Reflective practice: The teacher in the mirror

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REFLECTIVE PRACTICE: THE TEACHER IN THE MIRROR

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ABSTRACT

Reflective Practice: The Teacher in the Mirror

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With the enactment of the *No Child Left Behind Act of 2001*, administrators have faced extreme pressure to provide professional development to teachers to enhance their skill and knowledge base, make school improvements, and increase student achievement. Research indicated that critical reflection leads to lasting school change and professional growth of teachers. However, few studies examined reflection using the principles of adult learning and reflective practice theory. In this study, this perspective was explored using three distinct ways of reflecting in combination with various reflective practice models.

The purpose of this study was to describe the perceptions of elementary administrators and teachers from three states in the west regional area of the United States concerning reflective practice. The study also explored the perceived professional practice of administrators and teachers as it related to reflective practice. Teachers completed a *Reflective Attitude Survey* with open-ended questions. A modified version of the survey was completed by administrators.

An analysis of the data determined that teachers believed reflection was important and worthwhile. They liked reflecting about their own teaching. Teachers often reflected in the midst of teaching to make adjustments. Teachers felt that reflection helped them
improve their teaching performance. Additionally, teachers needed time to reflect and preferred to dialogue/collaborate with peers.

Further analysis revealed that administrators felt reflection was interesting and important. They believed reflecting was useful in improving teacher performance and promoting professional development. Principals promoted reflection using professional learning communities.

A comparison of the data suggested that there were significant differences in the perceptions of teachers and principals in 10 areas. However, both groups believed that establishing a supportive environment and developing a shared vision were important to employ reflective practices.
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This work is dedicated to my late mother, LaNeal Lucas Rayford. She taught me the importance of education at a very early age. She instilled in me that education is the key to open the doors to my future, whatever that may be. To my father, Dr. Lee Edward Rayford, who inspired me to embark upon this adventure. He traveled this path nearly three decades ago and continually gave his expertise. He is my rock. To my second mother, Billie Knight Rayford, who encouraged me to work toward a doctorate. She always challenges me to strive for greater things. It means the world to me to know that you are by my side. To my sister, Vickie Ann Rayford, for always believing in me and supporting all my endeavors. I truly appreciate my family’s unconditional love and understanding during this journey. This is for you.

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CHAPTER 1

INTRODUCTION

Based on the literature, schools have historically been the scapegoat for national, political, economic, and social issues in America. When our nation is challenged, schools are often looked upon to resolve the woes. For example, in 1958 the National Defense Education Act was created to address the need for better math and science instruction. This resulted because schools were criticized as the weak link in national defense during the Cold War of the 1950s (U.S. Department of Education, 2008). In addition, when the Soviet Union launched Sputnik in 1957, many spectators began to question the effectiveness of the public schools.

During the 1960s, the United States dealt with such issues as segregation and civil rights. According to Ravitch (1983), these concerns caused the national agenda to shift educational focus to the needs of the underserved. In 1965, the Elementary and Secondary Education Act was passed under the championship of President Lyndon B. Johnson as part of the war on poverty. This was the first time that financial inequities were examined among students and public schools. Despite these efforts, racial and economic inequities remained, along with the continued underachievement of minority students (Ravitch, 1983).

In 1983, A Nation at Risk, a document produced by the National Commission on Excellence in Education was released. The report was a response to the perceived inability of the United States to successfully compete in international markets (Spring, 2002). This report outlined in detail the poor academic quality of public schools and created what was known as the Excellence Movement. As a result, emphasis was placed on curriculum rigor; graduation requirements were enhanced; and additional testing was
instituted. According to the literature, educators across the country began to examine their professional practices and implemented several reform models. Fullan (1991) believed the results of these efforts produced only limited success.

Based upon the perceived failure of the *Excellence Movement*, in 1989 President George H. Bush initiated the Bush Summit, comprised of the nation’s governors, to discuss education. The Bush Summit laid the foundation for *Goals 2000*, six national goals that were to be met by the year 2000. Each state was asked to create and implement a standards-based curriculum to provide increased academic rigor and accountability. However, there was inconsistency in what the standards were to address and confusion in the implementation of the school reforms (Education Reporter, 1997).

In January 2001, President George W. Bush enacted a highly criticized legislative reform, the *No Child Left Behind Act* (*NCLB*). According to the U.S. Department of Education (2003), the framework created was designed to ensure increased performance in all of the nation’s schools. The *NCLB Act* was a reauthorization of the *Elementary and Secondary Education Act of 1965*. This revision had as its foundation the holding of schools accountable and the offering of school choice (U.S. Department of Education, 2003). Fullan (2005) argued,

* NCLB requires all states to have an achievement-driven system in which annual yearly progress in student achievement is documented and reported publicly for every school in each state, with a sequence of escalating consequences for those schools not improving. There is little investment in capacity building and it places people in high-alert dependency mode, jumping from one solution to another in a desperate attempt to comply. Any minor gains are bound to be
outweighed by a system that guarantees superficiality, temporary solutions, and cynicism in the face of impossible goals. (p. 11)

Tyack and Cuban (1995) surmised, “Educators have often responded to flurries of reform imposed from the outside ---often inconsistent in philosophy and program--- hunkering down and reassuring themselves that this, too, shall pass” (p. 135). They argued that successful educational reforms during the past century have been gradual and incremental. Based on this pattern, they suggested that reformers focus on strategies to help educators improve instruction from the inside out rather than from the top down. They argued that reformers should bear in mind the democratic purposes that guide public education.

Reforms that lack lasting potential are what Tyack and Cuban (1995) reported as being “pie-in-the-sky” reforms. These reforms have the least success potential because they are often proposed by policymakers and officials who do not fully grasp the inner workings of the classroom. Many people believe that since they once attended school, they understand how the classroom works, while truly not understanding the complexities involved. As a result, many policymakers and officials propose new teaching innovations, are successful at creating laws and policies and in getting them passed. However, the policies may not necessarily be successfully implemented; thus, they have only a short-term effect on classroom teaching and learning.

Based on the literature regarding public school reform, policy talk, societal transformations, and long-term institutional trends are interconnected. The rhetoric of reform reflects the tension between the values of democratic politics and a competitive market economy. Basically, schools reflect ongoing cultural, political, social, and
economic changes in the larger society. Nonetheless, educators have learned from school reforms over the past several decades that regardless of the motivation schools still fall short. The difficulties encountered include the inability to sustain change due to the complexity of political and social pressures. Fullan (2005) stated that education needs a radically new mind-set for sustainable reform, suggesting that a deliberate, continual, systemic model for learning is critical in meeting the demands of today’s classrooms. Research has substantiated that training, guided development, organizational support, and critical reflection are all part of a framework for successful strategic change.

Background of the Study

Over the past several decades, professional learning in schools has been emphasized due to the growing recognition that education is challenging and the stakes are high (Guskey, 2000). Public schools are being held accountable for providing “highly-qualified” teachers. Since schools receive Title II funding from the federal government, they are required to prepare, train, and recruit high-quality teachers (U.S. Department of Education, 2003). Although NCLB defines” highly-qualified” status in terms of teacher certification and credentials, schools and district administrators must also ensure that current teachers strengthen and improve pedagogy using research-based instructional strategies (Petersen & Young, 2004).

Much of the professional development provided to teachers is done through traditional in-service or workshop training models. This approach generally encompasses weekly meetings, two hour training, or training for a full-day. Peixotto and Fager (1998) referred to this as short-term training since the focus is usually on a specific topic and
presented to the entire staff. The training does not take into account the skill set of the teacher. These traditional forms of professional development are fragmented, not relevant, lack focus, and does not measure change in instructional practices (Joyce & Showers, 2002; York-Barr, Sommers, Ghere, & Montie, 2001).

In the past, school improvement often consisted of short-term traditional training with few opportunities for follow-up or monitoring (Danielson & McGreal, 2000; Littky & Grabelle, 2004). This trend was followed by sporadic episodes of high quality professional training that included guided practice, coaching, feedback and reflection (Joyce & Showers, 2002; Zmuda, Kuklis & Kline, 2004). Most recently, school improvement and staff development initiatives have been directed at improved academic achievement, primarily in response to the requirements of the No Child Left Behind Act of 2001. Principals play a pivotal role in the school improvement process within their schools. School leaders must be able to guide their stakeholders through first and second order changes simultaneously (Leithwood, Aitken, & Jantzi, 2006). Zmuda et al. (2004) suggested that in order to improve and transform school structures to meet the high-stakes accountability requirements, leaders need to “assert the importance of changing minds, not just practices, through the messy processes of dialog, debate, and reflection” (p. vi).

The concept of reflective practice has been gaining momentum as student achievement has increased for several high impact schools. Reflective practice has also been beneficial in the development of teachers (Osterman, 1990). By teachers gaining a better understanding of their teaching practices through individual reflection, reflection with partners, reflection in small groups, and school-wide reflection (York-Barr et al.,
2001), they are more likely to improve their effectiveness in the classroom and grow professionally.

Statement of the Problem

The No Child Left Behind Act of 2001 requires school districts to notify parents annually of the professional qualifications of their children’s teachers as well as report whether schools are in compliance with the “highly qualified” teacher requirement (U.S. Department of Education, 2003). Since schools receive Title II funding from the federal government, they are required to prepare, train, and recruit high-quality teachers. Additionally, NCLB mandates that states report how schools are meeting adequate yearly progress objectives for student achievement on state assessments. Therefore, principals are charged with providing professional development activities that are designed to improve teacher quality and are linked to student academic success (Berube & Dexter, 2006). According to Berube and Dexter, the challenge becomes how to engage teachers and administrators in reflective instructional dialogue for the purpose of improving instruction and increasing student achievement.

Several studies have been conducted on the effectiveness or application of a specific reflective model as a result of a school district initiative (Chapman, 2007; Gomez, 2005; Keruskin, 2005; Skretta, 2008). These studies examined the perceptions of principals and/or teachers regarding the newly adopted strategy from the perspective of reflective practice theory and/or a supervision and evaluation viewpoint. There is a gap in the research that describes the perceptions of reflective practices by administrators and
teachers and which addresses the reality of their professional practice through the lens of adult learning theory and reflective practice theory.

Purpose of the Study

The purpose of this study was to describe the perceptions of elementary administrators and teachers from three states within the west regional area of the United States concerning reflective practice. The study also explored the perceived professional practice of administrators and teachers as it related to reflective practice. Survey data collected from the study illustrated the perceptions and reality of reflective practice in elementary school settings.

Research Questions

1. What are elementary teachers’ perceptions of the reflective practice process?
2. In what ways do elementary teachers promote reflective practice to enhance their professional growth?
3. What are elementary administrators’ perceptions of the reflective practice process?
4. In what ways do elementary administrators promote reflective practice to encourage professional development of teachers and increase student achievement?
5. What are the similarities and differences between teachers’ perceptions and administrators’ perceptions of reflective practice?
Conceptual Framework

Terehoff (2002) maintained that the art and science of teaching adults (andragogy) has a philosophy different than the method of teaching children (pedagogy). She stated that the philosophy of facilitating adult learning is based on a specific set of adult learning characteristics and principles. Brookfield (1986) suggested that six principles are involved in facilitating adult learning effectively: voluntary participation, mutual respect among participants, collaboration, praxis, critical reflection, and self-direction. Below is a summarization of the principles (Brookfield, 1986).

1. **Voluntary Participation**- Adults are voluntary participants in learning situations. They are more motivated when they are able to understand the relevance of that participation.

2. **Mutual Respect**- Increasing a sense of self-worth is important. However, participants should not be afraid to reflect upon and offer suggestions for growth.

3. **Collaboration**- Adult learning should be an ongoing collaborative process. The facilitator and participants are responsible for creating the goals and objectives as well as for the evaluation.

4. **Praxis**- Praxis is defined as the alternating and continuous engagement by teachers and learners in exploration, action, and reflection. The learning is geared toward personal liberation and action.

5. **Critical Reflection**- Critical reflection suggests an examination of one’s beliefs and the premises that trigger the learning that is taking place.
6. **Self-Direction**- Adults should assume responsibility for their own learning. This means taking control of their learning by setting their own learning goals, deciding on which learning methods to use, and evaluating their progress.

Brookfield (1986) discussed the connection between adult learning theory and a form of reflective practice called reflection-in-action. In a case study, he devised a staff development workshop for high school principals and assistant principals based on the six principles involved in facilitating adult learning. Brookfield (1986) found that facilitators of staff development were consistently required to adapt and be innovative with trainings since the needs of participants were considered during that moment in time. In addition, he discovered that the principles in facilitating adult learning were linked to Donald Schon’s beliefs about reflective practice theory, specifically reflection-in-action (Brookfield, 1986).

Schon (1983), to whom reflective practice theory is mainly attributed, claimed that the actions of practitioners are based on inherent knowledge. Practitioners look to past experiences and feelings to build new understandings. Schon (1983) claimed that the action of reflection occurs in two distinct ways: while in action, referred to as reflection-in-action and after the activity, referred to as reflection-on-action.

Schon (1983) argued that reflection-in-action experiences contain an element of surprise. Often individuals have accepted familiar routines with predictable results, but on occasion something perplexing or surprising happens. The unexpected event forces an individual to pause in the thinking process. This deliberate pause causes one to think about the situation. Schon (1983, p. 68) stated, “When someone reflects-in-action, he becomes a researcher in the practice context.” Teachers may reflect on what they have
done in order to discover how an action contributed to an unexpected outcome.

Sometimes teachers reflect in the midst of an action without interruption of the activity or event. Reflecting-in-action serves to reshape what one is doing while they are doing it. For example, a teacher may reflect-in-action on how to help a student who is not grasping a concept during the lesson. They automatically know what to do based on their previous experience. It has become routine.

Reflection-on-action evolves from the limitations inherent in reflection-in-action (Schon, 1983). Below are the four impediments that he discussed.

1. Time may be a factor if one stops to reflect during the action.
2. The flow of the action is slowed considerably if one stops to think about every aspect of the situation.
3. Reflection-in-action may lead to reflection-on-action and then back to reflection-in-action, which can disrupt the teaching process.
4. The stance for reflection and for action is not compatible; it may interrupt the activity.

For example, a teacher can teach a lesson and after that lesson reflect upon it to make changes or begin reflection after the unit has been taught to make improvements. The teacher explores why s/he acted a certain way, what happened during the lesson, and raises questions and ideas about teaching practices.

Killion and Todnem (1991) expanded the reflective practice theory to include a third way of reflecting named reflection-for-action. They believed that by examining past and present actions, knowledge is generated to inform future actions. The reflection occurs before the action and is geared toward a desired outcome. For example, a teacher
identifies a problem that they want resolved in the classroom. The teacher then determines the desired outcome. Next, the teacher thinks about the strategies and actions already performed. Through discussion with colleagues, the teacher reflects about whether the previous steps were effective in accomplishing the desired outcome. If they were not, then action steps are developed to help reach the desired outcome.

Copper and Boyd (1998) agreed that there are three distinct forms of reflective practice. In addition, they took the position that there were methods of reflection that led to sustained change and professional growth of teachers. The methods of reflection were:

(a) individual reflective practices; (b) partner reflective practices; (c) small group reflective practices; and, (d) large group reflective practices. According to York-Barr et al. (2001), the method of reflective practice is spiraled in nature. It involves continuous learning and improvement. Additionally, it requires participants to think critically about their craft both to refine teaching practices and to grow professionally.

Significance of the Study

Much research has been conducted on the concept of reflection and models of reflective practice. In more recent studies (Chapman, 2007; Gomez, 2005; Keruskin, 2005; Skretta, 2008), emphasis has been placed on specific types of school-wide reflective models such as cognitive coaching and classroom walk-throughs. These studies measured attitudes about the implementation of a program as a result of a school district or state initiative. It is believed that the theoretical frameworks have been grounded in reflective practice theory, teacher evaluation, and supervision. Conversely, there is limited information about general perceptions of reflection, various reflective
designs, and the actual professional practices related to reflection. The theoretical framework of adult learning theory and reflective practice theory provides a different viewpoint. In this study, the researcher examined the beliefs of administrators and teachers about reflection and compared it to the reality of their professional practices.

The usefulness of the data obtained from this study is two-fold. First, they inform general practitioners i.e. administrators as to the benefit of reflection for purposes of teacher professional growth, improved student achievement, and school improvement. Secondly, the data informs district officials about the merit of reflection and how this concept can be included in evaluation instruments for teachers. Copper and Boyd (1998) proposed reflection as a method for facilitating teachers’ sustained change and growth. They argued that teachers must continually work to expand their knowledge in order to provide students with quality instruction and learning opportunities (Danielson, 2002).

Research Design and Methodology

The study was conducted using a regional cross-sectional survey design (Creswell, 2008; McMillan & Schumacher, 1997). The method of sampling was targeted (Creswell, 2008). Two participant groups were selected from their State Department of Education’s database (Oregon and Utah). The remaining participant group was members of an organization for administrators within their perspective state (Nevada). Principals and teachers in the study completed an attitude survey with open-ended questions. Follow-up telephone interviews were conducted with principals and teachers to obtain further information about the reflective practice process. A pilot test for the teacher and administrator protocol was administered using the basic guidelines for pilot testing as
outlined by Fink (2006). Dillman’s (2007) principles of survey implementation were utilized to collect the data. Statistics from the *Statistical Package for Social Science (SPSS)* was used to analyze the survey close-ended questions. A content analysis was conducted for the open-ended questions and interview responses to find predetermined and emerging themes. Additionally, a comparison was made between the perceptions of administrators and teachers concerning reflection.

Limitations

1. This study focused specifically on elementary administrators and teachers and was not representative of individuals in the middle school or high school setting.

2. The perceptions and practices of the administrators and teachers were limited to their professional development and experiences with reflective practice.

3. The survey data were limited to administrators and teachers that voluntarily participated in the study.

4. Administrators and teachers responded based on what they perceived to be socially acceptable practices.

Delimitations

1. The study was delimited to elementary administrators who were members of their state administrator organization and whose State Department of Education had a public database for schools.

2. The study was descriptive in nature and did not draw conclusions applicable to other school settings.
Assumptions

1. It was assumed that administrators and teachers understood and practiced reflection for purposes of professional growth and to bring about sustained change.

2. It was assumed that administrators were the instructional leaders of the school and understood how to facilitate adult learning.

Definition of Terms

Administrators: For the purpose of this study, this includes principals on the elementary level.

Adult learning: The process of engaging adults in the learning process (Knowles, Holton, and Swanson, 2005).

Adequate Yearly Progress (AYP): It is the minimum level of improvement that states, school districts and schools must achieve each year (U.S. Department of Education, 2004). It is how individual states measure progress toward achieving state academic standards.

Elementary school: For the purpose of this study, it includes schools with grades K through 5.

No Child Left Behind Act of 2001 (NCLB): An Act by Congress intended to close the achievement gap through accountability, flexibility, and choice (No Child Left Behind Act, 2002).
**Professional development:** Activities or training for the purpose of expanding knowledge and enhancing skills. This term will be used interchangeably with professional learning.

**Professional learning communities (PLC):** Hord (2009) provided this definition of professional learning communities: “Individuals coming together in a group in order to interact in meaningful activities to learn deeply with colleagues about an identified topic, to develop shared meaning, and identify shared purposes related to the topic” (p.41).

