
|   |   | [ ] Other: |   |
**Part 2: Level of Importance**

Instructions: Each item requires two responses. First rank (in Column A) the *importance* of each statement to you: 1 is the lowest and 5 is the highest rank that you can give each item. Then check that it is either Evident (Column B) or Not Evident (Column C) on your campus/district.

<table>
<thead>
<tr>
<th></th>
<th>Importance (Rank 1-5)</th>
<th>Evident</th>
<th>Not Evident</th>
</tr>
</thead>
</table>

### V. MENTOR Program Purposes

1. Written mentoring program purposes have been established.
2. Mentoring program purposes can be articulated by stakeholders.
3. Written mentoring program purposes are regularly reflected in administrative and mentor-novice decisions.
4. Mentoring program purposes are aligned with other school or district improvement efforts.

### VI. Mentor Selection and Mentor/Novice Matching

1. A formal process of selecting mentors is followed.
2. A formal process of matching mentor to mentee is followed.
3. Teaching assignments for the mentor and novice are complementary in level and/or content area.
4. Mentors and novices have compatible schedules that allow for frequent interaction.

### VII. Mentor Preparation and Development

1. Mentors participate in mentor training prior to beginning a mentoring assignment.
2. Mentors participate in ongoing, formal professional development to improve mentoring practice.
3. Mentors participate in ongoing, formal professional development related to standards-based teaching practices.
4. Mentors are provided time for mentor professional development during contract days of the school year.

VIII. Mentor Roles and Practices

1. The mentor/novice collaborative work includes a variety of strategies – observations, collaborative planning and teaching, and journaling.

2. The mentor’s assistance is informed by a cognitive and formative assessment of the novice’s needs.

3. Interactions between mentor and novice are both formal and informal, occurring in and out of the classroom.

IX. Program Administration, Implementation, and Evaluation

1. The program coordinator is knowledgeable and experienced in mentoring strategies.

2. Program evaluation includes the novice teacher’s teaching practice

3. Program evaluation includes effectiveness of mentoring practices

4. Program evaluation includes effectiveness of mentoring program strategies.

5. Data for evaluation are collected continuously from a wide variety of stakeholders including mentors, novices, administrators and others.

Any additional comments are welcome:
MENTORING RESEARCH COLLABORATIVE for Learning and Development

ISD Developmental Mentoring Evaluation Survey

ADMINISTRATOR
End of Year 1: 2007-2008

Date___________

Please Check:  ___High School Administrator ___Jr. High/Middle School Administrator ___Elementary Administrator

The purposes of this survey are: (1) to provide information about your campus or district mentoring program, (2) to provide information about your perceptions related to components of your mentoring program. Findings from this survey will be used by the MENTORING RESEARCH COLLABORATIVE for Learning and Development, in addition to other instruments and data, to evaluate the Magnolia ISD Mentoring Program, and to prepare a report that details the evaluation with recommendations for improving the mentoring program. Findings will be available from the District Coordinator.

**Part I-Level of Use**

Instructions: Please read the items in the left column and check the answers in the right column that best represent your mentoring practices and/or beliefs. You may check as many items as you wish.

<table>
<thead>
<tr>
<th>I. Examining Mentoring Practices</th>
<th>Please check the answer(s) that best describe your mentoring practices</th>
</tr>
</thead>
</table>
| 1. My role in the mentor program is facilitator and model of (Check all that apply) | _1 Reflective practice  
_2 Coaching plans  
_3 Conferencing skills  
_4 Classroom observation skills  
_5 I have limited knowledge or experience with mentoring practices  
_6 Other (describe): |
| 2. My role in the mentor program includes (Check all that apply) | _1 Coaching mentors and providing feedback on mentoring practices  
_2 Coordinating professional development for mentors and novices  
_3 Scheduling time for mentors to carry out mentoring responsibilities  
_4 Facilitating the process of selecting mentors and matching them with novice teachers  
_5 Scheduling collaborative opportunities for both mentors and novice teachers  
_6 Developing strategies to build and strengthen the mentor/novice relationship  
_7 Addressing or mediating mentor/novice teacher conflicts  
_8 Other: |
<table>
<thead>
<tr>
<th>II. Examining Program Design Practices</th>
<th>Please check the answer(s) that best describe the mentoring program practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Matching of novice teacher to mentor occurs (Check all that apply)</td>
<td>_1 Randomly                                                                   _2 Informally</td>
</tr>
<tr>
<td></td>
<td>_3 By location in the school                                                  _4 Formally</td>
</tr>
<tr>
<td></td>
<td>_5 By proximity                                                               _6 By expertise</td>
</tr>
<tr>
<td></td>
<td>_7 By grade level                                                             _8 By volunteerism</td>
</tr>
<tr>
<td></td>
<td>_9 Other                                                                      _10 By subject area</td>
</tr>
<tr>
<td></td>
<td>_11 I don’t know</td>
</tr>
<tr>
<td>2. The number of novice teachers assigned to each mentor is (select the number)</td>
<td>_1 4                                                                         _2 5</td>
</tr>
<tr>
<td></td>
<td>_3 6 or more</td>
</tr>
<tr>
<td>3. The amount of time that I spend in all of the mentoring related activities per week (average over the year)</td>
<td>_30 minutes-one hour per week                                                 _1-2 hours per week</td>
</tr>
<tr>
<td></td>
<td>_3-4 hours per week                                                           _5-or more hours per week</td>
</tr>
<tr>
<td>4. Selection of mentors on my campus is accomplished using the following criteria: (Check all that apply)</td>
<td>_1 Mentor’s excellent teaching skills                                         _2 Rotation-everyone gets a turn</td>
</tr>
<tr>
<td></td>
<td>_3 Mentor’s leadership skills                                                  _4 Mentor expressed an interest in mentoring</td>
</tr>
<tr>
<td></td>
<td>_5 Principal makes an arbitrary decision                                       _6 Other colleagues nominate a teacher as mentor</td>
</tr>
<tr>
<td></td>
<td>_7 Aspiring administrator                                                      _8 I don’t know</td>
</tr>
<tr>
<td>5. There is written criteria for mentor selection</td>
<td>_yes                                                                         _no</td>
</tr>
<tr>
<td></td>
<td>_I don’t know</td>
</tr>
<tr>
<td>6. Written criteria for mentor selection is known by faculty</td>
<td>_yes                                                                         _no</td>
</tr>
<tr>
<td></td>
<td>_I don’t know</td>
</tr>
<tr>
<td>III. Examining Program Implementation: Campus Based and District Level</td>
<td>Please check the answer(s) that best describe your mentoring program implementation</td>
</tr>
<tr>
<td>1. Time designated for mentoring was provided in the schedule for mentors/novices: to meet, to observe and to conference</td>
<td>_yes                                                                         _no</td>
</tr>
<tr>
<td></td>
<td>Comment:</td>
</tr>
<tr>
<td>2. MY schedule accommodates time to listen to successes and concerns and to offer feedback to both mentors and novice teachers</td>
<td>_yes                                                                         _no</td>
</tr>
<tr>
<td></td>
<td>Comment:</td>
</tr>
<tr>
<td>3. I have a process in place for supervision of mentors</td>
<td>_yes                                                                         _no</td>
</tr>
<tr>
<td></td>
<td>Comment:</td>
</tr>
</tbody>
</table>
4. I have met individually with a mentor or novice teacher about the following mentoring areas (check all that apply)  
   - __1__ Mentoring concerns  
   - __2__ Progress of the novice teacher  
   - __3__ Progress of the mentor’s practice  
   - __4__ Mentor/novice relationship  
   - __5__ Did not meet  
   Comment:  

