The Relationship of Principals’ Perceptions of Professional Development Practices and Student Achievement in High Poverty Schools

by

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Key words: high-quality profession development, professional development standards, high-achieving, high-poverty schools, principalship

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Abstract

This study investigated if there are differences among Torchbearer and Non- Torchbearer Schools principals’ professional development practices as measured by principals’ perceptions of the implementation of the NSDC standards. The study also examined the factors these principals perceived as facilitating and hindering the implementation of NSDC standards in their schools. A secondary purpose was to describe the differences in characteristics and school size of these two groups. Data were collected from NSDC survey, demographic survey and an open-ended questionnaire.

Findings from this study suggest that gender, age, experience and school size may be factors that have impacted the roles of principals in improving student achievement in Alabama Torchbearer Schools. Although the factors hindering the facilitation of the implementation of the NSDC standards were similar, findings from this study also indicated that principals in Torchbearer Schools perceived high levels of implementation of the NSDC standards than their counterparts, principals in Non-Torchbearer Schools and there were differences between the two groups in the factors that facilitated the implementation of the standards.
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CHAPTER I. INTRODUCTION

Never before in the history of education has there been so much attention paid to moving all students to high levels of achievement (Ylimaki, 2007). Policies and laws such as *No Child Left Behind Act* (2001) and a history of reports through the years point to the need to change schools. There is an emphasis on the need to improve schools, have highly competent leaders and teachers, and on fostering and implementing high quality professional development.

This need for change has been emphasized most strongly to meet the needs of students who have traditionally been underperforming in schools. Most of these students are in schools where there are high rates of poverty among students. Traditionally, schools with poverty rates have struggled to educate students successfully. More than 20 years ago, educators began exploring how schools with high numbers of poor students could be as successful in student performance as schools in more advantaged communities. Research on similar populations has found that students who live in poverty experience school differently from more affluent students (Comer, 2001; Griffith, 2002; Williams, 2003). However, students in high-minority and high poverty schools can perform well (Kannapel & Clements, 2005; Simon & Izumi, 2003).

Are there specific factors that impact student achievement in high-poverty schools? Why are some high-poverty schools more successful than their counterparts? The literature describes several common elements that appear to correlate positively with student achievement. The reasoning for their inclusion in this research was that if earlier studies produced significant results, these factors should be examined to determine their impact on student achievement in
high-poverty schools in this state. Specifically, principal age, gender, and experience, school size, and perceived professional development practices in relation to the National Staff Development Standards were analyzed to determine their roles in creating student success in high-poverty schools.

Effective schools principals are an essential ingredient of successful schools and in this present era of school accountability, school principals face unprecedented demands to improve student performance in their schools. According to the report *Preparing School Principals: A National Perspective on Policy and Program Innovations* (Hale & Moorman, 2003), in order for school reform efforts to be successful, strong leadership must exist. Identifying factors that can help raise the level of student achievement, particularly in high-poverty schools is important to educational stakeholders (Gielselmann, 2009). There have been several large-scale literature reviews conducted and links found related to the principal and increased student achievement (Robinson, 2006; Hallinger & Heck, 1996; Leithwood, Begley, & Cousins, 1990). Fullan (2002) indicates that principals who are prepared to handle complex, rapidly changing environments can execute reform efforts that lead to sustained improvement in student achievement.

Research suggests that successful school leaders influence student achievement in several ways, but primarily through their influence on staff and on their organizations (Leithwood & Jantzi, 2005). To be successful in high-poverty schools, Leithwood and Riehl (2003) suggests that school principals encompass the following practices:

- **Setting directions:** Leaders help to identify, articulate and develop shared goals that encourage a sense of common purpose among followers. To be successful, a school principal must create high-performance expectations and then communicate effectively those goals and expectations.
• Developing people: School principals influence faculty members to strive toward the achievement of these shared goals by offering intellectual stimulation and providing individualized support. Successful school principals provide an appropriate role model using their own practices and performance to demonstrate desired behaviors.

• Redesigning the organization: School principals strengthen school cultures, modify organizational structures, and build collaborative processes that match the changing nature of the improvement agenda (Leithwood & Riehl, 2003).

Marzano, Waters, and McNulty (2005) and Hallinger and Heck (1996) concur that effective principals exerted influence on school process directly linked to student achievement. Achieving high standards in schools requires sound leadership from school principals, recognized as key players for school success as they supervise and organize the work of others (Waters & Grubb, 2004). Furthermore, reform efforts may be short-term and superficial without strong leadership characterized by instructional capacity building in a cohesive professional community (Hord & Sommers, 2007; Spillane & Thompson, 1997).