**Professional practice:** The work ethic of administrators and teachers pertaining to their behavior on the job.

**Reflection:** The process or act of analyzing one’s actions by focusing on the process of achieving the outcome (Killion & Todnem, 1991). This can include analyzing products such as student work samples, student achievement data, etc.

**Reflective practice:** York-Barr et al. (2001) defined reflective practice as, “An inquiry approach to teaching that involves personal commitment to continuous learning and improvement” (p.3).

**School reform:** Programs and/or policies enacted to bring about a positive change in the education system.

**Supervision:** According to Zepeda, Wood and O’Hair (1996) supervision is, “Interaction in which the supervisor and teacher(s) are active in creating and supporting a collaborative learning environment focused on reducing isolation and encouraging teachers to examine and reflect upon their teaching” (p. 29).

**Teachers:** For the purpose of this study, this includes teachers who teach in grades K through 5.
Organization of the Study

This study was written as a five chapter dissertation. This first chapter provides a macro perspective of educational reform and its impact on the professional learning in schools. Within this chapter, adult learning, reflective practice theory, and reflective methods served as the theoretical framework. In Chapter 2, literature on supervision, supervision models, trends in reflection to promote teacher growth, and the notion of professional learning communities is explored. Chapter 3 outlines the survey design and methodology. The results section, Chapter 4, details the survey responses. A synthesis of the open-ended responses is described from the viewpoint of administrators and teachers. Tables display responses and show comparisons between administrators and teachers as well as descriptions of its meaning. Chapter 5 provides a conclusion and suggestions for further research.
CHAPTER 2
LITERATURE REVIEW

School reform plays an integral role in how schools conduct business (Astuto, Clark, Read, McGree, & Fernandez, 1994). With the enactment of the No Child Left Behind Act of 2001, administrators have faced extreme pressure to provide professional development to teachers to enhance their skill and knowledge base, make school improvements, and increase student achievement. First, in this section of the review, supervision is defined and a historical perspective is briefly explored to illustrate its evolution. Secondly, various supervision models are examined to show how administrators assist in the professional learning of teachers. The models reviewed are clinical supervision, humanistic/artistic supervision, technical/didactic models, and developmental/reflective models. Following are trends in reflection that promote teacher growth, school improvement, and student performance. The trends reviewed are journals, teacher portfolios, cognitive coaching, peer coaching, study groups, action research, classroom walk-throughs, and instructional rounds. They are divided based on how they occur: individually, with a partner, in a small group, and school-wide. Next, connections are made about research on adult learning, how administrators can facilitate reflection to promote professional growth of teachers, and professional learning communities. Lastly, recent doctoral studies on reflective models are shared to demonstrate the gap in the research and the significance of this study.
Supervision

There are several definitions or interpretations of supervision. Wiles and Bondi (1986) defined the role of the supervisor as one in which the administrator works with teachers to improve the educational process and assist in the growth and development of students. According to Alfonso, Firth, and Neville (1981), supervisors are responsible for directing and guiding the work process. Supervision is an integration of processes, procedures, and conditions that are deliberately designed to advance the work effectiveness of individuals. Betts (1968) stated:

A supervisor is any person who is given authority and responsibility for planning and controlling the work of a group by close contact. Broadly speaking, this definition means that a supervisor may be delegated the authority to engage, transfer, suspend, reprimand, or dismiss an employee under his control. The definition may also be interpreted in its narrow sense to include anyone who directs the work of others by giving instructions on production, by coordinating specialist departments and by recommending courses of action management. Supervision implies operating at close range by actually overseeing or controlling on the shop floor, dealing with situations on the spot as they arise, whereas management implies controlling remotely by using other administrative means. (pp. 6-7)

Oliva (1976) contended that supervisors work from selected or all three domains: (a) instructional development, (b) curriculum development, and, or (c) staff development. For the purpose of this literature review, the transformative definition of supervision will be used:
Interaction in which the supervisor and teacher(s) are active in creating and supporting a collaborative learning environment focused on reducing isolation and encouraging teachers to examine and reflect upon their teaching. (Zepeda, Wood, & O’Hair, 1996, p. 29)

History of Supervision

Understanding the history of the supervisory process in American public education requires knowledge of the way this process has evolved over time. The historical viewpoint is critical to the decisions that shape the future (Alfonso, Firth, & Neville, 1981; Butts & Cremin, 1953).

As early as the 1600s, a governance structure, whether implied or formal, was established to oversee schools. In 1647, the Deluder Act was passed by the Commonwealth of Massachusetts (Alfonso, Firth, & Neville, 1981; Oliva, 1993; Tyack & Cuban, 1995). According to Swearingen (1962), “Nothing was said specifically about inspection or supervision of schools, but the enactment did imply a felt need for establishing some kind of community responsibility for the success of the school” (p. 62).

In the early 1700s, Burton and Brueckner (1955) and Small (1969) contended that this was the first appearance of supervision. During this time, laymen traveled and were responsible for inspecting school facilities and monitoring pupils’ progress. Suzzallo (1969) documented that in Massachusetts the business of education was delegated to selectmen, who were ministers or town’s representatives. He further maintained that special school officials came into existence. The school committee evolved from town meetings and the school superintendents evolved from the school committee. This marked a significant period in local supervision. Dickey (1948) summarized this early
period of supervision with three fundamental approaches: “a) authority and autocratic rule, b) emphasis upon the inspection, and c) conformity to standards as prescribed by the committee laymen” (p. 8).

By the 1800s, the size of schools began to increase due to the growth in the town’s population (Alfonso, Firth, & Neville, 1981). The public began to look for professionally trained persons to supervise the schools (Oliva, 1993). In fact, Horace Mann secretary of the Massachusetts State Board of Education, created the first school for training teachers. By 1870, Oliva (1993) purported that approximately 30 school systems were led by superintendents. Superintendents spent the majority of their time visiting and supervising schools, which proved to be quite challenging because of the demanding nature of the job. Due to the growth of cities, the public felt that there needed to be a supervisor directly linked to the schools to observe more frequently. This marked the transfer of local supervision from the superintendent to the principal. The principal was seen as the inspector and the style of supervision referred to as “snoopervision” (Alfonso, Firth, & Neville, 1981; Oliva, 1993).

In the late nineteenth and early twentieth centuries, there was a shift in the supervision approach. Scientific and bureaucratic approaches replaced the inspection approach (Oliva, 1993). This was a result from Fredrick Taylor’s work on scientific management and efficiency (Callahan, 1962) and Max Weber’s work on bureaucratic management of organizations (Owens, 2001). With the scientific approach, teachers were evaluated based on instructional principles in their teaching constituted by the basic principles of scientific management (Callahan, 1962). Teaching and management was seen as a science. According to Lavisky (1973), the scientific approach represented the
start of curriculum decision-making since the fourth guiding principle in scientific management related to the management and workmen sharing responsibility.

Conversely, the bureaucratic model provided a hierarchy of authority and responsibility (Oliva, 1993). The school superintendents were at the top of the hierarchy and the teachers at the bottom.

At mid-twentieth century, supervision shifted again, but in the direction of human relations and group dynamics (Alfonso, Firth, & Neville, 1981; Lucio & McNeil, 1962; Oliva, 1993). Alfonso, Firth, and Neville (1981) affirmed:

Supervision based upon sound human relations and cooperative professional efforts was guided by the findings of social and perceptual psychology. Since supervision was seen as a dynamic process that encouraged the interchange of ideas and the interplay of personalities, the most productive level of human interaction was needed if supervision were to be effective. All participants had to be sensitive to each other as individuals and professionals. (p.32)

Supervision became a process of working with people on problems for the betterment of the school. In contrast, Burton and Brueckner (1955) espoused:

Modern supervision, by contrast, involves the systematic study and analysis of the entire teaching-learning situation utilizing a carefully planned program that has been cooperatively derived from the situation and which is adapted to the needs of those involved in it. Special help is also given to individual teachers who encounter problems that cannot be solved by ordinary group supervisory procedures. (p. 13)
This opposing viewpoint illustrates that the practices of supervision during this time period were on a continuum. During the late 1900s, Oliva (1993) stated:

No longer was supervision a handling-down of methods to teachers, followed by monitoring their performance. Collaboration and partnership between supervisors and teachers became important. Supervisors began to realize that their success was dependent more on interpersonal skills than on technical skills and knowledge; they [supervisors] had to become more sensitive to the behavior of groups and individuals within groups. (p. 9)

In the twenty-first century, we find a fusion of attitudes and behaviors about supervision. Supervisors act somewhere along the continuum. Some supervisors operate using principles of scientific supervision with a heavy reliance on human relations (Oliva, 1993). Based on Gordon (1997), democratic, cooperative, clinical, human resource-based, developmental, and transformational supervision have been advocated. However, Glanz (1995) stated that some still have the inspection mentality. Nonetheless, we are beginning to see teachers acting as instructional supervisors such as coaching peers or serving as mentors (Oliva, 1993). Krajewski (1996) described today’s approach as collaborative. In fact, he predicts that by the year 2015, supervision will consist not of structured options based on standards and expectations, but will be based upon the teachers’ individual needs and goals.

Supervision Models

There are popular and lasting approaches to supervision (Pajak, 2000): clinical supervision (Cogan, 1973; Mosher & Purpel, 1972), humanistic/artistic (Blumberg 1974;
Eisner, 1982), technical/didactic (Acheson and Gall, 2003; Hunter, 1980), and developmental/reflective models (Costa & Garmston, 2002; Glickman, 1981; Schon, 1987; Smyth, 1989). According to Blasé and Blasé (2004), the aforementioned supervision models provide varying procedures for observations, feedback, and perspectives for supervisory interactions with teachers to enhance teaching and learning.

**Clinical Supervision**

Clinical supervision is the brainchild of Goldhammer, Cogan, and Anderson (Daresh, 1995). Cogan (1973) defined this supervision model as being “focused upon the improvement of the teacher’s classroom instruction. The principal data of clinical supervision includes records of classroom events: what the teacher and students do in the classroom during the teaching-learning process” (p. 9). This model of clinical supervision included eight steps:

1. Establishing teacher-supervisor relationship.
2. Planning with teacher.
3. Planning strategy of observation.
4. Observing instruction.
5. Analyzing teaching-learning process.
6. Planning strategy of the conference.
7. The conference.
8. Renewed planning.

Mosher and Purpel (1972) condensed clinical supervision into three steps: planning the conference, observing, and evaluating or analyzing.
Humanistic/Artistic Supervision

In the humanistic approach to supervision, Blumberg (1974) examined the human side of relationships between supervisors and teachers. He investigated the organizational and behavioral dimensions of what he referred to as a “cold war.” Blumberg argued that the majority of problems between teachers and supervisors are behavioral conflicts and related to personality differences. Additionally, he viewed the school as an organic social system. The norms and values of the school directly affect the relationships between teachers and supervisors.

Eisner (1982) felt, “Although teaching is often regarded as an art or a craft, it is most often studied as if it were, or aspired to be, a science” (p. 53). He raised the question of the relationship of science and art to education for others to consider an artistic approach to supervision. In order to do this, Eisner generated the following fallacies of scientific supervision (pp. 54-59):

1. *Fallacy of additivity*- Committed by attempting to study or supervise teaching using a procedure that implies or assumes that the incidence of particular teaching behaviors have equal pedagogical weight i.e. structuring, giving examples, positive and negative reinforcement.

2. *Fallacy of composition* - The whole is equal to the sum of its parts. This is committed when the quality of teaching is determined by counting the incidence of teacher behaviors in a variable or category and then by adding to this sum the scores produced in other variables.

3. *Fallacy of concreteness*- This is the offshoot of behaviorism which holds that the exclusive referent for observation is the manifest behavior of the student. When
we observe pupils or teachers we do not merely look at the behavior they display, but also at its meaning and the quality of their experience.

4. *Fallacy of the act*- This is the tendency to neglect the process of educational life as it unfolds in classrooms and schools.

5. *Fallacy of method*- Neglecting the process is the more general tendency to neglect those aspects of teaching that are immune to the criteria and instruments that the researcher employs.

*Technical/Didactic Models*

Technical and didactic models of supervision emphasize techniques and hands-on approaches of clinical supervision. Supervisors use varied data-gathering procedures when observing teachers (Oliva, 1993). Acheson and Gall (2003) described techniques other than instrumentation when observing teachers. The techniques are:

1. *Verbatim and Selective Verbatim*- Word-for-word transcriptions to examine teacher questions, feedback, and classroom management.

2. *Observational Records*- Seating chart to monitor the movement pattern and verbal flow.


4. *Checklists and Time Coding*- Student surveys, questionnaires, and teacher evaluation scales.

Post-observation conferences are an element of any of the clinical supervision models, with the main purpose being to provide feedback to the teacher about their performance. Perceptive teachers are able to reflect and analyze their own performance (Oliva, 1993). Hunter (1980) identified six types of supervisory conferences to assist
teachers in this practice. The first five (Type A - Type E) are instructional conferences and the last (Type F) is evaluative. The conference types are as follows:

1. *Type A:* Identify effective instructional behaviors.
2. *Type B:* Generate a variety of teaching behaviors that are effective.
3. *Type C:* Find ways to change methods and improve on instruction.
4. *Type D:* Inform teachers of unfavorable teaching practices and suggest alternative behaviors.
5. *Type E:* Promote continuing growth of excellent teachers.

*Developmental/Reflective Models*

Glickman (1981) suggested that leaders think about supervision in a developmental manner and interact with staff in more effective ways. He further proposed that leaders select approaches based on the needs of the teacher. There is no one approach that works for all. Glickman identified three orientations to supervision based on the purposeful behaviors of listening, clarifying, encouraging, presenting, problem solving, negotiating, demonstrating, directing, standardizing, and reinforcing (pp. 17-37):

1. *Directive Orientation,* This includes the major behaviors of clarifying, presenting, demonstrating, directing, standardizing, and reinforcing. The final outcome would be an assignment for the teacher to carry out over a specified period of time.
2. *Collaborative Orientation,* This includes the major behaviors of listening, presenting, problem-solving, and negotiating. The end result would be a mutually
agreed upon contract by supervisor and teacher that would delineate the structure, process, and criteria for subsequent instructional improvement.

3. *Nondirective Orientation* - The major premise is that teachers are capable of analyzing and solving their own instructional problems. Only when the individual sees the need for change and takes major responsibility for it will instructional improvement be meaningful and lasting. Therefore, the supervisor acts as a facilitator imposing little formal structure.

**Reflective Models**

Reflection is a vehicle for change and there are several ways to achieve this (Fullan, 2005). It is only through this practice that teachers experience growth (York-Barr, Sommers, Ghere, & Montie, 2001). Schon (1987) defined reflective practice as a critical process in refining one’s artistry and craft in a specific discipline. He recommended reflective practice as a way for beginners in a discipline to recognize consonance between their own individual practices and those of successful practitioners. Additionally, reflective practice involves thoughtfully considering one's own experiences in applying knowledge to practice while being coached by professionals in the discipline. Smyth (1989) contended that there are four sequential stages linked to questions, which lead teachers to critical reflection:

1. *Describing* - What do I do?
2. *Informing* - What does this mean?
3. *Confronting* - How did I come to be like this?
4. *Constructing* - How might I do things differently?
Researchers (Cooper & Boyd, 1998; York-Barr et al., 2001) have discussed that critical reflection can occur and lead to lasting school change and professional growth of teachers through the following types of reflection: individual reflection, reflection with partners, reflection in small groups, and large group reflection. Although there are many approaches to each type of reflective practice, for the purpose of this review of literature, the focus is on journals and teacher portfolios for individual reflective practices; cognitive coaching and peer observations for partner reflections; study groups and action research for small group reflection, and classroom walk-throughs and instructional rounds for school-wide reflection.

**Individual Reflective Practices**

**Journals.**

Ira Progoff (Holly, 1989; Progoff; 1983; Rainer, 1978) brought journal writing as a form of growth to the public forefront. Although the form of writing that Progoff detailed refers to the technique of recording daily activities, dreams, and life events, Rainer (1978) believed that this same mode could be used to process self-discovery using diary devices. She purported reflection as one of four diary devices. Reflection brings about contemplation of intellect, which happens when one takes a step back to make connections to what was not noticed before (Rainer, 1978).

Holly (1989) explored journal writing as a reflective instrument to link teaching and professional development. This approach enables reflection to be a deliberative process since a teacher has to pause to write and then analyze for practice. Therefore, it is considered to be reflection-on-action since the reflecting occurs after the teaching phase (Schon, 1983).
There are both subjective and objective dimensions to journal writing (Holly, 1989; Rainer, 1978). Holly (1989) stated that the journal is a dialogue that documents what happened, feelings and facts surrounding an event, the steps involved, and important elements. Through analysis and interpretation of the writings, patterns and themes emerge that assist with future planning. Overall, the journal is a tool for personal and professional growth (Cooper & Boyd, 1998; Holly, 1989; Rainer, 1978; York-Barr et al., 2001).

*Teacher Portfolios.*

The popularity of teacher portfolios grew after the National Board for Professional Teaching Standards (NBPTS) established a professional model for teachers seeking national certification (Bullock & Hawk, 2005). The rigorous standards were created for competent, experienced teachers wishing to receive the highest honor in the teaching profession (National Board for Professional Teaching Standards, 2009). Prior to this time, portfolios had been mainly used in other professions as well as with pre-service teachers as part of the teacher development programs at many colleges and universities (Arter & Spandel, 1992).

Tucker, Stronge, and Gareis (2002) defined teacher portfolios as, “A structured collection of selected artifacts that demonstrate a teacher’s competence and growth” (p. 3). Teachers gather samples of professional documents such as lesson plans, student work samples, units of study, teaching philosophy, achievements, etc., which reflect their knowledge, skills, and beliefs (Bullock & Hawk, 2005). There must be a rationale for the artifacts selected (Arter & Spandel, 1992). Thus, the actual process of gathering the samples is reflective in nature (York-Barr et al., 2001). Furthermore, there are written
thoughts about the documents contained in the portfolio that are reflective too (Arter & Spandel, 1992; Bullock & Hawk, 2005; Tucker, Stronge, & Gareis, 2002; York-Barr et al., 2001). According to Bullock and Hawk (2005), reflection is a critical component in the development of the portfolio.

Reflection provides teachers an opportunity to self-evaluate their teaching and practices (Tucker, Stronge, & Gareis, 2002). When teachers think about their teaching and what improvements need to be made, they grow professionally. Over a period of time, a teacher is able to see his/her growth through the portfolio (York-Barr et al., 2001).

The teacher portfolio is indicative of the two forms of reflective theory that Schon (1983) espoused. Making decisions about the artifacts to include in the portfolio is an example of reflection-in-action. The written component serves as an example of reflection-on-action.

Partner Reflective Practices

Cognitive Coaching.

In the book, *Cognitive Coaching: A Foundation for Renaissance Schools* (Costa & Garmston, 1994), it is noted that in the early 1970s, Arthur Costa began to apply the pioneer work of Cogan, Goldhammer, and Anderson in clinical supervision as well as examine cognition and instruction. During this same time, Robert Garmston worked on nonjudgmental verbal skills in teaching and strategies of group dynamics for school improvement. Together, Costa and Garmston combined their works in the early 1980s and developed what is termed cognitive coaching (Costa & Garmston, 1994).