5. I have met with a team of mentors or novice teachers about the following mentoring topics  
   - __1__ Mentoring concerns  
   - __2__ Progress of the novice teachers  
   - __3__ Progress of the mentors’ practice  
   - __4__ Mentor/novice relationships  
   - __5__ Did not meet  
   Comment:  

6. The Program Coordinator (district level) has a substantial portion or all of the assignment devoted to the mentor program.  
   __Yes__  
   __No__  
   __I don’t know__  

7. **District level** support for the campus mentoring program this year included  
   - __1__ School visits  
   - __2__ Meetings for novice teacher  
   - __3__ District meetings  
   - __4__ Emails  
   - __5__ Phone conversations  
   - __6__ Access to resources  
   - __7__ Observation of novice teachers  
   - __8__ Access to mentor training  
   - __9__ Instructional support  
   - __Other__  

### IV. Examining Professional Development Devoted to Mentor Skills (Training)

1. Mentors on my campus were trained in the following (Check all that apply)  
   - __1__ Use of the COPAT  
   - __2__ Learning styles  
   - __3__ Conferencing Skills information  
   - __4__ Retention  
   - __5__ Observation Skills  
   - __6__ Coaching cycle  
   - __7__ Reflection activities  
   - __8__ Cognitive stage theory  
   - __9__ Assessment tools  
   - __10__ Other:  

Please check the answer(s) that best describe your professional development experiences in mentoring.
**Part 2: Level of Importance**

Instructions: Each item requires two responses. First rank (in Column A) the importance of each statement to you: 1 is the lowest and 5 is the highest rank that you can give each item. Then check that it is either Evident (Column B) or Not Evident (Column C) on your campus/district.

<table>
<thead>
<tr>
<th>Importance (Rank: 1-5)</th>
<th>Evident</th>
<th>Not Evident</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>V. MENTOR Program Purposes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Written mentoring program purposes have been established.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Mentoring program purposes can be articulated by stakeholders.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Written mentoring program purposes are regularly reflected in administrative and mentor-novice decisions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Mentoring program purposes are aligned with other school or district improvement efforts.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VI. Mentor Selection and Mentor/Novice Matching</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. A formal process of selecting mentors is followed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. A formal process of matching mentor to mentee is followed.</td>
<td></td>
<td></td>
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<tr>
<td>3. Teaching assignments for the mentor and novice are complementary in level and/or content area.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Mentors and novices have compatible schedules that allow for frequent interaction.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VII. Mentor Preparation and Development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Mentors participate in mentor training prior to beginning a mentoring assignment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Mentors participate in ongoing, formal professional development to improve mentoring practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Mentors participate in ongoing, formal professional development related to standards-based teaching practices.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Mentors are provided time for mentor professional development during contract days of the school year.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VIII. Mentor Roles and Practices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. The mentor/novice collaborative work includes a variety of strategies – observations, collaborative planning and teaching, and journaling.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. The mentor’s assistance is informed by a cognitive and formative assessment of the novice’s needs.

3. Interactions between mentor and novice are both formal and informal, occurring in and out of the classroom.

### IX. Program Administration, Implementation, and Evaluation

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The program coordinator is knowledgeable and experienced in mentoring strategies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Program evaluation includes the novice teacher’s teaching practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Program evaluation includes effectiveness of mentoring practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Program evaluation includes effectiveness of mentoring program strategies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Data for evaluation are collected continuously from a wide variety of stakeholders including mentors, novices, administrators and others.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any additional comments are welcome:
VITA

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