What is the importance of principal experience in relationship to improved student achievement? Experience matters. When a principal has considerable time in their schools/districts, this allows them to draw on a knowledge base to identify strategies that will increase student achievement. Bista and Glasman (1998) discovered a positive relationship between total years of principal experience and school improvement. The researchers discovered that total years of principal experience equated with more effective leadership abilities that impacted student achievement. Hallinger and Murphy (1985) determined that principals serving longer were able to focus on accomplishing the school’s mission while Young (1993) found
principals were more collaborative with decision making as their years in school administration increased.

Young (1993) indicated that years of principal experience at the current school site impacted student achievement. Principals serving for more than two years at their present site engaged their faculties in collaborative curriculum development. Furthermore, other researchers determined that principals who worked for more years at their present site were more apt to collaborate with teachers to improve instruction and formulate a shared vision that organized all elements of the school around increasing student achievement (Bista & Glasman, 1998). In their meta analysis of the literature that related to principal gender and student achievement, Shakeshaft, Brown, Grayson, Brunner, Grogan, and Hackney (2006) reported that the gender of the principal had impacted student achievement in several studies. Furthermore, many researchers claim that principal gender related to the application of different leadership strengths in school administration such as collaborative leadership, which relates to increased student achievement (Eagly, Karau, & Johnson, 1993; Kochan, Spencer & Mathews, 2000; Shakeshaft, 1989).

Data are mounting that small schools and not just smaller classes lead to high student achievement. Advocates for small schools suggest that they can raise student achievement, especially for minority and high poverty students (Bracey, 2001). Teachers in small schools report that they and their colleagues assume more responsibility for student learning and there are more intimate and personal social relations among teachers and students. Small schools have consistently reported high levels of social support, which makes it harder for any student to fall through the cracks (Bracey, 2001).
High quality professional development programs are an essential component in school improvement and in meeting goals established by the federal mandates of No Child Left Behind (NCLB) and state mandates. NCLB (2001) requirements focus on improving student achievement, increasing accountability for student performance, and expanding parental involvement leading to the need for hiring and retaining highly qualified teachers. These requirements have driven districts to evaluate current professional development practices as they work to develop programs that support improvements in teaching and classroom practices.

As the culture of school setting changes, there is a need to change how we have structured and delivered professional development. Professional development practices have historically been unplanned and haphazardly implemented in schools. The literature clearly has dictated what high quality professional development looks like; however, despite this, many schools have not adopted professional development standards and effective professional development practices and continue to conduct professional development the same way it was done for decades (Blankstein, 2004; DuFour et al., 2004). Furthermore, Sparks and Hirsch (1997) pointed out that “most professional development and school improvement activities continue to leave teachers’ knowledge and skills untouched” (p. 1).

Researchers have shown that effective professional development is an essential element in promoting significant change in school leaders’ practices, teachers’ instructional practices and student learning (Sparks & Hirsh, 1997, as cited in Levine, 2005). Goodlad (1983) states, schools must be “self-renewing systems.” In order to create conditions that promote the growth and development of teachers within a school and subsequently improvement in student achievement, leaders must promote a climate of professional growth through professional development activities that are analytical and reflective of a school’s vision and mission.
Educators’ perceptions and beliefs in the importance and effectiveness of professional development practices are repeatedly noted in the research as an essential component in eliciting positive and sustained change in educational practices. “When a school or district believes professional development is the key to improving schools, that attitude permeates everything that they do” (Richardson, 2000, p. 4). Thus, the focus of professional development has shifted from evaluating effectiveness by the number of attendees to and whether they enjoyed the workshop, to determining the impact of the professional development on student achievement (Joyce & Showers, 2002).

Research has also demonstrated that schools and districts that (a) foster teacher participation in a variety of professional communities, (b) offer teachers a strong sense of urgency, (c) value a commitment to the teaching profession, and (d) encourage a deep respect for lifelong learning demonstrate higher student achievement in reading, writing, and English than do other schools and districts with similar demographic characteristics (Langer, 2000, 2001). To positively impact student learning, professional development must directly impact the knowledge and practices of school leaders and teachers. Professional development needs to be ongoing, not only through workshops or summer institutes during the year, but through continuous reinforcement integrated into a belief system within the school. It should include a variety or delivery modes such as action research, coaching, study groups, and modeling (Joyce & Showers, 2002). Implementation of acquired knowledge and practices must also be evaluated continuously for consistency (Guskey & Sparks, 1996).

The National Staff Development Council has created a set of professional development standards for educators (NSDC, 2008). The NSDC standards offers a framework for creating professional development opportunities that are responsive to school leaders, teachers, and
students with an increased focus on student achievement. They also provide an explanation of how to implement high quality professional development schools. There are twelve standards that are categorized as context, process, or content standards. Each standard is a statement of the professional development expectation and establishes the level of performance to which all schools can aspire. The National Staff Development Council (NSDC) standards stress that professional development should not be perceived of as “one-shot” opportunities to disseminate information on classroom innovation and reform practices.