Costa and Garmston (2002) described the cognitive coaching model as a nonjudgmental reflective practice informed by current work in brain research and
constructivist learning theory. Cognitive coaching is a set of strategies designed to promote conversations about planning, reflecting, and problem solving. Costa and Garmston (1994) organized the coaching around three goals: trust, mutual learning, and growth toward holonomy. They defined holonomy as, “When a teacher has the ability to both self-regulate and be regulated by the shared norms and values of the school” (Costa & Garmston, 1994, p. 3).

Cognitive coaching functions in four phases of instructional thought. Below is a summarization (Costa & Garmston, 1994, pp. 18-22).

1. **Planning** – A foundation of trust is established between the coach and the teacher. The teacher discusses their goals for the observation, which are either based on their own teaching behaviors or the behaviors of students in the classroom. The teacher provides a detailed plan of the lesson in order to refine the lesson if necessary. Additionally, the parameters of the reflective conference are agreed upon and how the data will be collected.

2. **Teaching** – The coach monitors and collects data regarding the behaviors discussed in the planning conference.

3. **Reflecting Conference** – This is conducted after a period of time has elapsed. This allows the teacher an opportunity to reflect and analyze the lesson. It provides the coach an opportunity to organize the data and plan probing questions to illicit deeper meaning and thought. During the conference, the teacher shares their impressions of the lesson, comparisons are made on the established goal and the actual behaviors, and the teacher discusses future teaching practices based on their new discoveries as well as reflects on the overall coaching experience.
The reflective conference is considered a form of reflection-on-action since a specific time is set to think about the events of the lesson (Schon, 1983). The coach and teacher analyze the data and make comparisons between the actual teaching and the intended behaviors.

*Peer Coaching.*

Peer coaching is an approach used to study teaching (Joyce & Showers 1996), refine teaching practices (Cooper & Boyd, 1998), and encourage reflective practice (Thorn, McLeod, & Goldsmith, 2007). It involves a continuous relationship with a partner founded on trust and openness (Cooper & Boyd, 1998; Thorn, McLeod, & Goldsmith, 2007). Each teacher in this approach has an opportunity to act as the coach because of their expertise in an area.

Below is a summarization of the peer coaching cycle suggested by Cooper and Boyd (1998, p. 53).

1. A relationship of trust is built between participants. During this stage, the benefits of coaching are discussed and the expectations defined.
2. A pre-conference is conducted to plan lessons and establish a focus for the observation.
3. The teaching of the coach is observed based on the focus area agreed upon in the pre-conference. Notes are written in narrative or a checklist is utilized.
4. After the observation, the coach and observing teacher are engaged in self-reflection. The coach thinks about the lesson and formulates possible questions for the post-conference. The observing teacher reviews the notes and draws conclusions.
5. A post-conference is conducted. The observing teacher shares impressions of the lesson and what it means for their personal teaching.

6. The dialogue is shifted and focused on the coaching process. The coach solicits feedback about how he/she can assist the observing teacher with implementation of the strategy.

Joyce and Showers (1996) found, after an exhaustive review of the literature on teacher training and the implementation, that in order for transfer of skills to occur from training into the classroom the following are necessary: (a) modeling of the strategy, (b) time to practice, and (c) feedback and assistance. Coaching is essential to the refinement of teaching practices (Cooper & Boyd, 1998) and it leads to greater transferability (Joyce & Showers, 1996).

The difference between peer coaching and cognitive coaching lies in the role of the coach. In peer coaching, the coach models the desired practice. In cognitive coaching, the coach encourages the desired behavior from the sidelines. The coach is not the expert performer (Costa & Garmston, 1994). Nonetheless, the reflective actions of the coach and the teacher in peer coaching is a form of reflection-on-action just as in cognitive coaching.

*Small Group Reflective Practices*

*Study Groups.*

Study groups have been utilized as a tool for examining practices dating back to colonial times. In fact, Benjamin Franklin has been documented as the first advocate of study groups in America (Makibbin & Spraque, 1991). During this time, the purpose was to review moral and successful business practices. Likewise, many civic organizations
used study groups or what Oliver (1987) referred to as study circles to discuss critical social issues. In the early 1980s, study groups became a renewed interest in the professional development of teachers (Little, 1982).

Study groups are seen as essential to the quality of teaching (Stigler & Hiebert, 1999). They are a way to capture the art of teaching through professional reading (Sweeney, 2003), dialogue (Cooper & Boyd, 1998; York-Barr et al., 2001), and observation (Little, 1982). Study groups consist of 6-10 teachers who meet regularly to dialogue about a common interest (Cooper & Boyd, 1998; Sweeney, 2003; York-Barr et al., 2001). Teachers investigate curricular, instructional, and assessment innovations to refine their knowledge and incorporate best practices into their teaching repertoire.

However, in some study group models, classroom observations are a component (Makibbin & Spraque, 1991). The group participants plan the lesson together, observe each other, and provide feedback about the teaching and learning. In this study group model, teachers put theory into practice. This is identified as reflection-for-action (Killion & Todnem, 1991) and reflection-on-action (Schon, 1983). Reflection-for-action occurs when the teachers research, discuss, and create action steps for the new strategies for the purpose of professional growth and/or positive student outcomes. Reflection-on-action occurs after the implementation of the strategy and when the teacher contemplates with peers about the lesson and/or student behaviors.

*Action Research.*

The concept of research in an educational setting has been traced back to the 1940s with the work of Kurt Lewin, a social psychologist and educator (Ferrance, 2000; McFarland & Stansell, 1993). In the late 1940s, Stephen Corey was among the first to
use action research in the field of education (Corey, 1953). He believed that the use of the scientific method would bring change since research and application were both involved. In spite of this, in the mid 1950s, action research was viewed as being unscientific (McFarland & Stansell, 1993). Interest in the concept began to diminish after this time. However, in the 1970s, it surfaced again. Today, it is seen as a tool for professional development (Ferrance, 2000).

Ferrance (2000, p. 1) defined action research as, “A process in which participants examine their own educational practice systematically and carefully, using the techniques of research.” This is accomplished with different formats: individual action with reflection, individual action with collaborative reflection, or collaborative with reflection (Cooper & Boyd, 1998). For the purpose of this section on small group reflective practices, only the collaborative with reflection design is discussed.

In action research, routines are structured to guide the process. The routines are guided through six phases of inquiry (Ferrance, 2000, pp. 9-13).

1. *Identify a Problem Area* – Teachers collectively identify a meaningful problem, school issue, or area of interest i.e. curriculum, instruction, student achievement, school climate, etc.

2. *Gather Data* – Collect data from multiple sources to understand the scope of the problem.

3. *Interpret Data* – Analyze and look for patterns.

4. *Act on Evidence* – Use the data and current literature to design a plan of action and implement new technique.
5. **Evaluate Results** – Assess the effects of the intervention to ascertain whether improvement was made.

6. **Reflection** – Raise questions about the results, plan for revisions, and identify next steps.

The literature on action research indicates that it creates a frame of mind for school improvement; enhances problem-solving and instructional decision-making; promotes self-assessment and reflection; instills a commitment to continuous improvement; creates a positive school climate; impacts practice directly; and, encourages teacher empowerment (Glanz, 1999). Glanz contended that action research helps practitioners glean insights into their practice. The process permits teachers to research and reflect on teaching to acquire knowledge and grow professionally (Ferrance, 2000).

Action research is a form of reflection-for-action (Killion & Todnem, 1991). Teachers use past experiences, data, and research to identify a future way of behaving or thinking to produce an outcome (York-Barr et al., 2001).

*School-wide Reflective Practices*

*Classroom Walk-Throughs.*

Effective leaders have used “Management by Wandering Around” (MBWA) since Alexander the Great (Frase & Hetzel, 1990). Frase and Hetzel asserted:

The MBWA leader wanders throughout the school community because he knows that is where education takes place. The MBWA principal is out listening for hints and clues to strengths, weaknesses, problems, and solutions. He doesn’t retreat to the hallowed walls of his office to cast aspersions or point fingers of blame in the tradition of Marie Antoinette and King Louis XVI…The MBWA
principal is off his seat and on his feet looking and listening for better ways to do things-wandering with a purpose. (p. x)

Dave Packard and Bill Hewlett are considered to be the pioneers of the technique of MBWA (Hewlett-Packard, 1993). However, Peters and Waterman (1982) declared that MBWA is based on common sense and centuries of experience instead of research and scientific studies. According to many (Downey, English, Frase, Poston, & Steffy, 2004; Fink & Resnick, 2001; Frase & Hetzel, 1990; Peters & Waterman, 1982), this supervisory concept is nothing new. Nonetheless, this theory entered the educational management arena in the 1990s and has been a trend since this time (Frase & Hetzel, 1990).

Today MBWA may also be known as classroom walk-through observations. Therefore, these two terms will be used interchangeably. According to Fink and Resnick (2001), classroom walk-through observations are organized supervisory techniques that require the supervisor to visit classrooms to observe instructional practices and assess student learning. The primary purpose of classroom walk-through observations is to provide structure for a professional dialogue between the supervisor and the teachers about the instructional practices and happenings of the classroom (Downey et al., 2004). Fink and Resnick (2001) pointed out that the essential elements of classroom walk-through observations are brevity, focus, and dialogue. Downey (2004) developed a five-step walk-through observation structure that should take approximately three minutes:

1. **Student Orientation to the Work**- Are students on task?
2. **Curricular Decision Points**- What is the curricular objective and is it aligned to district or state standards?
3. **Instructional Decision Points** - What instructional practices are being utilized to teach the curricular objectives?

4. “**Walk-the-Walls**: Curricular and Instructional Decisions” - What evidence is there of past objectives and/or instructional decisions i.e. portfolios, student work on bulletin boards, etc.?

5. **Safety and Health Issues** - Are there any safety or health concerns that need to be addressed?

Follow-up conversations transpire after the walk-through approach that is reflective in nature (Downey et al., 2004). The ultimate goal of this approach is to move staff to a level of collegial collaboration and reflection toward instructional practices, which is considered a form of reflection-on-action (Schon, 1983).

**Instructional Rounds.**

Most recently, City, Elmore, Fiarmat, and Teitel (2009), introduced the practice of instructional rounds. This concept was adapted and extended based upon practices in the medical industry. Physicians are known to develop their knowledge of practice through observation, analysis, and discussion with other colleagues. City et al. suggested that educational leaders use a similar format to create a culture of solving common problems and improving instruction. They believe that administrators i.e. superintendents and principals are responsible for instructional improvement not solely the teacher.

Instructional rounds consist of a four step process: problem identification, observation, debriefing, and next steps (City et al., 2009).

1. **Problem Identification** - A network comprised of administrators identify an instructional related problem at a particular member’s school.
2. Observation- Members of the network observe for a 20 minute period in four to five classrooms. Administrators take anecdotal notes about what is said and heard during the visit.

3. Debriefing- The network meets to discuss observations. The purpose of the discussion is to analyze the descriptive data, look for patterns, and make predictions. Predictions are linked to teacher’s instruction and student learning.

4. Next Level of Work- Members make recommendations about improving the teaching and learning in the classroom as well as the organizational practices that are necessary to support the instruction.

The premise of instructional rounds is to build a common language and culture among members in a network (City et al., 2009). This is about the organization making a cultural transformation whereby practitioners have a deep understanding of good instruction and best practices. Instructional rounds are seen as a form of reflection-for-action (Killion & Todnem, 1991). The intent is to improve practices as a system and produce desirable results.

Promoting Reflective Practices

Reflective models are a way for administrators to promote reflection into the professional learning environment of the school. When administrators foster an environment that values communication and active participation, reflective practices thrive (Osterman, 1990). So, how do administrators begin the journey?

In order to begin, administrators must have a solid understanding of how adults learn. As mentioned in the introduction, the principles of adult learning theory facilitate this
process. Research (Brookfield, 1986; Darkenwald & Merriam, 1982; Merriam, 1993) has shown that adults must have the desire and motivation to acquire new skills and knowledge as well as improve professional practices. When adults are willing to learn, they are less likely to resist participatory learning techniques (Brookfield, 1986). Therefore, the activities ensued are relevant and meet the needs of the teachers (York-Barr et al., 2001).

According to Brookfield (1986), the environmental setting must be structured to build mutual respect and trust between all participants. Teachers become more receptive when this is evident. Put-downs, sarcasm, and belittling are unacceptable. Fellow participants are nonjudgmental when teachers share personal experiences, teaching behaviors, and practices.

Research (Osterman, 1990; Osterman & Kottkamp, 1993) has indicated that the act of dialogue is important. Dialogue allows teachers to verbalize their thoughts and begin to develop a self-awareness about changes that need to occur to refine practice. Consequently, it is essential for teachers to understand how personal beliefs and values, past experiences, and present practice shape their viewpoints and effect future teaching practices (Killion & Todnem, 1991). The discussions facilitate collaboration, which allows the group to discover a common area of interest to be explored (Brookfield, 1986). Thus, the learning is self-directed and the participants become empowered.

Brookfield (1986, p. 15) contended that adults acquire skills through the process of investigation and exploration, followed by action grounded in the exploration, followed by reflection on the action, followed by further investigation and exploration. During this process, teachers cycle back and forth between current and new knowledge (Even, 1987).
Cooper and Boyd (1998) believed that ongoing discussions and time to analyze one’s own experiences is the richest source of adult learning.

Ultimately, the purpose of reflective practices is behavioral change and improved performance (Osterman & Kottkamp, 1993). Based on Osterman (1990), “Professional growth often depends not merely on developing new ideas or theories of action, but on eliminating or modifying those old ideas that have been shaping behavior” (p. 135).

Huffman and Hipp (2003) believed that when teachers reflect frequently on their practices, assess their effectiveness, study collectively, and make decisions based on needs, they are functioning as a community of professional learners.

Professional Learning Communities

The idea of professional learning communities presented itself in education during the early 1990s (Hord, 1997). In Peter Senge’s book, *The Fifth Discipline*, he described how organizations learn and build capacity using five disciplines: systems thinking, personal mastery, mental models, shared vision, and team learning.

1. *Systems Thinking*- A conceptual framework based on the premise that an event or a series of events within an organization can impact the entire system positively or negatively. For instance, an organization experiences problems when parts of the system are in disequilibrium. There is a link between the parts and interactions of the system and the organization as a whole. Systems thinking is the cornerstone of the learning organization. It integrates the other four disciplines from theory into practice.
2. **Personal Mastery** – The personal commitment of the members within the organization to continually learn. There is a connection between personal learning and organizational learning. Members understand that professional growth not only benefits them personally but the organization as a whole. It helps the organization reach its goals.

3. **Mental Models** – An image, assumption, or story about the organization. They shape one’s perception. This is how one view’s the world and how action is taken. In order to change mental models, individuals within the system have to look inward and be willing to openly engage in dialogue about organizational practices.

4. **Shared Vision** – A common purpose translated from individual values and concerns from members within the organization into a set of principles and guiding practices for the whole organization. Shared vision provides a focus and energy for learning.

5. **Team Learning** – This involves dialogue and discussion. Dialogue is the free and creative exploration of issues without incorporating one’s viewpoint. In contrast, discussions encompass individual views and justifications. Members within the organization make decisions based on the best viewpoints and supporting evidence.

Senge’s concept of learning organizations moved from the business industry into the educational arena (Boyd & Hord, 1994). The concept of professional learning communities (PLCs) was expanded by DuFour and Eaker (1998). This model assures fundamentally altered teaching, learning, and school autonomy. This model represents a transformation from schools of the past to radically different ideas. Sergiovanni (2000) agreed that a strong and purposeful community is critical to school effectiveness.
The professional learning community can be summarized into three core beliefs (Servage, 2008): (a) staff development is crucial to the improvement of student learning; (b) professional development is most effective when it is collaborative; and, (c) that the collaborative work should be authentic, based on daily teaching, and inquiry-based. The purpose of the PLC is to meet regularly to engage in dialogue that is collaborative, used for curriculum planning or study, data analysis, and looking closely at individual student achievement.

Since this model of professional learning is community based, it requires that teachers have shared norms referred to by researchers as vision and mission (Boyd & Hord, 1994; DuFour & Eaker, 1998; Lambert, 2003; Zmuda, Kuklis, & Klein, 2004). In order for positive change to occur within the organization, there must be a shared responsibility amongst teachers for learning.

Previous Studies

Recent doctoral studies show that reflective practice has been examined from the perspective of principals and teachers on one particular model of reflection. The studies were examined through the lens of reflective practice theory and/or supervision and evaluation. For example, Skretta (2008) conducted a descriptive study to examine Nebraska high school principals’ perceptions of the use of classroom walk-throughs. There was no evident conceptual framework. However, Skretta discussed the classroom walk-through process and the premise of the model. In his study, he discovered that 76 of the 91 principals surveyed used the classroom walk-through model. Fifty-five percent perceived the technique to be important in monitoring classroom management. Only
26% perceived the walk-throughs to be very important in documenting the use of interventions for school improvement. Seventy-two percent of the principals perceived walk-throughs to be very important in building positive relationships with teachers. Eighty percent believed that classroom walk-throughs increased their visibility. Eighty-eight percent of the principals indicated that they offered some form of feedback such as verbal, email, or a note.

Chapman (2007) explored the perceptions of elementary principals and teachers in Catholic school settings regarding newly adopted classroom walk-throughs. She framed the study through the lens of supervision. Chapman used surveys and conducted semi-structured interviews with participants. Her results revealed five common themes: (a) classroom walk-throughs were a tool to improve instructional practice; (b) its purpose was to collect data; (c) classroom-walk-throughs supported best teaching practices; (d) increased administrator visibility and observation; and, (e) it was a tool for evaluation.

Keruskin (2005) investigated the perceptions of high school principals using a walk-through model and the impact on student learning and achievement. Like Chapman (2007), Keruskin used supervision as a framework. In his descriptive study, Keruskin interviewed five high school principals and five teachers from each school. Keruskin concluded that (a) it was important for teachers to understand the walk-through process; (b) immediate feedback was critical; (c) principals must share data with staff to improve instruction; (d) walk-throughs increased scores on state test and graduation rate; and, (e) walk-throughs produced more student engagement.

Gomez (2005) used a quasi-experimental design to determine whether cognitive coaching had a positive effect on how teachers perceived the reflective process. She
utilized reflective process as the conceptual framework for the study. Gomez had an experimental and control group of teachers. The experimental group received cognitive coaching training during the summer whereas the control group did not receive any training. Both groups were surveyed twice using an attitude survey about reflective practice. However, the experimental group took the survey before the cognitive coaching training as well as after the training. The control group took the survey before the end of one school year and at the beginning of another school year. The results showed that both groups had similar attitudes about reflection initially. The experimental group had a positive change in their attitude and behavior about reflection after receiving training whereas the control group experienced little change.

Clearly, recent studies on reflective practices have emphasized the effectiveness or application of one particular model of reflection as a result of a school or district initiative. The lens in which the studies were examined vary from supervision to the reflective process. Even so, a review of the literature suggests that both adult learning theory and reflective practice theory are embedded within various reflective models. Additionally, there is limited research regarding the perceptions of administrators and teachers about reflective practice and their perceived professional practices on reflection. In this study, this gap is addressed from the lens of adult learning theory and reflective practice theory.
CHAPTER 3

RESEARCH METHODOLOGY

Few studies have been conducted on the attitudes of both administrators and teachers concerning reflection and professional practice. This study described the attitudes and behaviors of school principals and teachers through the lens of adult learning theory and reflective practice theory.

The study was a cross-sectional survey design (Creswell, 2008; McMillan & Schumacher, 1997). According to Creswell (2008), the cross-sectional design is the most popular survey design in education. The advantage to this design is that it measured current attitudes and/or practices within a short period of time with different groups of participants (McMillan & Schumacher, 1997). Participants in the study completed an attitude survey with open-ended questions. Follow-up telephone interviews were conducted with school principals and teachers to obtain further information about the reflective practice process. Statistics were gathered on the survey and a content analysis was conducted for the open-ended questions and follow-up telephone interviews to find emerging themes. Additionally, a comparison was made between the perceptions of school principals and teachers concerning reflection.

Purpose of Study

The purpose of this survey study was to describe the perceptions of elementary school principals and teachers from three states within the west regional area of the United States concerning reflective practice. The study also explored the perceptions of principals and teachers on their professional practice of reflective practice.
Research Questions

1. What are elementary teachers’ perceptions of the reflective practice process?
2. In what ways do elementary teachers promote reflective practice to enhance their professional growth?
3. What are elementary administrators’ perceptions of the reflective practice process?
4. In what ways do elementary administrators promote reflective practice to encourage professional development of teachers and increase student achievement?
5. What are the similarities and differences between teachers’ perceptions and administrators’ perceptions of reflective practice?

Participants

The method of sampling for this study was purposive (McMillan & Schumacher, 1997). Nine hundred and seven elementary schools from the following three western states were selected as the target population: Nevada, Oregon, and Utah. Selection was based on one of two conditions: (a) principal contact information listed in their State Department of Education’s database (Oregon and Utah) or (b) principal was a member with their state organization for administrators (Nevada). From this target population (Creswell, 2008), only elementary principals were sent an email with the survey link to the web site. This particular subgroup was selected because it was the researcher’s belief that the targeted population was knowledgeable and practiced reflection. McMillan and Schumacher (1997) suggested that purposeful sampling in quantitative studies rely more on the judgment of the researcher to select participants who they feel can provide the best information to address the purpose of the research. In turn, each school principal selected
three teacher leaders such as a grade level chair or school committee chairperson to complete the teacher survey. The selection of three teachers from each school increased the numbers in the target population to guard against a low return rate (Verma & Neasham, 1998) and reduced the sampling error (Creswell, 2008). The selected teachers received the teacher survey link from their administrator.

Description of the Instrument

The Reflective Attitude Survey (RAS) by Young (1989) was modified to assess teachers’ attitudes and practice of reflection (Appendix D). The first section of the survey instrument elicited biographical information. The second section of the survey instrument consisted of 35 Likert items on the usefulness of the reflective process, frequency, likeableness of reflective activities, and feelings concerning reflection. The last section of the survey instrument had five open-ended questions. These questions asked of personal beliefs about reflection, examples and strategies of professional practice of reflection, and beliefs about the connection between reflection and professional growth. Teachers were asked at the end of the survey whether they were willing to participate in a follow-up telephone interview that would last no more than 30 minutes. If so, teachers provided pertinent contact information to the researcher.

The Reflective Attitude Survey (Young, 1989) was also modified to assess administrators’ attitudes and practice of promoting reflection (Appendix E). The first section of the survey instrument elicited biographical information. The second section of the survey consisted of 31 Likert items that paralleled the teacher survey. The last section of the instrument had five open-ended questions that paralleled the teacher
survey as well. Principals were asked at the end of the survey whether they were willing
to participate in a follow-up telephone interview that would last no more than 30 minutes.
If they agreed, principals provided pertinent contact information to the researcher.

All interviewees were randomly selected. Semi-structured telephone interviews were
conducted with three principals and three teachers to gather further data about how
reflective practice was promoted in their schools, supervision/evaluation tools used, and
the steps taken to prepare staff for the reflective process (Appendix F & G). Conducting
interviews from a small sample provided an in-depth understanding and exploration of
the topic in greater detail (Scott & Morrison, 2005). There were a set of guiding
questions prepared ahead of time and asked of each participant; however, the researcher
had the discretion to ask probing questions to discover the reasoning behind a response or
for more details (Johnson, 1977). The semi-structured questions for the interview were
phrased to allow for the unique responses of the participants (McMillan & Schumacher,
1997).

The interviews were audio taped and transcribed to ensure accuracy of responses.
Fowler (1988) asserted, “When an open question is asked, interviewers are expected to
record responses verbatim…” (p. 110). Telephone interviews allow the researcher to
gain access to participants that are geographically dispersed (Creswell, 2008). According
to Johnson (1977), the interview allows two-way, conversational communication to
collect more information and clarify meaning of a response. It is possible to elicit a more
accurate response since an interview can be less structured than the survey administered.
Additionally, the interview refines the data so that conclusions drawn are meaningful and
A pilot test was administered for both surveys since the protocols were modified from the original survey developed by Young (1989). Young reported that the original Reflective Attitude Survey had an alpha reliability of .92, which meant that the instrument was consistent in measuring the attitudes and beliefs of reflection over a period of time (Creswell, 2008). However, the purpose of this pilot test was to check for the clarity of the survey and interview questions and the relevance of topics to be addressed as well as for the purpose of making changes and obtaining feedback. Three elementary principals and three teacher leaders from Nevada were selected to pilot the survey and interview protocols. According to Fink (2006) there are basic guidelines for pilot testing surveys. Below is a summarization of the guidelines that were employed for this pilot study (p. 40).

1. Select individuals for the pilot similar to the participants that will be in the study.

2. Enlist a reasonable number of individuals for the trial to get feedback for improvements.

3. Individuals should test the ease of the survey such as log on and access the web site.

4. Test selected portions of the survey in an informal manner. Test directions to see whether they are explicit. Look at the wording of the questions in the survey.

5. For reliability, focus on the clarity of the questions and survey format.

6. For validity, ensure that all relevant topics have been addressed in the survey.

7. Test the ability to get a range of responses. There should be a series of choices to show different perspectives.
Procedures for Collecting Data

The most recent innovation in survey methodology has been the collection of data through self-administered surveys by e-mail (Dillman, 2007). Dillman suggested the need to tailor the procedures for e-mail surveys to create a positive experience for participants and to increase the response rate for the researcher. He proposed 29 design principles for e-mail surveys related to survey construction and implementation procedures. The four principles related to survey implementation were used. They were (Dillman, 2007):

1. *Utilize a multiple contact strategy*- Send a pre-notice email message to leave a positive impression with the recipient about the importance of the study. Send the survey two to three days after the pre-notice email.

2. *Personalize all e-mails*- An individual e-mail message containing the survey or link to the survey should be sent to all sampled individuals.

3. *Keep the cover letter brief*- This allows the recipient to quickly get to the first question and fosters a more attentive reading behavior.

4. *Include a replacement questionnaire with e-mail reminder*- It cannot be assumed that recipients have the original e-mail with the questionnaire or link.

An online version of the modified *Reflective Attitude Survey* for teachers and administrators was created using *Zoomerang* software (www.zoomerang.com). Initially, a personalized pre-notice e-mail was sent to the target population of administrators. Three days later, an e-mail with a link to the survey web page was sent. The administrator cover letter (Appendix C) and teacher cover letter (Appendix B) were attached to the email to provide more detail of the study and its importance. Participants
had two weeks to complete the survey. The first reminder e-mail was sent within a three
day period of the initial e-mail with the survey link. A second reminder e-mail was sent
three days after the first reminder e-mail. A thank you was generated upon completion of
the survey or if individuals declined to participate.

Principals selected three teacher leaders from their school to receive the web link.
Teachers were given two weeks to complete the survey. However, due to the selection of
the teacher participants, no e-mail reminders were sent to teachers. It was the
responsibility of the administrator to follow-up with the teachers selected to participate.
A thank-you was generated upon completion of the survey or if the teacher declined to
participate.

Due to the low number of responses, the survey close date was extended two
additional weeks to increase the sample population. Consequently, a third and fourth e-
mail reminder was sent week three and four with the web links and cover letter
attachments. According to Krejcie and Morgan (1970), with a population of 907, a
sample of 269 is required to be representative of the given population.

Three principals and three teachers were randomly selected using a random number
generator (www. stattrek.com/Tables/Random.aspx). The amount of random numbers
needed (3) was entered along with the minimum and maximum range of numbers
(number of participants volunteering to be interviewed). Fifty-two principals responded
that they would be willing to be interviewed and 20 teachers. Therefore, 52 and 20 were
used as maximum numbers. Next, the calculate button was selected to generate the three
random numbers from the table. Based on this process, participants from the interview
list were selected for interviews. The interviews were audio taped and then transcribed. Anecdotal notes were taken during the interview process.

Procedures for Analyzing Data

Descriptive statistics is the most commonly used technique to report survey results (Fink, 2006). The Zoomerang survey data was exported into the Statistical Package for Social Science 15.0 (SPSS 15.0) and used to analyze the survey close-ended questions. In this study, descriptive statistics was employed to include counts, percentages, and measures of central tendency. Results were aggregated by biographical data such as school setting, staff size, average class size, years as an administrator, and years as a teacher. Percentages and statistical measures of tendency were provided for administrator responses and teacher responses for the following categories: usefulness of reflective practice, usefulness of reflective practice in improving teaching performance, frequency of reflective practices, feelings about reflective practices, and feelings about reflection. An independent t-test was used to compare the principals’ and teachers’ responses in the aforementioned categories.

A content analysis was conducted of the open-ended survey questions to further describe the perceptions and practices of reflection. Responses to the open-ended questions were printed and sorted based on grouping: principals and teachers. The responses from each open-ended question were color coded based on predetermined categories from the literature as well as common themes that emerged, which were not preset. Predetermined categories make for ease of data analysis and emerging themes allow the researcher to remain true during more focused analysis, which may alter the
preset coding (Marshall & Rossman, 2006). A tally sheet was created to show frequency and patterns. Next, two data sets were constructed to facilitate the comparison between the teachers and administrators on the close-ended and open-ended questions.

The principal and teacher interview transcripts were highlighted and color coded by predetermined codes too. The assigned codes were tallied and patterns noted. A comparison was made between both groups. Quotes from the interview transcripts were used in the results section to add meaning and context to the survey responses.

Summary

This study was a cross-sectional design. Three states from the western region of the United States were selected as the target population to describe elementary teacher and administrator perceptions of reflective practice and their professional practice of reflection. The data collected from the surveys and interviews were aggregated to show the attitudes and beliefs about reflection from the perspective of teachers and administrators, but also to show the similarities and differences between the two groups.
CHAPTER 4
FINDINGS OF THE STUDY

Introduction

The purpose of this survey study was to describe the perceptions of elementary school principals and teachers from three states within the west regional area of the United States (Nevada, Oregon, and Utah) concerning reflective practice. The study also explored the perceptions of principals and teachers on their professional practice of reflective practice. A modified version of the Reflective Attitude Survey (Young, 1989) was sent to administrators. Administrators then selected three teacher leaders to forward the teacher survey web link for participation. Follow-up telephone interviews were conducted with three elementary principals and teachers. Data was collected, analyzed, and compared between the two groups.

A pre-notice of the upcoming survey study was sent to 907 elementary administrators. An e-mail was sent three days later with the survey web link and administrator and teacher cover letters. The first e-mail reminder was sent three days after the initial e-mail. Three days after the first survey reminder, a second e-mail reminder was sent. At the end of the two week period, only two hundred and twenty-one administrators and 59 teachers had responded to the survey. According to Krejcie and Morgan (1970), with a population of 907, a sample of 269 is required to be representative of the given population. Therefore, the survey close date was extended for two additional weeks to increase the number of participants. An e-mail was sent indicating the survey extension as well as two reminder e-mails. With the extension, of the 907 survey links sent to administrators, 291 responded and 122 teachers participated.
Follow-up telephone interviews were conducted after randomly selecting three principals out of 52 and three teachers out of 20 who were willing to participate. Interviews took approximately 15-20 minutes to complete. Administrators and teachers from all three states were represented.

The data collected from the survey was exported from Zoomerang and entered into SPSS 15.0. Descriptive statistics was employed to include counts, percentages, and measures of central tendency for biographical information and the reflective practice categories for the close-ended questions. An independent t-test was used to compare the principals’ and teachers’ responses in the reflective practice categories. A content analysis was conducted to find emerging themes and predetermined codes for open-ended questions on the survey and the follow-up telephone interviews.

Characteristics of Participants

Principals and teachers in the study were asked seven biographical questions to provide background of the sample population. Principals provided the following information: (a) school setting, (b) staff size, (c) average class size, (d) years as an administrator in their school, (e) total administrative years, (f) gender, (g) and age group. Teachers provided information about (a) their current teaching position, (b) school setting, (c) staff size, (d) class size, (e) total years teaching, (f) gender, and (g) age group.

Out of 907 administrators, 163 principals from Nevada were e-mailed the survey link, 429 from Oregon, and 315 from Utah. Two hundred and ninety-one principals from these three states responded as did 122 teachers.
**Personal Characteristics**

Of the 291 principals who responded, 64% percent of the respondents were females and 36% were males. Thirty-three percent had been administrators for 6-10 years and 31% for 1-5 years. In addition, 36% were between the ages of 51-60 years old, 32% between the ages of 41-50, 20% between 31-40 years old, and only 12% over the age of 60. The personal characteristics of principals are contained in Table 1.

Table 1

**Personal Characteristics of Administrators**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>NUMBER</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL ADMINISTRATIVE YEARS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>91</td>
<td>31%</td>
</tr>
<tr>
<td>6-10</td>
<td>97</td>
<td>33%</td>
</tr>
<tr>
<td>11-15</td>
<td>50</td>
<td>17%</td>
</tr>
<tr>
<td>16-20</td>
<td>22</td>
<td>8%</td>
</tr>
<tr>
<td>21-25</td>
<td>14</td>
<td>5%</td>
</tr>
<tr>
<td>Over 25</td>
<td>17</td>
<td>6%</td>
</tr>
<tr>
<td>GENDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>187</td>
<td>64%</td>
</tr>
<tr>
<td>Male</td>
<td>104</td>
<td>36%</td>
</tr>
<tr>
<td>AGE GROUP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-30</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>31-40</td>
<td>59</td>
<td>20%</td>
</tr>
<tr>
<td>41-50</td>
<td>92</td>
<td>32%</td>
</tr>
<tr>
<td>51-60</td>
<td>106</td>
<td>36%</td>
</tr>
<tr>
<td>Over 60</td>
<td>34</td>
<td>12%</td>
</tr>
</tbody>
</table>

N=291

Of the 122 teachers who responded, 87% were females and 13% were males. Twenty-five percent had been teaching for 6-10 years, 22% 1-5 years of teaching experience, 16% taught 11-15 years, 13% over 25 years of experience teaching, 12% have taught between 16-20 years as well as another 12% had 21-25 years of teaching experience. Additionally, 34% represented the age range 31-40, 22% were 41-50 years...
old, 21% between 51-60 years old, 17% 21-30, and only 6% were over the age of 60.

The personal characteristics of teachers are found in Table 2.

Table 2

*Personal Characteristics of Teachers*

<table>
<thead>
<tr>
<th>ITEM</th>
<th>NUMBER</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>YEARS TEACHING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>27</td>
<td>22%</td>
</tr>
<tr>
<td>6-10</td>
<td>31</td>
<td>25%</td>
</tr>
<tr>
<td>11-15</td>
<td>19</td>
<td>16%</td>
</tr>
<tr>
<td>16-20</td>
<td>14</td>
<td>12%</td>
</tr>
<tr>
<td>21-25</td>
<td>15</td>
<td>12%</td>
</tr>
<tr>
<td>Over 25</td>
<td>16</td>
<td>13%</td>
</tr>
<tr>
<td>GENDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>106</td>
<td>87%</td>
</tr>
<tr>
<td>Male</td>
<td>16</td>
<td>13%</td>
</tr>
<tr>
<td>AGE GROUP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-30</td>
<td>20</td>
<td>17%</td>
</tr>
<tr>
<td>31-40</td>
<td>42</td>
<td>34%</td>
</tr>
<tr>
<td>41-50</td>
<td>27</td>
<td>22%</td>
</tr>
<tr>
<td>51-60</td>
<td>26</td>
<td>21%</td>
</tr>
<tr>
<td>Over 60</td>
<td>7</td>
<td>6%</td>
</tr>
</tbody>
</table>

N=122

*School Characteristics*

The school characteristics such as school setting, staff size, average class size, and years principals had been in their current school are contained in Table 3. Of the 291 elementary principal respondents, 38% of their schools were in urban areas, 36% in suburban settings, 25% in rural areas, and 1% had students that resided in both urban and suburban areas. Half (50%) of the principals responded that their staff size was between 21-40 teachers. Nearly 3% indicated that they had 80-100 teachers on staff. The average class size for 46% of the principals was 21-25 students, 41% averaged between 26-30 students in a class, and only 2% of the principals had 1-15 students in a class. Almost all
of the principals (73%) had been administrators in their current school for 1-5 years followed by 22% in their schools for 6-10 years. One percent of the principals had been an administrator in their school for over 25 years.