The Alabama Leadership Academy

Just as school systems have sought ways to meet the federal standards and improve schooling for all students, states have become involved in this endeavor in a variety of ways. In Alabama, one of the initiatives involved the establishment of the Alabama Leadership Academy (ALA). Launched in mid-2001, the Alabama Leadership Academy (ALA) was the first statewide effort by the Alabama State Department of Education to provide ongoing professional development for principals of low-performing schools. ALA is a professional development initiative of the Classroom Improvement Section of the Alabama State Department of Education. The emphasis of the ALA is to increase the achievement of all students in Alabama by supporting the growth and development of superintendents, principals, and teachers as instructional leaders. The ALA seeks to increase the quality and capacity of leadership in every school in Alabama (www.alex.state.al.us). The Alabama Leadership Academy Council meet three times a year to determine issues and content and include fourteen principals, two superintendents, and five Alabama State Department of Education staff members representing Classroom Improvement, Special Education, Federal Programs, and Alabama Reading Initiative Program.
A book study conducted by the Alabama Leadership Academy formed the basis of an initiative labeled the Torchbearer Program. The members of the Alabama Leadership Academy (2006) believed that there were very few high-performing, high poverty schools in Alabama. They decided to develop a program that would highlight these schools and facilitate others to succeed. They began by engaging in a book study using No Excuses: 21 Lessons from High-Performing, High Poverty Schools, by Samuel Casey-Carter. This book outlines research-based methods for raising student achievement in 21 high-poverty population schools in the nation.

As an outgrowth of this book study, the ALA established the Torchbearer School Program. This program was established to identify high poverty, high performing schools in the state in an effort to honor those who were succeeding and to use the strategies and structures as models for others to emulate. To be considered for recognition as a Torchbearer School, schools must meet the following criteria:

1. At least 80% of the student population receiving free/reduced meals;
2. Have at least 80% of students to score at Levels III or IV on the Math section of the Alabama Reading and Mathematics Test (ARMT);
3. Have at least 80% of students to score at Levels III or IV of the Reading section of the Alabama Reading and Mathematics Test (ARMT);
4. Have at least 95% of twelfth grade students pass all required subjects of the Alabama High School Graduation Exam (AHSGE); and
5. Have a graduation rate above the state average (high schools).

Currently, seventy nine schools have been designated as Torchbearer. The first Torchbearer Schools were identified in 2004–2005. There were thirteen of them. Following their identification, members of the Alabama Leadership Academy (2006) conducted site visits
in twenty Torchbearer Schools to discern why Torchbearer Schools were successful when other schools with similar demographics had not been. The Torchbearer principals were administered a Principal survey. Data from the survey and qualitative responses indicated that the Torchbearer Schools had several traits in common but the most striking commonality among these schools was that principals, teachers, and students were excited about learning (2006). In 2008, a Principal survey was administered to principals in Torchbearer Schools and the principals indicated that the strength and commitment of their professional development program is a factor as to why they are successful (ALA, 2009). Principals reported that teachers in Torchbearer Schools participate in professional development that allows them to provide input into instructional decisions and high-level, ongoing, capacity building professional development as a priority in their schools. The most effective professional development activities for increasing teacher’s knowledge and skills include those that provide teachers with opportunities to actively engage with each around curriculum and instruction (Desimone, Smith & Phillips, 2007, p. 1087).

It appears that faculties in Torchbearer Schools are creative and collaborative which creates a positive environment for their schools. In addition, faculties are constantly involved in effective, high-quality sustained professional development, with the end product of these efforts is that the Torchbearer Schools have become a community of learners (Alabama Leadership Academy, 2006).

**Theoretical Perspective**

Since the early 1990s, the National Staff Development Council (NSDC) has collaborated with major national and state organizations to study issues related to staff development and to define a set of standards that could be systematically utilized to design quality professional
development programs for educators that would impact student achievement and success. Their first set of standards, organized into three inter-related categories (context, process, and content), were adopted in 1995.

The NSDC (2001) reviewed the standards in order to identify and document a more solid research-base linkage between professional development practices and improved student learning. They proposed a revised set of 12 standards, which are recognized and accepted within the field of education and drive the vision for professional development practices that support major reform initiatives and improve student learning. The NSDC clearly advocates that “high quality” professional development must be results-driven, standards based, and job embedded. Guskey and Sparks (1996) use these standards to provide a theory of change in a conceptual framework that identifies linkages between the professional development provided to educators and improved student learning (see Figure 1). Beginning with the three boxes on the left (context, process, content), the Model illustrates the 12 components necessary for high quality professional development.
Figure 1. Staff Development and Improvements in Student Learning (Guskey & Sparks, 1996, p. 35)

Purpose of the Study

The purpose of this study was to determine if there are differences among Torchbearer and Non Torchbearer Schools principals’ perceptions of the implementation of the NSDC standards. Student success may be facilitated to the extent that the NSDC standards are embraced by schools. A secondary purpose was to describe the similarities and differences in characteristics and school size of these two groups. The study also examined the factors these
principals perceived as facilitating and hindering the implementation of NSDC standards in their schools.