Table 3

School Characteristics of Administrators

<table>
<thead>
<tr>
<th>ITEM</th>
<th>NUMBER</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHOOL SETTING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>72</td>
<td>25%</td>
</tr>
<tr>
<td>Urban</td>
<td>110</td>
<td>38%</td>
</tr>
<tr>
<td>Suburban</td>
<td>106</td>
<td>36%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1%</td>
</tr>
<tr>
<td>STAFF SIZE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-20</td>
<td>35</td>
<td>12%</td>
</tr>
<tr>
<td>21-40</td>
<td>144</td>
<td>50%</td>
</tr>
<tr>
<td>41-60</td>
<td>71</td>
<td>24%</td>
</tr>
<tr>
<td>61-80</td>
<td>29</td>
<td>10%</td>
</tr>
<tr>
<td>80-100</td>
<td>10</td>
<td>3%</td>
</tr>
<tr>
<td>Over 100</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>AVERAGE CLASS SIZE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-15</td>
<td>5</td>
<td>2%</td>
</tr>
<tr>
<td>16-20</td>
<td>23</td>
<td>8%</td>
</tr>
<tr>
<td>21-25</td>
<td>135</td>
<td>46%</td>
</tr>
<tr>
<td>26-30</td>
<td>118</td>
<td>41%</td>
</tr>
<tr>
<td>31-35</td>
<td>10</td>
<td>3%</td>
</tr>
<tr>
<td>Over 35</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>YEARS IN SCHOOL</td>
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</tr>
<tr>
<td>1-5</td>
<td>212</td>
<td>73%</td>
</tr>
<tr>
<td>6-10</td>
<td>65</td>
<td>22%</td>
</tr>
<tr>
<td>11-15</td>
<td>11</td>
<td>4%</td>
</tr>
<tr>
<td>16-20</td>
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<td>0%</td>
</tr>
<tr>
<td>21-25</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Over 25</td>
<td>2</td>
<td>1%</td>
</tr>
</tbody>
</table>

N=291

The school characteristics from elementary teachers included current teaching assignment, school setting, staff size, and class size. The data responses are contained in Table 4. Of the 122 teachers, 31% were specialists such as art, music, physical
education, library, and special education teachers. Seven percent taught kindergarten, 11% first grade, 11% second grade, 15% third grade, 11% fourth grade, and 14% fifth grade. Sixty-four percent taught in an urban school setting, 29% in a suburban setting, 5% in a rural setting, and 2% from other, which respondents indicated children were bused from both urban and suburban areas to their school. Forty-five percent of the elementary teachers responded that their staff size ranged from 21-40 teachers, 33% had staff sizes from 41-60 teachers, and 2% between 80-100 teachers on staff. In addition, the average class size for 30% of the teachers was 16-20 students. Twenty-eight percent indicated that they had between 21-25 students in a class, 21% with 26-30 students, and 4% with over 35 students in a class.
Table 4

School Characteristics of Teachers

<table>
<thead>
<tr>
<th>ITEM</th>
<th>NUMBER</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CURRENT TEACHING ASSIGNMENT</td>
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<td></td>
</tr>
<tr>
<td>K</td>
<td>9</td>
<td>7%</td>
</tr>
<tr>
<td>1</td>
<td>14</td>
<td>11%</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>11%</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
<td>15%</td>
</tr>
<tr>
<td>4</td>
<td>13</td>
<td>11%</td>
</tr>
<tr>
<td>5</td>
<td>17</td>
<td>14%</td>
</tr>
<tr>
<td>Other (Specialty Area)</td>
<td>38</td>
<td>31%</td>
</tr>
<tr>
<td>SCHOOL SETTING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>Urban</td>
<td>79</td>
<td>64%</td>
</tr>
<tr>
<td>Suburban</td>
<td>35</td>
<td>29%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>STAFF SIZE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-20</td>
<td>7</td>
<td>6%</td>
</tr>
<tr>
<td>21-40</td>
<td>55</td>
<td>45%</td>
</tr>
<tr>
<td>41-60</td>
<td>40</td>
<td>33%</td>
</tr>
<tr>
<td>61-80</td>
<td>17</td>
<td>14%</td>
</tr>
<tr>
<td>80-100</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td>Over 100</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>CLASS SIZE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-15</td>
<td>11</td>
<td>9%</td>
</tr>
<tr>
<td>16-20</td>
<td>36</td>
<td>30%</td>
</tr>
<tr>
<td>21-25</td>
<td>34</td>
<td>28%</td>
</tr>
<tr>
<td>26-30</td>
<td>26</td>
<td>21%</td>
</tr>
<tr>
<td>31-35</td>
<td>10</td>
<td>8%</td>
</tr>
<tr>
<td>Over 35</td>
<td>5</td>
<td>4%</td>
</tr>
</tbody>
</table>

N=122

Analysis of Data

Both quantitative and qualitative data were collected and analyzed to answer the five research questions. A modified version of the *Reflective Attitude Survey* (Young, 1989) for teachers and administrators provided the quantitative data. The open-ended questions on the survey and the follow-up telephone interviews provided the qualitative data as well as supported the quantitative findings.
Research Question 1

What are elementary teachers’ perceptions of the reflective practice process?

The modified version of the Reflective Attitude Survey (Young, 1989) was developed to assess the attitudes and beliefs as it related to reflection and reflective practice. The survey contained 35 Likert items with a five point scale, five being the most favorable to one being the least favorable. The survey was grouped into categories on the usefulness of the reflective process, frequency, likeableness of reflective activities, and feelings concerning reflection. Survey items 8-14 were statements about the usefulness of reflective practice and items 15-21 were questions on the usefulness of reflection in improving teaching performance. Questions 22-27 pertained to the frequency of reflective activities. Survey items 28-35 asked teachers about their feelings about practicing reflection and items 36-42 asked teachers to use a continuum to characterize their feelings about reflection.

The mean scores and percentages for each statement and question in the survey were calculated. In the category about the usefulness of reflective practice, improving teaching was identified with the highest mean score of 4.20. Teachers believed that reflection was very helpful in discovering strengths and weaknesses (mean score 4.14). Also, teachers perceived reflection encouraged better planning in their teaching (mean score 4.12). Refer to Table 5 for data.
Table 5

*Teacher Perceptions: Usefulness of Reflective Practice*

<table>
<thead>
<tr>
<th>Mean Score</th>
<th>Extremely Useful</th>
<th>Very Useful</th>
<th>Moderately Useful</th>
<th>Not Very Useful</th>
<th>Not at All Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.98</td>
<td>38%</td>
<td>37%</td>
<td>23%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>4.10</td>
<td>38%</td>
<td>48%</td>
<td>13%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>3.75</td>
<td>24%</td>
<td>49%</td>
<td>21%</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>4.14</td>
<td>49%</td>
<td>39%</td>
<td>10%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>4.11</td>
<td>49%</td>
<td>34%</td>
<td>14%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>4.12</td>
<td>47%</td>
<td>34%</td>
<td>16%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>4.20</td>
<td>50%</td>
<td>36%</td>
<td>12%</td>
<td>2%</td>
<td>0%</td>
</tr>
</tbody>
</table>

N=122

In the category of the usefulness of reflection in improving teaching performance, teachers felt reflecting about their own teaching was very useful (mean score 4.02). The other areas with high mean scores were (a) reflecting with others (3.95) and (b) reflecting with a group about teaching experiences (3.87). Data is presented in Table 6.
### Table 6

**Teacher Perceptions: Usefulness in Improving Teaching Performance**

<table>
<thead>
<tr>
<th>Mean Score</th>
<th>Extremely Useful</th>
<th>Very Useful</th>
<th>Moderately Useful</th>
<th>Not Very Useful</th>
<th>Not at All Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.91</td>
<td>29%</td>
<td>49%</td>
<td>19%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>3.59</td>
<td>21%</td>
<td>33%</td>
<td>44%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>2.94</td>
<td>8%</td>
<td>25%</td>
<td>37%</td>
<td>23%</td>
<td>7%</td>
</tr>
<tr>
<td>4.02</td>
<td>41%</td>
<td>46%</td>
<td>11%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>3.50</td>
<td>16%</td>
<td>42%</td>
<td>32%</td>
<td>8%</td>
<td>2%</td>
</tr>
<tr>
<td>3.60</td>
<td>24%</td>
<td>33%</td>
<td>34%</td>
<td>7%</td>
<td>2%</td>
</tr>
<tr>
<td>3.95</td>
<td>36%</td>
<td>40%</td>
<td>22%</td>
<td>2%</td>
<td>0%</td>
</tr>
</tbody>
</table>

N=122

Based on the data in Table 7, teachers usually reflected on their teaching after a lesson or unit to make adjustments for future teaching (mean score 4.16). Additionally, teachers indicated that they usually reflected on past and present teaching practices to create a teaching plan to implement (mean score 4.09). Schon (1983) referred to this type of reflection as reflection-on-action.
Table 7

*Teacher Perceptions: Frequency of Reflective Activities*

<table>
<thead>
<tr>
<th></th>
<th>Mean Score</th>
<th>Every Lesson %</th>
<th>Daily %</th>
<th>Twice Weekly %</th>
<th>Weekly %</th>
<th>Less Often Than Mentioned %</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. How often do you reflect about teaching, formally or informally?</td>
<td>3.99</td>
<td>32%</td>
<td>56%</td>
<td>4%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>23. How often do you reflect to adjust your teaching in the midst of a lesson?</td>
<td>4.00</td>
<td>42%</td>
<td>44%</td>
<td>6%</td>
<td>6%</td>
<td>2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Mean Score</th>
<th>Always %</th>
<th>Usually %</th>
<th>Sometimes %</th>
<th>Occasionally %</th>
<th>Never %</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. How often do you reflect on your teaching after a lesson and/or unit to adjust for future teaching?</td>
<td>4.16</td>
<td>47%</td>
<td>42%</td>
<td>8%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>25. How often do you reflect on past and present teaching practices to create a teaching plan to implement?</td>
<td>4.09</td>
<td>44%</td>
<td>41%</td>
<td>11%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>26. How often do you implement teaching plans made during reflections?</td>
<td>3.81</td>
<td>22%</td>
<td>58%</td>
<td>15%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>27. How often does your principal facilitate reflection amongst teachers?</td>
<td>3.2</td>
<td>19%</td>
<td>28%</td>
<td>31%</td>
<td>17%</td>
<td>5%</td>
</tr>
</tbody>
</table>

N=122

The survey data suggested that teachers liked to reflect about their own teaching (mean score 4.22). They also liked reflecting alone (4.07). Approximately 50% of the teachers believed reflection to be worthwhile and important. Tables 8 and 9 present the findings.
Table 8

**Teacher Perceptions: Feelings about Reflective Activities**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Mean Score</th>
<th>Strongly Like</th>
<th>Like</th>
<th>Neutral</th>
<th>Dislike</th>
<th>Strongly Dislike</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflecting alone</td>
<td>4.07</td>
<td>36%</td>
<td>42%</td>
<td>21%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Reflecting with another person</td>
<td>4.05</td>
<td>38%</td>
<td>46%</td>
<td>13%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Reflecting with a group about teaching</td>
<td>3.78</td>
<td>25%</td>
<td>52%</td>
<td>15%</td>
<td>7%</td>
<td>1%</td>
</tr>
<tr>
<td>Reflecting in writing</td>
<td>2.95</td>
<td>12%</td>
<td>25%</td>
<td>30%</td>
<td>26%</td>
<td>7%</td>
</tr>
<tr>
<td>Reflecting about your own teaching</td>
<td>4.22</td>
<td>50%</td>
<td>40%</td>
<td>9%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Reflecting about others’ teaching</td>
<td>3.49</td>
<td>14%</td>
<td>41%</td>
<td>36%</td>
<td>7%</td>
<td>2%</td>
</tr>
<tr>
<td>Reflecting about an assigned theme</td>
<td>3.57</td>
<td>17%</td>
<td>43%</td>
<td>31%</td>
<td>9%</td>
<td>0%</td>
</tr>
<tr>
<td>Reflecting with no assigned theme</td>
<td>3.34</td>
<td>10%</td>
<td>38%</td>
<td>38%</td>
<td>12%</td>
<td>2%</td>
</tr>
</tbody>
</table>

N=122

Table 9

**Teacher Perceptions: Feelings about Reflection**

<table>
<thead>
<tr>
<th>Perception</th>
<th>Mean Score</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Boring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interesting</td>
<td>4.03</td>
<td>35%</td>
<td>37%</td>
<td>25%</td>
<td>2%</td>
<td>1%</td>
<td>Unpleasant</td>
</tr>
<tr>
<td>Pleasant</td>
<td>Mean 5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understandable</td>
<td>3.70</td>
<td>20%</td>
<td>38%</td>
<td>36%</td>
<td>4%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Confusing</td>
<td>Mean 5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worthwhile</td>
<td>4.01</td>
<td>37%</td>
<td>37%</td>
<td>20%</td>
<td>4%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Waste of Time</td>
<td>Mean 5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Important</td>
<td>3.96</td>
<td>32%</td>
<td>40%</td>
<td>21%</td>
<td>4%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Success Promoting</td>
<td>4.25</td>
<td>51%</td>
<td>29%</td>
<td>16%</td>
<td>2%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Frustrating</td>
<td>Mean 5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy</td>
<td>3.62</td>
<td>19%</td>
<td>38%</td>
<td>33%</td>
<td>7%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Difficult</td>
<td>Mean 5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Important</td>
<td>4.22</td>
<td>50%</td>
<td>26%</td>
<td>19%</td>
<td>4%</td>
<td>1%</td>
<td>Trivial</td>
</tr>
</tbody>
</table>

N=122
Research Question 2

In what ways do elementary teachers promote reflective practice to enhance their professional growth?

The last section of the modified RAS (Young, 1989) had five open-ended questions. These questions asked about personal beliefs of reflection, examples and strategies of professional practice of reflection, and beliefs about the connection between reflection and professional growth. A content analysis was conducted to find emerging themes and predetermined codes. In addition, follow-up telephone interviews were conducted. Twenty teachers indicated at the end of the survey their willingness to participate. Three were selected using a random number generator. The interviews were audio taped with the permission of the participants and then transcribed.

Based on a content analysis of the open-ended questions and telephone interviews, teachers believed that reflection was relevant in promoting professional development and improving instruction in the classroom. Teachers stated that reflection helped them look back at their teaching and instruction for the purpose of making adjustments to lessons. Much of this reflection was done after a lesson or unit of study had been taught. However, teachers indicated that they reflect-in-action (Schon, 1983) during most lessons. For example one teacher wrote, “I will stop sometimes in the middle of a lesson if I see that is not going right and change it.” Another participant illustrated this reflective strategy by describing what occurred during a lesson, “By questioning students during a lesson, I had realized that a number of them had a preconceived notion that had not been dispelled during the lesson. Without that ah-ha, I would have continued to deliver content without adding an extra step to the procedure that lead children to deeper
understandings.” The findings also showed that teachers needed time to reflect and preferred dialogue and collaboration with peers. Reflection provided an opportunity to analyze student strengths and weaknesses in order to work on the deficit areas. Additionally, teachers felt that reflection promoted continuous school improvement and correlated to increased student achievement. See Appendix I Tables 1-5 and 11 for data.

Research Question 3

What are elementary administrators’ perceptions of the reflective practice process?

The modified Reflective Attitude Survey (Young, 1983) for administrators paralleled the teacher survey. It consisted of 31 Likert items with a five point scale, five being the most favorable to one being the least favorable. The survey was also grouped into categories on the usefulness of the reflective process, frequency, likeableness of reflective activities, and feelings concerning reflection. Survey items 9-15 were statements about the usefulness of reflective practice and items 16-22 were questions on the usefulness of reflection in improving teaching performance. Questions 23-24 pertained to the frequency of reflective activities by teachers in their school. Survey items 25-32 asked principals about their feelings about teachers practicing reflection and items 33-39 asked principals to use a continuum to characterize their feelings about reflection.

The mean scores and percentages for each statement and question in the administrative survey were calculated. In the category of the usefulness of reflective practice, principals indicated that encouraging teachers to evaluate their instructional practices was very useful (mean score 4.00). The data suggested that principals perceived reflection to be useful in improving teaching (mean score 3.97). In addition,
using reflection to discover strengths and weaknesses was high, with a mean score of 3.91. Refer to Table 10 for data.

Table 10
Administrator Perceptions: Usefulness of Reflective Practice

<table>
<thead>
<tr>
<th></th>
<th>Mean Score</th>
<th>Extremely Useful</th>
<th>Very Useful</th>
<th>Moderately Useful</th>
<th>Not Very Useful</th>
<th>Not at All Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>3.86</td>
<td>32%</td>
<td>52%</td>
<td>15%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>10</td>
<td>3.81</td>
<td>27%</td>
<td>55%</td>
<td>16%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>11</td>
<td>3.54</td>
<td>16%</td>
<td>54%</td>
<td>24%</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>12</td>
<td>3.91</td>
<td>38%</td>
<td>48%</td>
<td>12%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>13</td>
<td>4.00</td>
<td>44%</td>
<td>43%</td>
<td>11%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>14</td>
<td>3.89</td>
<td>35%</td>
<td>50%</td>
<td>13%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>15</td>
<td>3.97</td>
<td>44%</td>
<td>43%</td>
<td>12%</td>
<td>1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

N=291

In the category of the usefulness of reflection in improving teaching performance, reflecting with others had the highest mean score of 3.96. The data suggested that principals believed that teachers reflecting about their teaching was useful (mean score 3.93). Additionally, reflecting with a group about their teaching experience was found to be moderately useful (3.87). Table 11 displays the findings.
Table 11

_Administrator Perceptions: Usefulness in Improving Teaching Performance_

<table>
<thead>
<tr>
<th>Mean Score</th>
<th>Extremely Useful</th>
<th>Very Useful</th>
<th>Moderately Useful</th>
<th>Not Very Useful</th>
<th>Not at All Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Reflecting with a group about teaching experiences</td>
<td>3.87</td>
<td>40%</td>
<td>43%</td>
<td>16%</td>
<td>1%</td>
</tr>
<tr>
<td>17. Reflecting on an assigned theme</td>
<td>3.51</td>
<td>16%</td>
<td>49%</td>
<td>32%</td>
<td>3%</td>
</tr>
<tr>
<td>18. Reflecting with no assigned theme</td>
<td>2.65</td>
<td>5%</td>
<td>18%</td>
<td>41%</td>
<td>32%</td>
</tr>
<tr>
<td>19. Reflecting about your own teaching</td>
<td>3.93</td>
<td>40%</td>
<td>46%</td>
<td>12%</td>
<td>2%</td>
</tr>
<tr>
<td>20. Reflecting about another person’s teaching</td>
<td>3.37</td>
<td>13%</td>
<td>46%</td>
<td>37%</td>
<td>4%</td>
</tr>
<tr>
<td>21. Reflecting alone</td>
<td>3.01</td>
<td>8%</td>
<td>29%</td>
<td>48%</td>
<td>13%</td>
</tr>
<tr>
<td>22. Reflecting with others</td>
<td>3.96</td>
<td>40%</td>
<td>51%</td>
<td>7%</td>
<td>2%</td>
</tr>
</tbody>
</table>

N=291

Table 12

_Administrator Perceptions: Frequency of Reflective Activities_

<table>
<thead>
<tr>
<th>Mean Score</th>
<th>Every Lesson</th>
<th>Daily</th>
<th>Twice Weekly</th>
<th>Weekly</th>
<th>Less Often Than Mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>23. How often do you have teachers reflect about teaching, formally or informally?</td>
<td>1.86</td>
<td>2%</td>
<td>14%</td>
<td>4%</td>
<td>48%</td>
</tr>
<tr>
<td>24. How often do you have teachers implement teaching plans made during reflections?</td>
<td>2.87</td>
<td>11%</td>
<td>30%</td>
<td>32%</td>
<td>18%</td>
</tr>
</tbody>
</table>

N=291
Principals liked the following reflective activities for teachers: (a) reflecting with a group about teaching (4.16), (b) reflecting about the teachers’ own teaching (4.14), and (c) reflecting with another person (4.09). Principals felt reflection was both interesting (4.35) and important (4.35). The data is presented in Tables 13 and 14.

Table 13

**Administrator Perceptions: Feelings about Reflective Activities**

<table>
<thead>
<tr>
<th>Mean Score</th>
<th>Strongly Like</th>
<th>Like</th>
<th>Neutral</th>
<th>Dislike</th>
<th>Strongly Dislike</th>
</tr>
</thead>
<tbody>
<tr>
<td>25. Reflecting alone</td>
<td>3.40</td>
<td>20%</td>
<td>43%</td>
<td>27%</td>
<td>9%</td>
</tr>
<tr>
<td>26. Reflecting with another person</td>
<td>4.09</td>
<td>56%</td>
<td>41%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>27. Reflecting with a group about teaching</td>
<td>4.16</td>
<td>70%</td>
<td>26%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>28. Reflecting in writing</td>
<td>3.52</td>
<td>25%</td>
<td>43%</td>
<td>28%</td>
<td>3%</td>
</tr>
<tr>
<td>29. Reflecting about your own teaching</td>
<td>4.14</td>
<td>64%</td>
<td>34%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>30. Reflecting about others’ teaching</td>
<td>3.61</td>
<td>24%</td>
<td>56%</td>
<td>18%</td>
<td>2%</td>
</tr>
<tr>
<td>31. Reflecting about an assigned theme</td>
<td>3.62</td>
<td>26%</td>
<td>53%</td>
<td>19%</td>
<td>1%</td>
</tr>
<tr>
<td>32. Reflecting with no assigned theme</td>
<td>2.92</td>
<td>6%</td>
<td>30%</td>
<td>48%</td>
<td>12%</td>
</tr>
</tbody>
</table>

N=291

Table 14

**Administrator Perceptions: Feelings about Reflection**

<table>
<thead>
<tr>
<th>Mean Score</th>
<th>Strongly Like</th>
<th>Like</th>
<th>Neutral</th>
<th>Dislike</th>
<th>Strongly Dislike</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interesting</td>
<td>4.35</td>
<td>46%</td>
<td>44%</td>
<td>9%</td>
<td>1%</td>
</tr>
<tr>
<td>2. Pleasant</td>
<td>4.04</td>
<td>33%</td>
<td>43%</td>
<td>20%</td>
<td>3%</td>
</tr>
<tr>
<td>3. Understandable</td>
<td>4.08</td>
<td>37%</td>
<td>42%</td>
<td>15%</td>
<td>5%</td>
</tr>
<tr>
<td>4. Worthwhile</td>
<td>4.34</td>
<td>56%</td>
<td>32%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>5. Success Promoting</td>
<td>4.18</td>
<td>43%</td>
<td>39%</td>
<td>12%</td>
<td>3%</td>
</tr>
<tr>
<td>6. Easy</td>
<td>3.29</td>
<td>12%</td>
<td>31%</td>
<td>35%</td>
<td>17%</td>
</tr>
<tr>
<td>7. Important</td>
<td>4.35</td>
<td>54%</td>
<td>34%</td>
<td>8%</td>
<td>2%</td>
</tr>
</tbody>
</table>

N=291
Research Question 4

In what ways do elementary administrators promote reflective practice to encourage professional development of teachers and increase student achievement?

The last section of the administrative survey paralleled the teacher survey with five open-ended questions. The open-ended questions asked principals about their beliefs of reflection and the role it plays in the professional development of teachers, promoting school improvement, increasing student achievement, and examples of how they promote reflection at their school. Follow-up telephone interviews with three principals were conducted to support quantitative data and add richness to the study. Fifty-two principals indicated at the end of the survey their willingness to participate. However, the three principals were selected using a random number generator. The interviews were audio taped with the permission of the participants and then transcribed. A content analysis was conducted on both the open-ended questions and the interview transcripts. Predetermined themes were used based on the literature regarding reflection. The researcher also allowed themes to emerge based on the responses from the principals.

Based on the data, elementary principals believed that reflection was relevant, guided instruction for teachers, and helped teachers grow professionally. A principal interviewed stated, “The purpose of reflective practice is professional growth. It helps navigate through sticky times. It assists teachers in reviewing practices that may need refinement. Reflection raises the awareness of what’s working, what’s not. It helps teachers to make changes and to self-check.”

Principals indicated in the survey open-ended questions that they promoted reflection through professional learning communities, dialogue and collaboration amongst staff, and
reflective questions. They felt time to reflect on practices was essential. For example, a
principal wrote the following about how they promoted reflective practice in their school,
“Think time, including written reflection. Pair time, including oral and written
reflections-including exchanging of reflections on similar experiences/topics. Share time,
larger group share outs-exchange of reflections. PLCs [professional learning
communities].”

Principals indicated that they built trust among staff when beginning the reflective
practice process. They explained the concept of reflective practice and modeled it with
staff. The principals interviewed stated that they used reflection as a way to set school
goals. In addition, the principals were able to establish a shared vision by sharing their
own beliefs and then having others share. One principal stated, “I started by sharing my
beliefs and then when they [the teachers] became comfortable, they knew it was okay to
share their beliefs.” Another principal shared, “Building a shared vision is an ongoing
process. We are constantly asking ourselves how we need to reshape what we are about.
How does this align with our beliefs? How do we want to make changes? What’s next for
us?” Refer to Appendix I Tables 6-10 and 12 for data.

Research Question 5

What are the similarities and differences between teachers’ perceptions and
administrators’ perceptions of reflective practice?

An independent t-test was conducted using SPSS 15.0 to compare the teacher
responses from the survey to the principal responses. The surveys were divided into
categories but only the following were compared: the usefulness of the reflective process,
usefulness in improving teaching performance, likeableness of reflective activities, and
feelings concerning reflection. The themes from the open-ended survey questions and the follow-up telephone interviews were compared as well.

An analysis indicated that there was one significant difference (p < .05) in the category of the usefulness of the reflective process. Teachers responded more positively to reflection helping them gain new ideas about teaching (p = .029) than administrators. There were significant differences in the usefulness of reflection in improving teaching performance category. The responses from principals was less positive than teachers regarding reflection without an assigned theme, p = .026. In this same category, teachers perceived reflecting alone to be more useful in improving teaching performance than principals (p = .000). In the category of feelings about reflective activities, the following showed significant difference: (a) reflecting in a group (p = .005), (b) reflecting with no assigned theme (.003), and (c) both reflecting alone and in writing (p = .000). Principals strongly liked for teachers to reflect in a group about teaching (p = .005) more so than teachers. In the category of feelings about reflection, there was significant difference in the items pertaining to reflection promoting success (p = .035), being easy (p = .004), being pleasant, (p = .001), and interesting (p = .000). T-test results are found in Appendix I Tables 13-16.

The responses from the open-ended survey questions revealed that both teachers and administrators believed that reflection was relevant and improved instructional practices. When asked about how reflection helped promote school improvement, the theme of instructional improvements and the importance of dialogue/collaboration in this process emerged. The differences in responses were prevalent when teachers and principals were asked to specifically provide examples of reflective practices. The examples provided by
teachers were based more on when reflection occurs and the purpose, such as reflection-on-action, reflection-in-action, and reflection-for-action. On the other hand, principals indicated that they promoted reflective practice in their schools through professional learning communities. In addition, the responses from both groups suggested that time to reflect was important and journal writing assisted in this process.

The responses from the follow-up telephone interviews supported the findings from the survey. It also provided additional data on creating a climate conducive to reflection. The teachers and principals interviewed believed that when building trust to employ this idea of reflection that creating a supportive environment was key as well as establishing a shared vision with common goals. There were no significant differences in interview responses from both groups.

Summary

In this chapter, the findings related to each research question were presented. The data collected for this study was descriptive in nature. The descriptive analysis included frequency, percentages, and measures of central tendency. An independent t-test was used to compare the responses of teachers and principals. A content analysis was conducted to find emerging themes and predetermined codes for open-ended questions on the survey and follow-up telephone interviews.

Based on the responses, it was evident that teachers believed reflection was important and worthwhile. They liked reflecting about their own teaching. The data showed that teachers often reflected in the midst of teaching during every lesson to make adjustments. Teachers felt that reflection helped them improve their teaching performance.
Additionally, teachers felt that they needed time to reflect and preferred to
dialogue/collaborate with peers.

The responses from the administrators revealed that they felt reflection was
interesting and important. They believed reflecting was useful in improving teacher
performance and promoting professional development. In addition, principals preferred
that teachers reflect about an assigned theme with peers using professional learning
communities.

A comparison of the data suggested that there were significant differences in the
perceptions of teachers and principals in 10 areas. However, both groups believed that
establishing a supportive environment and developing a shared vision were important to
employ reflective practices.
CHAPTER 5
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

With the enactment of the *No Child Left Behind Act of 2001*, educational reform took yet another turn (DuFour, DuFour, & Eaker, 2009). This new legislation mandated annual testing in reading and mathematics as well as reporting the results by subgroups such as race/ethnicity, free/reduced lunch, special education, and other demographic data (U.S. Department of Education, 2003). This educational initiative also required schools to demonstrate adequate yearly progress overall as a school and in each subgroup. Additionally, states were mandated to report annually the professional qualifications of teachers. As a result, principals were charged with providing professional development activities that were designed to improve teacher quality and linked to academic success (Berube & Dexter, 2006). Therefore, engaging in reflective dialogue between administrators and teachers for the purpose of changing mindsets, improving instruction and increasing student performance became essential (Zmuda, Kuklis, & Kline, 2004).

The purpose of this study was to describe the perceptions of elementary administrators and teachers from three states concerning reflective practice. The study explored the perceived professional practice of administrators and teachers as it related to reflective practice. In addition, the researcher compared the perceptions of administrators and teachers related to reflection and their professional practice.

The researcher sent an e-mail with the survey link to 907 elementary principals in Nevada, Oregon, and Utah. Two hundred and ninety-one principals responded to the survey. The principals were asked to forward the teacher web link to three teacher
leaders in their school. One hundred and twenty-two teachers responded to the survey. Follow-up telephone interviews were conducted with three principals and three teachers. The close-ended questions on the survey were processed statistically using \textit{SPSS 15.0}. Frequencies, percentages, and measures of central tendency were compiled for biographical information and the reflective practice categories for the close-ended questions. An independent t-test was used to compare the perceptions of principals and teachers to find significant differences. A content analysis was conducted on the open-ended questions of the survey as well as the follow-up telephone interviews to find predetermined and emerging themes.

\textbf{Findings of the Study}

The findings of the study were based on five research questions:

1. What are elementary teachers’ perceptions of the reflective practice process?

Teachers identified reflection as being a very useful task in improving their teaching performance, discovering strengths and weaknesses, and encouraging better planning in their teaching. The data showed that teachers not only perceived reflecting about their teaching as a helpful tool in improving their teaching but liked it. They felt reflecting with others was a useful tool but least favored reflecting with no assigned theme for this same purpose. In fact, most teachers reflected in the midst of lessons for every lesson they taught. The purpose of this reflection activity was to make adjustments to the lesson. The data suggested that teachers always reflected after a lesson or unit to help with future teaching. In addition, teachers liked to reflect alone and with others, but
preferred the former more. Overall, teachers felt reflection was worthwhile and important.

2. In what ways do elementary teachers promote reflective practice to enhance their professional growth?

The data clearly suggested that teachers perceived reflection to be relevant in promoting professional development and improving instruction in the classroom. Reflection helped teachers look back at their teaching and instruction. Much of this reflection was done after a lesson or unit of study had been taught. The findings showed that teachers needed time to reflect and preferred dialogue and collaboration with peers.

3. What are elementary administrators’ perceptions of the reflective practice process?

Principals identified the task of reflection as being a very useful tool to encourage teachers to evaluate their own teaching. They also felt the reflective process was useful in encouraging better planning for teaching. The data suggested that principals perceived reflecting with others and reflecting about teaching to be useful in improving teachers’ performance in the classroom. In fact, principals strongly liked for their teachers to reflect with a group about their teaching as opposed to reflecting alone. Overall, principals perceived reflection to be both interesting and important.

4. In what ways do elementary administrators promote reflective practice to encourage professional development of teachers and increase student achievement?

Based on the data, elementary principals believed that reflection was relevant, guided instruction for teachers, and helped teachers grow professionally. They promoted reflection through professional learning communities, dialogue and collaboration amongst staff, and reflective questions. Additionally, principals created a supportive
environment to develop a shared vision and set common goals for continuous school improvement.

5. What are the similarities and differences between teachers’ perceptions and administrators’ perceptions of reflective practice?

Both groups identified a supportive environment as essential in the trust building stage to employ reflective practice in the school setting. This foundation was the stepping stone to establish a shared vision and a common focus. However, there were significant differences in perceptions of the groups in 10 areas. Principals indicated that reflection was more successful than teachers. Teachers perceived the task of reflection to be more useful in gaining new ideas about teaching than did principals. Also, teachers found reflecting with no assigned theme to be more useful in improving their performance as opposed to the principals. Teachers strongly liked reflecting alone and principals preferred teachers to reflect with a group about their teaching. In fact, principals liked for teachers to reflect in writing more so than the teachers. Overall, principals found reflection to be more interesting and much more of a pleasant experience than teachers.

Conclusions

The supervision of teachers in public education has evolved over the past four centuries. It has transformed from principals being seen as the inspector with a top down mentality to administrators relying on the input of teachers when making program and instructional decisions. Today, the approach to supervision is more collaborative (Krajewski, 1996). Krajewski predicted that within the next five years that supervision
will shift yet again. However, the focus will be on the individual needs and goals of teachers.

The literature suggested that there were various supervision models to assist in the professional learning of teachers such as clinical supervision, humanistic/artistic, technical/didactic, and developmental/reflective models. In each of these approaches as described in the literature review, the conference stage not only allowed the administrator to provide feedback but there was a time to ask reflective questions of the teacher. It was through this reflective time during the conference that teachers analyzed their own performance to make changes and grow. In the study, many principals indicated that they conference with teachers for this very purpose. For example a principal noted, “During post conferences, teachers are asked to reflect on the outcome of the lesson that was observed. They are asked to discuss what they liked about the lesson and what they might do differently if they were to repeat the same instruction.” Another principal wrote, “In my individual conferences with teachers, every meeting begins with, how do you think the lesson went? Why? Why not? What will you do differently next time?”

According to Brookfield (1986), the facilitation of adult learning was most effective when set characteristics/principles were present. First, teachers must understand the relevance of a learning situation. When this connection is made, teachers are more apt to voluntarily participate in an activity. The results of this study supported that teachers understood the relevance of reflection; therefore, participated in reflective practices. For instance a teacher poignantly stated, “Reflection is the starting point with any growth. It brings about awareness of issues. This awareness leads to engagement in addressing issues. The engagement leads to empowerment in being able to solve problems and make
my teaching better.” Another teacher asserted, “I believe reflection to be a crucial factor in professional development. It is through reflection that I am able to identify areas of weakness and determine courses for further professional development.”

Secondly, there must be the facilitation of mutual respect. Teachers must be willing and comfortable to offer suggestions to their colleagues for growth. This principle suggested that collaboration and dialogue must be evident. As revealed by a teacher, “Reflection is essential in professional development. When one reflects, it gives teachers aspects of their teaching to adjust. When able to discuss this with others, it can only enhance a teacher’s teaching practices.”

Thirdly, the characteristic of collaboration must be an ongoing process for teachers. It is through collaboration that teachers begin to process learning verbally to derive deeper meaning from their experiences (Osterman & Kottkamp, 1993). Reflective questions can be utilized to gain in-depth understanding and challenge ideas. The very act of dialogue supports this learning process. The collaboration can take place amongst peers or occur between the administrator and the teacher.

Fourthly, adult learning must be geared toward a teacher taking personal action. It is the alternating engagement of the teacher being viewed as a learner and an instructor. “Reflection is the measure of our awareness of what we’re doing, how our actions coincide with our intentions. Reflection fuels our spirits with pointers to new directions of thinking, acting and being,” as stated by a teacher. Another teacher commented, “Reflection can be valuable in improving strategies and methods, if you implement the ideas that you gather through reflection.” Taking action for professional growth and instructional improvements leads to personal liberation.
The last adult learning principle advised that teachers assume responsibility for their learning. This is accomplished by teachers setting their own learning goals and methods to bring about change professionally and instructionally. As indicated by many teachers, reflection has allowed them the opportunity to make decisions about their next steps for professional development.

The theory of adult learning can be linked directly to reflective practice theory (Brookfield, 1986) as evidenced by the participants in this study. The primary goal of reflective practice theory is behavioral change for the purpose of professional development and improved practice (Schon, 1983). The results of this study supported the conclusion that elementary teachers and principals find reflection relevant in promoting professional growth and instructional improvements. The research literature suggested that the purpose of reflection is to actively engage in the thinking process to gain a deeper understanding of one’s actions for future improvements (Schon, 1983; Killion & Todnem, 1991; York-Barr et al., 2001). Teachers best develop their instructional practice when reflection is job-embedded and there is a process in place to assess their practice (Ontario Principals’ Council, 2009). The process of reflecting on a routine basis therefore becomes a norm in the workplace and creates a culture of continuous learning. According to Bredeson (2003), when teachers are engaged in reflection they strengthen their instructional practices. They question existing practices and want to rectify inadequacies (Glickman, 1993). Teachers grow professionally by developing new ideas as well as modifying those that shaped their previous behavior (Osterman, 1990).
Reflection can occur individually and with others. The data collected from this study supported that teachers reflected alone. In fact, teachers generally reflected in the midst of a lesson during most lessons to make adjustments. Schon (1983) referred to this as reflection-in-action. Teachers reflected without the lesson being interrupted. As a teacher stated, “Through reflection, a teacher can assess their students’ mastery and if need be adjust the lesson, which will hopefully ensure an increase in mastery.” Another teacher acknowledged, “I also reflect during instruction and make adjustments when needed.” Teachers also indicated in the study that they usually reflected after a lesson or unit of study to adjust for future teaching. This is known as reflection-on-action (Schon, 1983). Teachers take a deliberate pause to raise questions and ideas about teaching practices. Individual reflection provides teachers with an opportunity to make improvements in their educational practice (York-Barr et al., 2001) and increase student learning (Schmoker, 2006).

There are several ways to individually reflect such as use of teacher portfolios, journaling, and as previously mentioned by reflecting-in-action, on-action as well as for-action. The study revealed that journaling was a favored reflective practice by teachers and encouraged by administrators at their schools. Journals are tools for personal and professional growth (Cooper & Boyd, 1998; Holly, 1989; York-Barr et al., 2001). It is an instrument to link teaching and professional development (Holly, 1989). For example a principal wrote, “We use reflective journals at our school. Teachers are asked to personally reflect on experiences. They write down what they feel, document behavioral patterns, or whatever comes to mind about the experience. Writing down patterns helps get to the root cause of the behavior instead of focusing on the behavior.” Holly (1989)
believed that through an analysis of the writing in a journal, patterns emerge that assist with future planning.

Another conclusion drawn from the study was that teachers and principals found dialogue and collaboration with peers to be essential when reflecting. Engaging in dialogue expands thinking (York-Barr et al., 2001) as well as establishes and promotes new understanding (Schmoker, 2006). Cooper and Boyd (1998) asserted that ongoing dialogue and time to analyze one’s own experiences to be a rich source of adult learning. Dialoguing with peers helps teachers clarify their own thinking.

When administrators routinely engage staffs in reflective dialogue, it helps to shape the culture of the school (DuFour & Eaker, 1998). Therefore, it becomes imperative to have teachers critically examine school practices, individual classroom practices, and possible new teaching approaches to bring about purposeful and lasting change (Fullan, 2005). An administrator indicated in the survey that when they conduct meetings with their staff that reflection is part of the learning/problem solving process. Teachers identified concern areas, reflected upon solutions, and created goals. The thinking of the teachers reshaped their practice as a school. Brody and Davidson (1998) purported that the very nature of reflective dialogue informs learning and creates a community of inquirers.