To explore whether these schools have embraced the standards through their perceived professional development practices, this study will be guided by the following research questions:

1. What are the characteristics of principals of Torchbearer Schools and principals of Non Torchbearer Schools in terms of (a) gender, (b) age, and (c) years of experience as principal (d) and in school size?

2. To what extent are there differences (at the .05 level) in the perceived implementation of the following National Staff Development Council (NSDC) standards: (a) processes (data driven, evaluation, research-based, design, learning, and collaboration); (b) content (equity, quality teaching, and family involvement); and (c) context (learning communities, leadership, and resources), for principals in Alabama Torchbearer schools and their counterparts in Non-Torchbearer schools?

3. To what extent are there bivariate correlations and partial correlations controlling for principal type among the 12 subscales of the NSDC standards and on all scales combined?

4. To what extent are there differences in the factors that principals in Torchbearer and Non-Torchbearer Schools perceive as facilitating the implementation of NSDC standards in their schools?

5. To what extent are there differences in the factors that principals in Torchbearer and Non-Torchbearer Schools perceive as hindering the implementation of NSDC standards in their schools?
Significance of the Study

In the age of accountability, school districts must ensure that students meet higher standards. School leadership and teacher performance is at the pinnacle of student success. The No Child Left Behind Act of 2001 and National Staff Development Council Standards coupled with new standards for state and national accountability create an atmosphere that is results and data-driven. Research indicates that it is imperative that principals in the education profession have the experience and leadership skills to foster high student success. The research also stresses the importance of all educators engaging in activities that assure that they will have the knowledge and skills to influence the academic performance of their students (NSDC, 2001).

Students in Alabama Torchbearer Schools and Non Torchbearer Schools are performing differently. Principals in Torchbearer Schools have cited professional development as an important element in school success; yet, no study has been done to determine the extent to which these professional development practices follow the NSDC guidelines. Now, do we have knowledge about whether professional development practices in Torchbearer Schools differ for those in Non-Torchbearer Schools?

Determining if Torchbearer and Non-Torchbearer principals’ perceived professional development practices differ may provide evidence about whether professional development practices are making a difference in student learning in high poverty schools in Alabama. Conversely, if there are no differences in how professional development is being implemented, assumption about the factors that are creating positive changes will need to be further explored.

Limitations and Assumptions

This study had the following limitations:

1) Only elementary, middle/junior high schools were included in this study.
2) There no high schools included in the study.

3) It is presumed that principal responses on the NSDC survey, demographic and qualitative responses reflected their honest perceptions.

**Key Terms**

**Content** — The content of professional development articulated the knowledge and skills needed to effect change in leadership or teaching practices. The content includes an understanding of the academic content standards for what students must know and be able to do as well as the instructional strategies and assessment techniques to ensure student success.

**Context** — The context of professional development focused on the school and/or school district, organization policies, resources, and the culture in which the learning by educators was implemented.

**National Staff Development Council’s Standards** — The National Staff Development Council (2001) published a set of 12 standards for effective professional development practices as a framework for individuals to utilize when planning, designing, and implementing professional development. These 12 standards were categorized into the content, process, and context of professional development noted by Sparks (1983).

**Process** — The processes of professional development described the learning processes and designs used for acquisition of new knowledge and skills. These included such factors as the use of student learning data, evaluations of previous professional development experiences, research-based techniques for the improvement of teaching practices, adult learning strategies, and the various designs used for staff development opportunities.

**Professional development** — Professional development for this study was described as a systemic approach that engaged school leaders and teachers in improving their professional
knowledge, skills, and practices within the context of schools. *Professional development, staff development, professional growth, and professional learning* are used interchangeably in the context of this study. *Effective professional development* and *high-quality professional development* are synonymous terms used within this research study.

**Torchbearer School** — A program created by the Alabama State Department of Education to recognize high-poverty, high-performing public schools in Alabama.

### Summary

This chapter presented an overview of the study, its purposes, research questions, significance, and theoretical basis. Torchbearer schools are outperforming their counterparts, Non Torchbearer Schools. To understand what is happening in schools that are successful when others with the same demographic characteristics are not, the research questions used in the study were to determine if there was a relationship between Alabama Torchbearer and Non-Torchbearer Schools principals’ perceptions of their professional development practices and student learning, and to determine the degree to which these practices embraced the NSDC standards. In addition, the study proposes to determine if demographic factors such as the principals’ gender, age, experience, and the size of school had an impact on student achievement.

The next section provides an overview of related literature on the characteristics of successful high poverty schools. This is followed by a review of the literature on professional development for educators. The last part of the review deals with the role of the principal in implementing professional development that will help assure student success.
CHAPTER II. LITERATURE REVIEW

While the issue of failing schools has long been a motivating force in educational reform, the passage of No Child Left Behind (2001) has created a new sense of urgency relative to assuring success for all children. Confronted with a steadily rising bar for achievement, schools lagging behind will lose students, independence, and even the possibility of existing.

Many struggling schools serve high poverty populations whose test scores persistently fall behind their counterparts in more affluent settings. In an age when achievement testing carries high stakes for students, teachers, and school leaders, the potential social consequences give the issue even greater significance (Kannapel & Clements, 2005). However, in contrast to what has been said in the literature about high poverty low achieving schools, there is evidence that a high poverty school can become a high achieving school despite the social phenomena of poverty (Carter, 2000; Esquith, 2003; Haycock, 2004; Lyman & Villani, 2004).

Research has indicated that the principal is a leading force in the school and significantly impacts student achievement through essential leadership practices of setting directions, developing people, and redesigning the organization (Leithwood & Riehl, 2003). Likewise, the teacher and the quality of teacher that occurs in the classroom is an essential ingredient in student success (Darling-Hammond, 2000). It seems that there is no longer any doubt in the field of education that quality instruction has the greatest potential to impact student achievement. A key element in teacher and leader competence is continual learning through professional development. “Professional development and teacher preparation are key factors within the
teaching profession and are indications of future growth and achievement of students” (Nagy Ning, & Wang, 2007, p. 11). In addition, a report released in 2000 from the National Staff Development Council (NSDC) noted the importance of professional development for principals and other school leaders in the process of improving student achievement.

This study looks at the relationship between principals’ perceived professional development practices and the impact on student achievement in high and low performing high poverty schools. In addition, this study examines the extent to which age, gender, experience, and school size and what variables can be attributed to the role of principals in these schools.

It begins with a literature review on the characteristics of successful high poverty schools. This is followed by a review of the literature on professional development for educators. The last part of the review deals with the role of the principal in implementing professional development that will help assure student success.

**Characteristics of Successful High-Poverty Schools**

Research has indicated that certain characteristics are associated with increased student achievement and performance in schools traditionally viewed as low performing with a large number of students living in poverty (Kannapel & Clements, 2005). Educators in high-performing, high poverty schools hold high expectations for all students and subscribe to the notion that all children can achieve success and that schools can and do make a difference in student achievement (Carter, 2000; Clubine, Constable, & Smith, 2002; Kannapel & Clements, 2005; Lein, Johnson, & Ragland, 1997; Ragland, Clubine, Constable, & Smith, 2002; Symonds, 2003). High poverty schools with faculties that believe in their students, set high goals for them students, and have professional development activities that promote supportive and nurturing
classroom environments have students with higher student achievement scores (Carter, 2000; Kannapel & Clements, 2005).

Schargrel, Thacker and Bell (2007) in their book *At-Risk to Academic Excellence: What Successful Leaders Do* brings together the wisdom and experience from over 50 schools, including Alabama Torchbearer Schools, that have been categorized as high performing, high minority, high poverty and how they were turned around and students are successful. It shows how the leaders of those schools succeeded in their own words and include actual examples and real life stories which illustrate how the leaders at these schools raised academic achievement, motivated students, boosted parent and community involvement, and applied the three R’s; rigor, relevance, and relationships.

A study of 26 successful high-poverty schools in Texas described the school culture at the sites as one of “no excuses” (Lein, Johnson, & Ragland, 1997). Principals and teachers did not accept any reason for lowering student expectations and believed they could succeed with any student. Researchers of high achieving, high poverty schools in North Carolina observed a pervasive “culture of achievement” and reported that “principals set high goals for the school and the teachers which filtered down to the students and parents” (North Carolina Department of Public Instruction, 2000). This top to bottom effect was also reported in a study of high poverty high-achieving schools in Kentucky where researchers noted that principals held high expectations for faculty and staff which translated into teachers’ high expectation for students (Kannapel & Clements, 2005). In a related finding, Symonds (2003) found that teachers in successful schools were more likely to cite “inside-school factors (professional development, reading programs) instead of outside-school factors (parental involvement or home support of
student learning) as examples of what it takes to increase student achievement in low performing schools.