Lastly, this study suggested that principals promoted reflection through professional learning communities. Both principals and teachers indicated that a supportive environment was established to develop a shared purpose. Senge (1990) purported that shared vision and mutual purpose was a building block for organizational learning. This shared vision and common purpose provide a framework for the actions taken on a daily
basis by staff (DuFour & Eaker, 1998). Consequently, the infrastructure of a professional learning community must have trust as the foundation (Ontario Principals’ Council, 2009). However, this process of building trust takes time. As a principal indicated in her interview, “I have been in the building for a year. I met with all teachers one-on-one to explain my background and beliefs. I wanted to see how they felt about collaboration. It took about six months for me to build their trust.” As this administrator began sharing her values and beliefs, the staff knew it was okay to share their beliefs.

When the foundation blocks of mutual trust and a shared vision exist, teachers are more open-minded in considering alternate ways to grow professionally and enhance their instructional practices (Ontario Principals’ Council, 2009). As the literature suggested, leading this change requires that administrators recognize that teachers develop at different stages. With a shared vision and ongoing reflective dialogue prevalent, teachers begin to understand that professional development not only benefits them personally but the school as a whole (Senge, 1990). Teachers make a personal commitment to continually learn to reach the goals of the school. In fact, professional learning communities are designed to develop reflective teachers who have the ability to assess and take action to revise their own practices in order to improve student learning (DuFour & Eaker, 1998). For instance, an administrator wrote, “Ongoing reflection puts teachers in the role of learners, and as such is a natural and relevant means of continuing to deepen their understanding of the teaching and learning process.” A teacher commented, “Reflection is imperative! I don’t understand how anyone can grow professionally without reflecting on their own practices.” Another teacher stated, “It is as much our responsibility to be a part of the learning as it is for our students. If we stop
improving, we stop learning. Reflection encourages us to improve on what we already do.”

Another important aspect of professional learning communities as revealed by the study findings is the time necessary for reflection. Principals must provide time for teachers to collectively meet to reflect on student learning, discuss teaching, and devise a plan of action for continuous improvement (DuFour, DuFour, & Eaker, 2009). This may occur with small groups throughout the school such as grade level teams, departments, or committees. It may also occur school-wide with the entire staff focusing on an assigned theme/topic. Nonetheless, time must be allocated to facilitate teacher collaboration and reflective inquiry (King, 2004). A principal made this statement about the notion of time, “Allowing teachers time for reflection is important and very helpful in professional development. I find that educators welcome the time for reflection if they are supported in their efforts to improve their profession and if they are allowed time for reflection.” With this being said, administrators will have to explore creative ways to ensure time. Continuous improvement requires continuous reflection (DuFour, DuFour, & Eaker, 2009), which requires time and structure (Danielson, 2002).

In conclusion, the No Child Left Behind Act of 2001 demands that school leaders link student learning goals to professional development and educational resources. In order to accomplish this task, schools need to use student assessment results systematically to identify professional development needs and to design professional development opportunities accordingly (Holloway, 2003). Additionally, school leaders are responsible for helping teachers modify and target their own instruction, based on the assessment data. This process entails data collection, analysis, establishing priorities, and setting
goals linked to student learning and professional development activities (Guskey, 2003). Professional development should connect to goals related to student learning, be reflective in nature, and viewed as a continual process.

Recommendations for Further Study

1. Further studies should be conducted to describe the perceptions of elementary, middle, and high school teachers and principals regarding reflection. The fact that staff and student populations as well as the infrastructure of schools may differ could provide interesting data. This study could be accomplished by administering the survey state-wide or selecting schools within one school district.

2. Further studies should be conducted to describe the perceptions of elementary, middle, and high school teachers and principals regarding reflection in the same school district. A case study methodology should be used. This would provide a more in-depth look at the schools and paint a vivid picture of the actual reflective process and professional practices.

3. Further studies should be conducted using elementary schools that have been identified as high achieving and low achieving schools. This could be accomplished by selecting schools within a state or within a district to see whether there are perceived differences from these groups regarding their reflective practices.

4. A replication of this study should be conducted using a larger population of a region within the United States. This would allow for more generalizability.
APPENDIX A

PERMISSION LETTER FOR SURVEY MODIFICATION
Celese Rayford
Mabel Hoggard Magnet School
950 N. Tonopah Dr.
Las Vegas, NV 89106

July 27, 2009

Dear Celese:

Thank you for your request for permission to use the Reflective Attitude Survey, which I developed in 1989. As you know, it was part of my Master's thesis at Brigham Young University entitled, Preservice Teachers' Written Reflection: The Effect of Structured Training on Pedagogical Thinking. I gladly grant you permission to use the survey and to adapt the survey for use with school administrators. I do ask that you cite the original source for both the extant survey and the adapted survey you create.

I will be very interested in the outcome of your work. I appreciate your promise to notify me when your research is complete and to provide a link to the finished product. Best wishes in the exciting work of conducting your dissertation research.

Respectfully,

Janet R. Young, Ph.D.
Associate Chair, Department of Teacher Education
Brigham Young University
Dear Elementary Teacher:

With the enactment of the No Child Left Behind Act of 2001, educators have faced the challenge of being responsible for school improvement, professional growth, and increased student achievement. Since this educational reform has gained momentum, it is evident that there is a need to know how schools promote professional growth through reflective practices that improve teaching and learning from the perspective of elementary teachers and administrators. For the purpose of the survey, reflective practices are those activities that cause one to think about their teaching. Reflection is the act of analyzing one’s actions by focusing on how they were achieved.

The purpose of this survey is to describe the attitudes and beliefs of teachers about reflection and professional practice. The survey will also gather demographic data to assist in further analysis. The survey should take no more than 15 minutes to complete. There are 35 closed-ended questions and 5 open-ended questions.

Participation in this survey is strictly voluntary and responses will remain confidential. The close-ended data will be aggregated and the open-ended responses reported by category. A comparison will be made between teachers and administrators. The survey data will be used in partial fulfillment of the researcher’s doctoral program at the University of Nevada, Las Vegas and may be made available in journal publications or educational conferences.

Clicking on the “Start Survey” box indicates that you consent to participate in the survey. You understand that there are only minimal risks. You may decline to answer any questions that make you uncomfortable. You are aware there are no direct benefits to you as a participant in this study, but the data will expand knowledge of perceptions and professional practice of reflection. You understand there is no financial cost to participate nor will you be compensated in any manner. You have the right to withdraw participation at any time.

By not clicking on the “Start Survey” box, this indicates that you do not consent to participate in the study. You understand this will not affect or benefit you in any way.

For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted you may contact the UNLV Office for the Protection of Research Subjects at 702-895-2794. If you have questions, concerns, or comments about the survey, you may contact me at Celese_Rayford@interact.ccsd.net. You may also call me at 702-799-4740 (work) or 702-249-6348 (cell). Should you need to reach the principal investigator, please contact Dr. Pamela Salazar at 702-895-1971 (office) or email at pam.salazar@unlv.edu.

Your assistance in completing the survey is greatly appreciated.

Sincerely,
Celese Rayford, Principal
APPENDIX C

SAMPLE ADMINISTRATOR COVER LETTER
Dear Elementary Administrator:

With the enactment of the No Child Left Behind Act of 2001, educators have faced the challenge of being responsible for school improvement, professional growth, and increased student achievement. Since this educational reform has gained momentum, it is evident that there is a need to know how schools promote professional growth through reflective practices that improve teaching and learning from the perspective of elementary teachers and administrators. For the purpose of the survey, reflective practices are those activities that cause one to think about their teaching. Reflection is the act of analyzing one’s actions by focusing on how they were achieved.

The purpose of this survey is to describe the attitudes and beliefs of administrators about how teachers reflect and how you promote reflective practice. The survey will also gather demographic data to assist in further analysis. The survey should take no more than 15 minutes to complete. There are 31 closed-ended questions and 5 open-ended questions.

Participation in this survey is strictly voluntary and responses will remain confidential. The close-ended data will be aggregated and the open-ended responses reported by category. A comparison will be made between teachers and administrators. The survey data will be used in partial fulfillment of the researcher’s doctoral program at the University of Nevada, Las Vegas and may be made available in journal publications or educational conferences.

Clicking on the “Start Survey” box indicates that you consent to participate in the survey. You understand that there are only minimal risks. You may decline to answer any questions that make you uncomfortable. You are aware there are no direct benefits to you as a participant in this study, but the data will expand knowledge of perceptions and professional practice of reflection. You understand there is no financial cost to participate nor will you be compensated in any manner. You have the right to withdraw participation at any time.

By not clicking on the “Start Survey” box, this indicates that you do not consent to participate in the study. You understand this will not affect or benefit you in any way.

For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted you may contact the UNLV Office for the Protection of Research Subjects at 702-895-2794. If you have questions, concerns, or comments about the survey, you may contact me at Celese_Rayford@interact.ccsd.net. You may also call me at 702-799-4740 (work) or 702-249-6348 (cell). Should you need to reach the principal investigator, please contact Dr. Pamela Salazar at 702-895-1971 (office) or email at pam.salazar@unlv.edu.

Your assistance in completing the survey is greatly appreciated.

Sincerely,

Celese Rayford, Principal
Please click on your selected response for each question (choose one).

What is your current teaching assignment?

K 1 2 3 4 5 Other__________

Which best describes your school setting?

Rural Urban Suburban Other__________

Which best describes the size of your teaching staff at your school?

1-20 21-40 41-60 61-80 80-100 Over 100

Which best describes your class size?

1-15 16-20 21-25 26-30 31-35 Over 35

Which best describes the years have you been teaching?

1-5 6-10 11-15 16-20 21-25 Over 25

What is your gender?

Female Male

Which best describes your age group?

21-30 31-40 41-50 51-60 Over 60

Please read and answer the following statements concerning reflective attitudes and practices. For the purpose of this survey, reflection is defined as a process in which the teacher thinks about his/her instructional practices.

How useful is the ‘reflective’ process in helping you accomplish each of the following tasks? Click on the response below the statement (choose one).
1. **Helping you describe what happened during a teaching experience**
   - Extremely Useful
   - Very Useful
   - Moderately Useful
   - Not Very Useful
   - Not at all Useful

2. **Gaining new ideas about teaching**
   - Extremely Useful
   - Very Useful
   - Moderately Useful
   - Not Very Useful
   - Not at all Useful

3. **Helping you label and categorize what happened during a teaching experience**
   - Extremely Useful
   - Very Useful
   - Moderately Useful
   - Not Very Useful
   - Not at all Useful

4. **Discovering strengths and weaknesses as a teacher**
   - Extremely Useful
   - Very Useful
   - Moderately Useful
   - Not Very Useful
   - Not at all Useful

5. **Encouraging you to evaluate your teaching**
   - Extremely Useful
   - Very Useful
   - Moderately Useful
   - Not Very Useful
   - Not at all Useful

6. **Encouraging better planning in your teaching**
   - Extremely Useful
   - Very Useful
   - Moderately Useful
   - Not Very Useful
   - Not at all Useful

7. **Improving your teaching**
   - Extremely Useful
   - Very Useful
   - Moderately Useful
   - Not Very Useful
   - Not at all Useful

How **useful** is each of the following activities in improving your teaching performance?

Click on the response below the statement (choose one).

8. **Reflecting with a group about teaching experiences**
   - Extremely Useful
   - Very Useful
   - Moderately Useful
   - Not Very Useful
   - Not at all Useful

9. **Reflecting on an assigned theme**
   - Extremely Useful
   - Very Useful
   - Moderately Useful
   - Not Very Useful
   - Not at all Useful

10. **Reflecting with no assigned theme**
    - Extremely Useful
    - Very Useful
    - Moderately Useful
    - Not Very Useful
    - Not at all Useful

11. **Reflecting about your own teaching**
    - Extremely Useful
    - Very Useful
    - Moderately Useful
    - Not Very Useful
    - Not at all Useful

12. **Reflecting about another person’s teaching**
    - Extremely Useful
    - Very Useful
    - Moderately Useful
    - Not Very Useful
    - Not at all Useful

13. **Reflecting alone**
    - Extremely Useful
    - Very Useful
    - Moderately Useful
    - Not Very Useful
    - Not at all Useful

14. **Reflecting with others**
    - Extremely Useful
    - Very Useful
    - Moderately Useful
    - Not Very Useful
    - Not at all Useful

How **often** do you do the following activities? Click on the response below the statement (choose one).
15. How often do you reflect about teaching, formally or informally?
- Every Lesson
- Daily
- Twice Weekly
- Weekly
- Less than mention

16. How often do you reflect to adjust your teaching in the midst of a lesson?
- Every Lesson
- Daily
- Twice Weekly
- Weekly
- Less than mention

17. How often do you reflect on your teaching after a lesson and/or unit to adjust for future teaching?
- Always
- Usually
- Sometimes
- Occasionally
- Never

18. How often do you reflect on past and present teaching practices to create a teaching plan to implement?
- Always
- Usually
- Sometimes
- Occasionally
- Never

19. How often do you implement teaching plans made during reflections?
- Always
- Usually
- Sometimes
- Occasionally
- Never

20. How often does your principal facilitate reflection amongst teachers?
- Always
- Usually
- Sometimes
- Occasionally
- Never

How much do you like the following activities? Click on the response below the statement (choose one).

21. Reflecting alone
- Strongly Like
- Like
- Neutral
- Dislike
- Strongly Dislike

22. Reflecting with another person
- Strongly Like
- Like
- Neutral
- Dislike
- Strongly Dislike

23. Reflecting with a group about teaching
- Strongly Like
- Like
- Neutral
- Dislike
- Strongly Dislike

24. Reflecting in writing
- Strongly Like
- Like
- Neutral
- Dislike
- Strongly Dislike

25. Reflecting about your own teaching
- Strongly Like
- Like
- Neutral
- Dislike
- Strongly Dislike

26. Reflecting about others’ teaching
- Strongly Like
- Like
- Neutral
- Dislike
- Strongly Dislike

27. Reflecting about an assigned theme
- Strongly Like
- Like
- Neutral
- Dislike
- Strongly Dislike

28. Reflecting with no assigned theme
- Strongly Like
- Like
- Neutral
- Dislike
- Strongly Dislike

For each pair of words or phrases, click on the number on the continuum which best characterizes your feelings about reflection.

Interesting
- 5
- 4
- 3
- 2
- 1
- Boring
Please answer the following questions in the text box about your personal beliefs about reflection and your professional practices.

1. What is your belief about the role reflection plays in professional development?

2. What is your belief about the role reflection plays in increasing student achievement?

3. What is your belief about the role reflection plays in promoting school improvement?

4. Give an example(s) of your reflective practice.

5. What strategies do you use to reflect?

Would you be willing to participate in a follow-up interview of 30 minutes or less?
   Yes      No
If yes:

Please provide your name, telephone number with area code, best day of the week, and best time to be contacted.

The interview will be audiotaped to assist the researcher in the collection of data. Your identity will be kept strictly confidential. No information will be provided that would identify you. The audiotape will be destroyed at the conclusion of the study.

Thank you for taking time to complete the reflective attitude survey. When the study is completed by the researcher, an email will be sent to your principal with a summary of the results from the study.

☐ CLICK HERE TO SUBMIT RESPONSES.

If no:

Thank you for taking time to complete the reflective attitude survey. When the study is completed, an email will be sent to your principal with the results.

☐ CLICK HERE TO SUBMIT RESPONSES.
APPENDIX E

ADMINISTRATOR REFLECTIVE ATTITUDE SURVEY
(adapted from Young, 1989)

Please click on your selected response for each question (choose one).

Which best describes your school setting?
- Rural
- Urban
- Suburban
- Other

Which best describes the size of your teaching staff at your school?
- 1-20
- 21-40
- 41-60
- 61-80
- 80-100
- Over 100

Which best describes your average class size?
- 1-15
- 16-20
- 21-25
- 26-30
- 31-35
- Over 35

Which best describes the years have you been an administrator in your current school?
- 1-5
- 6-10
- 11-15
- 16-20
- 21-25
- Over 25

Which best describes the total years have you been an administrator?
- 1-5
- 6-10
- 11-15
- 16-20
- 21-25
- Over 25

What is your gender?
- Female
- Male

Which best describes your age group?
- 21-30
- 31-40
- 41-50
- 51-60
- Over 60

Please read and answer the following statements concerning reflective attitudes and practices. For the purpose of this survey, reflection is defined as a process in which the teacher thinks about his/her instructional practices.

How useful is the ‘reflective’ process in helping the teachers at your school accomplish each of the following tasks? Click on the response below the statement (choose one).
1. Describe what happened during a teaching experience
   Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

2. Gain new ideas about teaching
   Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

3. Label and categorize what happened during a teaching experience
   Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

4. Discovering instructional strengths and weaknesses
   Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

5. Encourage teachers to evaluate their instructional practices
   Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

6. Encourage better planning in teaching
   Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

7. Improve teaching
   Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

How useful is each of the following activities in improving the teachers’ performance at your school? Click on the response below the statement (choose one).

8. Reflecting with a group about teaching experiences
   Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

9. Reflecting on an assigned theme
   Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

10. Reflecting with no assigned theme
    Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

11. Reflecting about their own teaching
    Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

12. Reflecting about another person’s teaching
    Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

13. Reflecting alone
    Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

14. Reflecting with others
    Extremely Useful  Very Useful  Moderately Useful  Not Very Useful  Not at all Useful

How often do you the following activities occur with teachers in your school? Click on the response below the statement (choose one).

15. How often do you have teachers reflect about teaching, formally or informally?
    Every Lesson  Daily  Twice Weekly  Weekly  Less than mention
16. How often do you have teachers implement teaching plans made during reflections?

<table>
<thead>
<tr>
<th>Always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Occasionally</th>
<th>Never</th>
</tr>
</thead>
</table>

How much do you like teachers to do the following activities? Click on the response below the statement (choose one).

17. Reflecting alone

| Strongly Like | Like | Neutral | Dislike | Strongly Dislike |

18. Reflecting with another person

| Strongly Like | Like | Neutral | Dislike | Strongly Dislike |

19. Reflect with a group about teaching

| Strongly Like | Like | Neutral | Dislike | Strongly Dislike |

20. Reflecting in writing

| Strongly Like | Like | Neutral | Dislike | Strongly Dislike |

21. Reflecting about their own teaching

| Strongly Like | Like | Neutral | Dislike | Strongly Dislike |

22. Reflecting about others’ teaching

| Strongly Like | Like | Neutral | Dislike | Strongly Dislike |

23. Reflecting about an assigned theme

| Strongly Like | Like | Neutral | Dislike | Strongly Dislike |

24. Reflecting with no assigned theme

| Strongly Like | Like | Neutral | Dislike | Strongly Dislike |

For each pair of words or phrases, click on the number on the continuum which best characterizes your feelings about reflection.

Interesting 5 4 3 2 1 Boring
Pleasant 5 4 3 2 1 Unpleasant
Understandable 5 4 3 2 1 Confusing
Worthwhile 5 4 3 2 1 Waste of Time
Success promoting 5 4 3 2 1 Frustrating
Easy 5 4 3 2 1 Difficult
Important 5 4 3 2 1 Trivial
Please answer the following questions in the text box about your personal beliefs about reflection and your professional practices.

1. What is your belief about the role reflection plays in professional development?

2. What is your belief about the role reflection plays in increasing student achievement?

3. What is your belief about the role reflection plays in promoting school improvement?

4. Give examples of how you promote reflective practice at your school.

5. What strategies do you use to help teachers reflect?

Would you be willing to participate in a follow-up interview of 30 minutes or less?
Yes No

If yes:

Please provide your name, telephone number with area code, best day of the week, and best time to be contacted.
The interview will be audiotaped to assist the researcher in the collection of data. Your identity will be kept strictly confidential. No information will be provided that would identify you. The audiotape will be destroyed at the conclusion of the study.

Thank you for taking time to complete the reflective attitude survey. When the study is completed by the researcher, an email will be sent to you with a summary of the results from the study.

☐ CLICK HERE TO SUBMIT RESPONSES.

If no:

Thank you for taking time to complete the reflective attitude survey. When the study is completed, an email will be sent to you with the results.

☐ CLICK HERE TO SUBMIT RESPONSES.
Hello, my name is Celese Rayford. I am working on an approved research study from the University of Nevada, Las Vegas regarding administrator and teacher perceptions about reflective practices.

Thank you for your willingness to participate and share your responses. Please know that your responses are confidential. The audiotape will only be available to me and to the transcriber. If there is anything you do not want me to record, just let me know and I will turn off the audio device.

Excerpts of this interview may be made part of the final research project, but under no circumstances will your name or identifying characteristics be included in the report. The audiotape will be destroyed at the completion of the study.

Are you ready to begin?

1. I would first like to know how you define reflection.

2. What is reflective practice?

3. What is your purpose for engaging in using reflective practice?
4. When beginning to employ this idea of reflective practice, what actions were used with staff to build trust?

5. In the trust building stage, did the staff develop a shared vision? If yes, then how? If no, then why?

6. How were staff members prepared to begin the reflective process (i.e. training, book study, PLC)?

7. Are instruments used for accountability? If so, what are these instruments and how are they used?

8. How has reflection improved your teaching performance?

9. How has reflection improved student achievement?

10. Lastly, how does your school measure the effectiveness of reflective practice strategies or techniques?

This concludes the interview. Thank you for your time.
Hello, my name is Celese Rayford. I am working on an approved research study from the University of Nevada, Las Vegas regarding administrator and teacher perceptions about reflective practices.

Thank you for your willingness to participate and share your responses. Please know that your responses are confidential. The audiotape will only be available to me and the transcriber. If there is anything you do not want me to record, just let me know and I will turn off the audio device.

Excerpts of this interview may be made part of the final research project, but under no circumstances will your name or identifying characteristics be included in the report. The audiotape will be destroyed at the completion of the study.

Are you ready to begin?

1. I would first like to know how you define reflection. What is reflective practice?

2. What is your purpose for reflective practice?

3. When beginning this idea of reflective practice, what actions did you take to build trust among your staff?
4. In the trust building stage, were you able to develop a shared vision? If yes, then how? If no, then why?

5. How did you prepare staff to begin the reflective process (i.e. training, book study, PLC)?

6. Do you use instruments for accountability? If so, what are they and how are they used?

7. How has reflection improved teacher performance?

8. How has reflection improved student achievement?

9. Lastly, how do you measure the effectiveness of the reflective practice strategies or techniques?

This concludes the interview. Thank you for your time.
Transcriber’s Confidentiality Agreement

TITLE OF STUDY: Reflective Practice: The Teacher in the Mirror

PRINCIPAL INVESTIGATOR: Dr. Pamela Salazar

CONTACT PHONE NUMBER: 702-895-1971

As a transcribing typist of this research study, I understand that I will be hearing tapes of confidential interviews. The information on these tapes has been revealed by research participants who participated in this project on good faith that their interviews would remain strictly confidential. I understand that I have a responsibility to honor this confidentially agreement.

I hereby agree not to share any information on these tapes with anyone except the principal investigator of this project. Any violation of this agreement would constitute a serious breach of ethical standards, and I pledge not to do so.

This acknowledgement is governed by HIPAA as well as other applicable federal, state, university and local laws, rules and regulations.

[Signature]
Signature of Transcribing Typist

[Date]
October 21, 2009

[Printed Name]
Printed Name of Transcribing Typist
APPENDIX I

SUMMARY TABLES OF SURVEYS AND INTERVIEWS
Table 1

*Teacher Survey Question 1: What is your belief about the role reflection plays in professional development?*

<table>
<thead>
<tr>
<th>Predetermined Themes</th>
<th>Frequency</th>
<th>Emerging Themes</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Improvements</td>
<td>47</td>
<td>None noted</td>
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</tr>
<tr>
<td>Professional Growth</td>
<td>32</td>
<td>Relevant</td>
<td>70</td>
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</tbody>
</table>

Table 2

*Teacher Survey Question 2: What is your belief about the role reflection plays in increasing student achievement?*

<table>
<thead>
<tr>
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<th>Frequency</th>
<th>Emerging Themes</th>
<th>Frequency</th>
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<tr>
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<td>52</td>
<td>Instructional Improvements</td>
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<tr>
<td>Student Growth</td>
<td>49</td>
<td>Inspire Student Reflection</td>
<td>6</td>
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Table 3

*Teacher Survey Question 3: What is your belief about the role reflection plays in promoting school improvement?*

<table>
<thead>
<tr>
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<th>Frequency</th>
<th>Emerging Themes</th>
<th>Frequency</th>
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</thead>
<tbody>
<tr>
<td>Common Focus/Goals</td>
<td>13</td>
<td>Dialogue/Collaboration</td>
<td>13</td>
</tr>
<tr>
<td>Continuous for Improvement</td>
<td>25</td>
<td>Instructional Improvements</td>
<td>12</td>
</tr>
<tr>
<td>Data</td>
<td>6</td>
<td>None noted</td>
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<tr>
<td>Relevant</td>
<td>48</td>
<td>Relevant</td>
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Table 4

*Teacher Survey Statement 4: Give an example(s) of your reflective practice.*

<table>
<thead>
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<th>Predetermined Themes</th>
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<th>Misc. Themes</th>
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<tbody>
<tr>
<td>Frequency</td>
<td>Frequency</td>
<td>Frequency</td>
</tr>
<tr>
<td>Action Research- 0</td>
<td>Dialogue/Collaboration- 12</td>
<td>Data- 4</td>
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<tr>
<td>Classroom Walk-throughs- 0</td>
<td>Reflection-For-Action- 10</td>
<td>Professional Learning Communities- 2</td>
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<tr>
<td>Cognitive Coaching- 0</td>
<td>Reflection-In-Action- 11</td>
<td></td>
</tr>
<tr>
<td>Journals- 16</td>
<td>Reflection-On-Action- 38</td>
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<tr>
<td>Peer Coaching- 5</td>
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<tr>
<td>Study Groups- 3</td>
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<tr>
<td>Teacher Portfolios- 0</td>
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</table>

Table 5

*Teacher Survey Question 5: What strategies do you use to reflect?*

<table>
<thead>
<tr>
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<td>Data- 10</td>
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<td>Journaling- 25</td>
<td>Peer Coaching- 3</td>
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<td>Reflective Time- 34</td>
<td>Professional Learning Communities- 4</td>
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<td></td>
<td>Professional Reading- 7</td>
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Table 6

*Administrator Survey Question 1: What is your belief about the role reflection plays in professional development?*

<table>
<thead>
<tr>
<th>Predetermined Themes</th>
<th>Misc. Themes</th>
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</thead>
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<tr>
<td>Frequency</td>
<td>Frequency</td>
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<td>Instructional Improvements- 74</td>
<td>Supportive Environment- 6</td>
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<tr>
<td>Professional Growth- 77</td>
<td>Time Needed- 16</td>
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<tr>
<td>Relevant- 121</td>
<td></td>
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</tbody>
</table>

113
Table 7

Administrator Survey Question 2: What is your belief about the role reflection plays in increasing student achievement?

<table>
<thead>
<tr>
<th>Predetermined Themes</th>
<th>Emerging Themes</th>
<th>Misc. Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>Frequency</td>
<td>Frequency</td>
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<tr>
<td>Data- 19</td>
<td>Dialogue/Collaboration- 18</td>
<td>Inspire Student Reflection- 11</td>
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<tr>
<td>Relevant- 94</td>
<td>Instructional Improvements- 76</td>
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</table>

Table 8

Administrator Survey Question 3: What is your belief about the role reflection plays in promoting school improvement?

<table>
<thead>
<tr>
<th>Predetermined Themes</th>
<th>Emerging Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>Frequency</td>
</tr>
<tr>
<td>Common Focus/Goals- 33</td>
<td>Dialogue/Collaboration- 19</td>
</tr>
<tr>
<td>Continuous for Improvement- 29</td>
<td>Increase Student Achievement- 17</td>
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<tr>
<td>Data- 10</td>
<td>Instructional Improvements- 21</td>
</tr>
<tr>
<td>Make Adjustments- 13</td>
<td>Relevant- 64</td>
</tr>
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<td>Relevant- 64</td>
<td></td>
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</tbody>
</table>

Table 9

Administrator Survey Statement 4: Give examples of how you promote reflective practice at your school.

<table>
<thead>
<tr>
<th>Predetermined Themes</th>
<th>Emerging Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>Frequency</td>
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<td>Action Research- 3</td>
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<td>Classroom Walk-throughs- 9</td>
<td>Dialogue/Collaboration- 42</td>
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<tr>
<td>Cognitive Coaching- 0</td>
<td>Professional Learning Communities- 64</td>
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<tr>
<td>Instructional Rounds- 1</td>
<td>Reflective Questions- 25</td>
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<tr>
<td>Journals- 30</td>
<td>Reflective Time- 30</td>
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<tr>
<td>Peer Coaching- 14</td>
<td>Teacher Conferences- 25</td>
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<td>Study Groups- 8</td>
<td></td>
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<tr>
<td>Teacher Portfolios- 2</td>
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</tr>
</tbody>
</table>
Table 10

**Administrator Question 5: What strategies do you use to help teachers reflect?**

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Misc. Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data- 24</td>
<td>Book Study- 2</td>
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<tr>
<td>Dialogue/Collaboration- 79</td>
<td>Classroom Walk-throughs- 7</td>
</tr>
<tr>
<td>Journaling- 48</td>
<td>Inquiry- 10</td>
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<tr>
<td>Reflective Questions- 37</td>
<td>Peer Coaching- 10</td>
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<td>Reflective Time- 34</td>
<td>Professional Reading- 7</td>
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<td></td>
<td>Reflective Instrument- 12</td>
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Table 11

**Summary of Teacher Interviews**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q 1:</td>
<td>● Looking back on teaching and instruction in order to make changes</td>
</tr>
</tbody>
</table>
| Q 2: | ● Can be done after a lesson  
|      | ● Individually  
|      | ● With a group |
| Q 3: | ● To improve instruction  
|      | ● To make lessons better |
| Q 4: | ● Open communication  
|      | ● Warm environment  
|      | ● Free to express opinion  
|      | ● Sense on “in it together” |
| Q 5: | ● Working toward common goal  
|      | ● Knowing expectations |
| Q 6: | ● Learned reflective process by reflecting on common theme/topic |
| Q 7: | ● Minutes from meetings |
| Q 8: | ● Helps you make improvements to your lesson |
| Q 9: | ● Identify strengths and weaknesses of students  
|      | ● Work on deficit areas |
| Q 10: | ● Looking at assessment data  
|      | ● Taking surveys to get feedback from the staff |
Table 12

*Summary of Administrator Interviews*

<table>
<thead>
<tr>
<th>ITEM</th>
<th>RESPONSE</th>
</tr>
</thead>
</table>
| Q 1: | • Thinking about teaching  
|      | • Ask questions  
|      | • Seek clarification |
| Q 2: | • Setting aside time  
|      | • Guide instruction  
|      | • Can be done alone or with others |
| Q 3: | • Make changes and improvements to teaching  
|      | • Professional growth |
| Q 4: | • Explain reflective practice  
|      | • Model reflective practice  
|      | • To set goals  
|      | • To analyze their own performance  
|      | • Not evaluative |
| Q 5: | • Yes, shared vision  
|      | • Shared own beliefs  
|      | • Shared where they were as a school and where they want to go |
| Q 6: | • All had others view another school’s process  
|      | • Based on observations, they created a PLC model that fitted their school’s needs |
| Q 7: | • 2 have no accountability system  
|      | • 1 has minutes from PLCs |
| Q 8: | • Dialogue  
|      | • Colleagues are able to share practices |
| Q 9: | • Making adjustments in instruction  
|      | • As instruction improves, student achievement improves  
|      | • Students incorporate reflection |
| Q 10: | • Surveys  
|      | • Observation/notes  
|      | • Feedback from teachers, parents, and students |
Table 13

<table>
<thead>
<tr>
<th>Item</th>
<th>Teacher Mean</th>
<th>Principal Mean</th>
<th>Mean Difference</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Describe what happened during a teaching experience</td>
<td>3.98</td>
<td>3.86</td>
<td>-.121</td>
<td>-.903</td>
<td>.367</td>
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<tr>
<td>2. Gaining new ideas about teaching</td>
<td>4.10</td>
<td>3.81</td>
<td>-.287</td>
<td>-2.192</td>
<td>*.029</td>
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<tr>
<td>3. Label and categorize what happened during a teaching experience</td>
<td>3.75</td>
<td>3.54</td>
<td>-.203</td>
<td>-1.523</td>
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<td>4. Discovering strengths and weaknesses as a teacher</td>
<td>4.14</td>
<td>3.91</td>
<td>-.229</td>
<td>-1.655</td>
<td>.099</td>
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<tr>
<td>5. Encouraging to evaluate teaching</td>
<td>4.11</td>
<td>4.00</td>
<td>-.115</td>
<td>-.801</td>
<td>.423</td>
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<tr>
<td>6. Encouraging better planning in your teaching</td>
<td>4.12</td>
<td>3.89</td>
<td>-.229</td>
<td>-1.737</td>
<td>.083</td>
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<td>7. Improving teaching</td>
<td>4.20</td>
<td>3.97</td>
<td>-.232</td>
<td>-1.714</td>
<td>.087</td>
</tr>
</tbody>
</table>

*p < .05 (statistically significant)
Table 14

*T-Tests: Teachers and Principals- Usefulness in Improving Teaching Performance*

<table>
<thead>
<tr>
<th>Item</th>
<th>Teacher Mean</th>
<th>Principal Mean</th>
<th>Mean Difference</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reflecting with a group about teaching experiences</td>
<td>3.91</td>
<td>3.87</td>
<td>-.040</td>
<td>-.287</td>
<td>.747</td>
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<tr>
<td>2. Reflecting on an assigned theme</td>
<td>3.59</td>
<td>3.51</td>
<td>-.082</td>
<td>-.593</td>
<td>.553</td>
</tr>
<tr>
<td>3. Reflecting with no assigned theme</td>
<td>2.94</td>
<td>2.65</td>
<td>-.293</td>
<td>-.233</td>
<td>* .026</td>
</tr>
<tr>
<td>4. Reflecting about your own teaching</td>
<td>4.02</td>
<td>3.93</td>
<td>-.093</td>
<td>-.648</td>
<td>.518</td>
</tr>
<tr>
<td>5. Reflecting about another person’s teaching</td>
<td>3.50</td>
<td>3.37</td>
<td>-.125</td>
<td>-.975</td>
<td>.330</td>
</tr>
<tr>
<td>6. Reflecting alone</td>
<td>3.60</td>
<td>3.01</td>
<td>-.591</td>
<td>-4.534</td>
<td>* .000</td>
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<tr>
<td>7. Reflecting with others</td>
<td>3.95</td>
<td>3.96</td>
<td>.008</td>
<td>.058</td>
<td>.954</td>
</tr>
</tbody>
</table>

*p < .05 (statistically significant)*

Table 15

*T-Tests: Teachers and Principals- Feelings about Reflective Activities*

<table>
<thead>
<tr>
<th>Teacher Item</th>
<th>Teacher Mean</th>
<th>Principal Mean</th>
<th>Mean Difference</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Reflecting alone</td>
<td>4.07</td>
<td>3.40</td>
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<td>-4.639</td>
<td>* .000</td>
</tr>
<tr>
<td>9. Reflecting with another person</td>
<td>4.05</td>
<td>4.09</td>
<td>.040</td>
<td>.277</td>
<td>.782</td>
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<tr>
<td>10. Reflecting with a group about teaching</td>
<td>3.78</td>
<td>4.16</td>
<td>.383</td>
<td>2.485</td>
<td>* .005</td>
</tr>
<tr>
<td>11. Reflecting in writing</td>
<td>2.95</td>
<td>3.52</td>
<td>.568</td>
<td>3.852</td>
<td>* .000</td>
</tr>
<tr>
<td>12. Reflecting about your own teaching</td>
<td>4.22</td>
<td>4.14</td>
<td>-.084</td>
<td>-.549</td>
<td>.532</td>
</tr>
<tr>
<td>13. Reflecting about others’ teaching</td>
<td>3.49</td>
<td>3.61</td>
<td>.120</td>
<td>.859</td>
<td>.391</td>
</tr>
<tr>
<td>15. Reflecting with no assigned theme</td>
<td>3.34</td>
<td>2.92</td>
<td>-.415</td>
<td>-3.032</td>
<td>* .003</td>
</tr>
</tbody>
</table>

*p < .05 (statistically significant)*
Table 16

*T-Tests: Teachers and Principals- Feelings about Reflection*

<table>
<thead>
<tr>
<th>Item</th>
<th>Teacher Mean</th>
<th>Principal Mean</th>
<th>Mean Difference</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Interesting</td>
<td>4.03</td>
<td>4.35</td>
<td>.32</td>
<td>3.859</td>
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<tr>
<td>17. Pleasant</td>
<td>3.70</td>
<td>4.04</td>
<td>.34</td>
<td>.338</td>
<td>*.001</td>
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<tr>
<td>18. Understandable</td>
<td>4.01</td>
<td>4.08</td>
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<td>.068</td>
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<tr>
<td>19. Worthwhile</td>
<td>4.25</td>
<td>4.34</td>
<td>.09</td>
<td>.088</td>
<td>.413</td>
</tr>
<tr>
<td>20. Success Promoting</td>
<td>3.96</td>
<td>4.18</td>
<td>.22</td>
<td>.223</td>
<td>*.035</td>
</tr>
<tr>
<td>21. Easy</td>
<td>3.62</td>
<td>3.29</td>
<td>.33</td>
<td>-.324</td>
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<tr>
<td>22. Important</td>
<td>4.22</td>
<td>4.35</td>
<td>.13</td>
<td>1.253</td>
<td>.211</td>
</tr>
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</table>

*p < .05 (statistically significant)*
REFERENCES


Gordon, S. P. (1997). Has the field of supervision evolved to a point that it should be called something else? In J. Glanz & R.F. Neville (Eds.), *Educational supervision: Perspectives, issues, and controversies* (pp. 114-123). Norwood, MA: Christopher-Gordon.


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  Assistant Principal, Sheila Tarr Elementary School, 2003-2004
  Assistant Principal, R. E. Tobler Elementary School, 2002-2003
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  Fourth Grade Teacher, Mt. Zion Elementary School, Georgia, 1996-1999
  Third Grade Teacher, Mt. Zion Elementary School, Georgia, 1994-1996

Dissertation Title: Reflective Practice: The Teacher in the Mirror

Dissertation Examination Committee:
  Chairperson, Pamela Salazar, Ed.D.
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  Committee Member, James Crawford, Ph.D.
  Graduate Faculty Representative, Porter Troutman, Ed.D.