Several studies of successful high poverty schools indicate that a common feature is a strong focus on a specific school-wide goal. A study of nine high-performing high poverty urban elementary schools found that school leaders lent focus to the work of teachers and staff by identifying and pursuing “an important, visible, yet attainable goal” (Johnson & Asera, 1999). Similarly, a study of schools successfully improving student achievement in the San Francisco Bay area found that they had a “narrower reform focus” and were therefore “better at zeroing in on what needs to be done” than schools that were maintaining or widening the gap (Symonds, 2003).

The focus for many high poverty, high performing schools seems to be improving student achievement. A study of 26 successful high-poverty schools in Texas revealed that they shared a “strong focus on the academic success of every student” (Lein, Johnson, & Ragland, 1997). Similarly, a Kentucky study of eight high-performing, high-poverty schools found that all “had a strong focus on academics, instruction, and student learning” (Kannapel & Clements, 2005). Researchers in Texas who looked at common characteristics of high minority, high achieving schools called this unification around a central theme or mission “school coherence” and found strong evidence of it in the schools identified in their study (Jesse, Davis, & Pokorny, 2005).

Perhaps as a result of a strong focus on improving achievement, high-poverty, high achieving schools have put an emphasis on continuously assessing students’ progress above and beyond the annual testing required by the No Child Left Behind law (NCLB). What emerges from studies of high achieving high poverty schools is a reliance on student achievement data to identify and provide quick attention to struggling students. High achieving schools create
support teams that employ specific strategies for responding to students’ needs and monitor the effects of implemented strategies (Barth, et al., 1999; Kannapel & Clements, 2005).

Faculty and staff in high-poverty, high-achieving schools report feeling a sense of ownership over the success of their students and their school (Johnson & Asra, 1999). This shared responsibility often leads to meaningful collaboration among staff (Ragland, 2002). In a study of successful high-poverty schools in the San Francisco Bay Areas, teachers in schools that were high poverty and high achieving reported visiting each others’ classrooms to observe instructional strategies more frequently than teachers in schools that were not high poverty and low performing. Faculty in high poverty, high achieving schools were more likely to believe that teacher collaboration is an effective means of closing the achievement gap (Symonds, 2003).

In addition to a general willingness to assist and support one another, studies indicate that principals and teachers in high-poverty schools frequently collaborate to analyze student achievement data and discuss student work. The 90/90/90 studies (those where 90 percent of students qualify for free/reduced lunch, 90 percent are ethnic minorities, and 90 percent achieved high academic success) points out that creating time for this type of collaboration can be challenging. Schools observed in the 90/90/90 study “used the time that they already had with an intentional focus on collaborative scoring of student work.” In addition, faculty meetings were “announcement-free zones” so they could be completely devoted to collaboration (Reeves, 2003). In a study of nine high-performing, high-poverty elementary schools “time was structured to ensure that collaboration around instructional issues became an important part of the school day and the school week” (Johnson & Asera, 1999).
In summary, Kannapel and Clements (2005), Corallo and McDonald (2001), Carter (2000), and Barth et al. (1999) report that the following characteristics have an impact on student achievement in high-poverty schools:

- Ongoing assessment in the school and classrooms;
- Aligning professional development with instruction and assessment;
- School leadership that promotes collaboration with teachers involved in decision making;
- Teachers collaborate across grade levels and curriculum areas
- Highly qualified teachers; and
- Family involvement

**Professional Development and Student Success**

If students are to be successful in schools, their teachers must be engaged in continual learning in order to improve and enhance their teaching abilities and their understanding of the children they serve. Most of the opportunity for such learning occurs through professional development activities. However, in order to be meaningful, this professional development must be effective. The next section of this literature review deals with the issue of professional development. It begins with an historical review of the topic. This is followed by a review of the characteristics of effective professional development activities, planning models, the role of the federal government in fostering effective professional development.

**Historical Perspectives on Professional Development**

In the summer of 1936, a six-week seminar was held with thirty teachers. These thirty teachers were part of two commissions, the Commission of the Reorganization of the Secondary School Curriculum, and the Commission on the Relation to School and College of the
Progressive Education Association. The seminar was held at Ohio State University to discuss
the curriculum and evaluation of secondary school materials. Research from this meeting proved
so successful that in 1937 the idea of the seminar became known as a “workshop” (Ryan &
Tyler, 1939). The 1937 workshop was held at Sarah Lawrence College, Bronxville, New York.
Because of the success of the Sarah Lawrence Workshop of 1937, a new idea of in-service
education for teachers was born.

These workshops were the foundation for professional development. In 1938 two new
workshops were introduced, the Rocky Mountain Workshop and the Eastern Workshop. The
Rocky Mountain Workshop was held at Colorado Women’s College in Denver, Colorado and the
latter was held at Mills College in Oakland, California. The reason for the workshop sites was so
teachers could work directly with groups who shared similar concerns, especially in the areas of
curriculum and evaluation (Ryan & Tyler, 1939). The above-mentioned workshops were
markedly different from most of the in-service programs of the past. These worked because they
carried out certain fundamental principles that had been neglected in American education (Ryan
& Tyler, 1939).

The early education staff development workshops were general in nature. However, by
1957, workshops were devoted to individual and group problems. The significance of the
workshop was to make it pertinent to the teachers’ needs and insure that the individual
participants carried the information learned in the workshop back to the classroom and the
community.

The workshops continued to grow and their popularity and usefulness were viewed as
important for teacher development. As workshops grew, their purpose changed. Kelley, in
1951, defined the purposes of workshops as: (1) an atmosphere where teachers could readily
communicate, (2) an opportunity for personal growth through accepting and working toward a goal held in common with others, (3) an opportunity to work on problems that are direct and of a current concern, (4) a place where teachers are in a position of responsibility for their own learning, (5) an experience in cooperative undertaking, (6) a place where teachers can learn methods and techniques which they can use in their own classrooms, (7) a place where teachers have an opportunity in collaboration with others to produce materials that will be useful in their teaching, (8) a place where teachers can evaluate their own efforts, and (9) a place that gives teachers an opportunity to improve their own morale (p. 11).

In the 1980s, the term ‘workshop’ could be used interchangeably with in-service, staff development, professional development, and teacher enhancement. All four are means of accomplishing the same goals. In-service education is planned opportunities for teachers to improve their performance in their assigned responsibilities (Gersten, Woodard, & Morvant, 1992).

Staff development, as defined by Ross and Regnan (1993), are changes in understandings, affects, and actions that increase effectiveness in a role. Teacher enhancement is to improve, broaden, and deepen the disciplinary and pedagogical knowledge of elementary and secondary teachers (Frechtling, Sharp, Carey, & Vade-Kiernan, 1995). Professional development is an activity or endeavor that provides an opportunity for the professional growth of teachers (Jones, 1996).

Staff development became an integral part of most school settings and the workshop approaches were viewed as effective at the time. But as schools began to change, accountability became integral to measuring student success and concerns about student learning began to arise.
The notions of what types of professional development activities were needed began to change and new ideas about effectiveness began to emerge.

**Characteristics of Effective Professional Development Models**

It is suggested by Garet et al. (2001) that professional development can influence classroom practices significantly and lead to improved student achievement when it focuses on (1) how students learn and particular subject matter, (2) instructional practices that are specifically related to the subject matter and how students understand it, and (3) strengthening teachers’ knowledge of specific subject-matter content. Close alignment of professional development with actual classroom conditions also is key (Parsad, 2001).

As reported by the National Commission on Teaching and America’s Future (2002), conventional forms of professional development have little effect on educational practices, organizational changes, and student outcomes. Even when there is a link to the classroom, inconsistency and lack of follow-up serve to lessen the potential impact on teaching and practice and student achievement. Research on what constitutes effective professional is consistent across many studies. “Professional development sparks curiosity, motivation, and new ways of thinking. It is most effective when it is an ongoing process, which includes appropriate, well-thought-out training and individual follow-up” (Kent, 2004, p. 428). High quality professional development (a) is integrated with district/school goals to improve education, (b) is guided by a systemic long-term plan, (c) is based on teacher-identified needs, (d) is primarily school-based, (e) is focused on subject content and methods of teaching, (f) is focused on research-based teaching and learning, (g) is designed around collaborative problem solving, (h) provides sufficient time and resources, and (i) is evaluated on the basis of its impact on teacher effectiveness and student learning (Hawley & Valli, 2000). These principles serve to create a
new vision for professional development that could help districts in meeting the challenges of systematic educational school improvement (Joyce & Showers, 1997).

Guskey (2003a) reviewed research literature on professional development and found consistent support for five characteristics of effective professional development. The first characteristic is the content focus of the activity, meaning the degree to which the activity is focused on improving teacher knowledge of content and how students must be supported when learning the content. The second characteristic is the duration of the activity, which includes the total number of hours spent on the activity, as well as the span of time for the activity. The third element is collective participation from teachers in the same school, department, and grade level. Fourth, activities must provide opportunities for active learning by the participants. Lastly, the activity must promote coherence between the teachers’ professional development, and align with state and district standards and assessments. It would seem that using these five characteristics would assist districts in planning effective professional development activities that have the greatest potential for impacting teaching, classroom practices, and student learning.

Zimmerman and May (2003) support information presented from the Association for Supervision and Curriculum Development (ASCD) that describes effective professional development as (a) directly focused on helping to achieve student learning goals and supporting student learning needs, (b) a collaborative endeavor – teachers and administrators working together in planning and implementation, (c) school-based and job embedded, (d) a long-term commitment, (e) differentiated, and (f) tied to the district goals. Haslam and Seremet (2001) concluded that high quality professional development was an adult learning and growth process that led to increased student learning. Furthermore, the authors state that high quality professional development should focus on content knowledge and content-specific pedagogy.
One would conclude that when professional development focuses on the content that instructors teach, it is more likely to impact instruction and increased student learning. “Helping teachers to understand more deeply the content they teach and the ways students learn that content appears to be a vital dimension of effective professional development” (Guskey, 2003b, ¶4). The EPE Research Center (2007) supports the notion that high quality professional development should also engage teachers and principals as active learners and problem solvers.

Staff development was necessary for increasing student performance, but professional learning by itself cannot be successful unless the school system in which it occurred supported learning for educators and for students. Multiple factors contributed to increased student learning including (a) content standards, (b) high expectations for student performance, (c) improved curriculum frameworks, (d) assessment practices, and (e) new approaches to instructional strategies. But in our complex world of schools, it was nearly impossible to determine if one particular factor such as professional development was exclusively responsible for student learning. Killion (2002b, p. 22) stated, “Therefore, staff development leaders and decision makers need to acknowledge the relationship of many factors rather than to attempt to show that staff development is a single cause of increased student achievement.” When identifying schools at varying grade levels that demonstrated evidence of increased student achievement, each program confirmed that a positive correlation relationship existed between staff development and student achievement (Killion, 1999, 2002b, 2002c).

Three recent research studies reported a correlation between teacher growth from professional development programs and student achievement. Lowden (2003) examined the impact of professional development utilizing Guskey’s (2000, 2002) models for teacher change based upon an evaluation of professional development. Using a researcher-designed survey, a
strong correlation between teacher’s implementation of new knowledge and skills in the classroom and the impact on student achievement was found. In a quasi-experimental research study, students whose teachers participated in ongoing professional development demonstrated higher achievement results in comparison to students whose teachers did not participate in professional development activities (Lane, 2003). This study was reflective of the results from Wenglinsky (2002) who reported that teachers who had sustained professional development within a specific content were more likely to engage in classroom practices associated with improved student achievement.

A study conducted by the Council for School Performance (Harkreader & Weathersby, 1998) examined the differences in higher achieving and lower achieving schools in Georgia. The results indicated that teachers in both groups of schools participated in professional development having similar content and offered by similar sources throughout the school year. The professional development programs in higher achieving schools included greater collaboration between administrators and teachers on decisions about professional development, a greater focus on students and classroom practices, more training processes used, and more direction and support given by leadership. The higher achieving schools approached professional development collectively and professionally and these factors related to the context schema defined within NSDC’s standards (2001) described later in this chapter.

Corcoran (1999) identified three important concepts when planning professional development. The first was to work on teacher subject matter knowledge due to data that shows the more teachers know about a subject the better they are at teaching it. This concept appears to be common sense, but it may be neglected. The second important aspect in planning professional development is to help teachers adapt and implement the curriculum with a better
understanding of the difficulties that students have with it. The third is to promote equity in the classroom, which means to help teachers not only understand how they engage students in learning but also how they may unintentionally treat one class of students differently than another class. One then could say professional development that focuses on improving teachers’ content and knowledge while emphasizing best practices for delivering the content may lead to higher levels of student achievement if students are engaged in an equitable learning environment.

Gage (1984) and Loucks-Horsley (1990) do indicate that professional development programs can have positive effects on student performance. Joyce (1989) found that a particular professional development approach, given time and support for full implementation, had a direct dramatic effect on student performance. Further studies of this type are needed to support what is generally believed to be true: professional development can and does have an impact on student performance.

For professional development to have an impact on student achievement, Guskey (2000) noted that it must first impact teachers who are engaged in the professional development activity. “Teacher learning must be the heart of any effort to improve education in our society. While reforms may be needed, better learning for more children ultimately relies on teachers” (Sykes, 1996, ¶2). Malcolm Knowles (1984) states that adults learned best when they are actively involved in the learning process, pulling from past and present learning experiences to solve problems. “When teachers conduct their work in isolation, their satisfaction in and commitment to the profession are jeopardized. Enthusiastic teachers are not usually self-sustaining; thus, good novice and veteran teachers often exit the profession due to burnout and discouragement” (Danielson, 2002, p. 185).
The ultimate goal of the professional learning experiences of educators is to improve student achievement (Killion, 2002b). Mizell (1999) shared that there must be two major issues addressed to demonstrate the critical role of improved student achievement when planning professional development. First, those who implement the professional development must have student learning as the primary objective. Second, the evaluation must focus on the effects of professional development and student learning. In addition, the researchers, based on past experience, could add a third issue that high quality professional development should provide learning opportunities that are embedded in the daily work of teachers and principals. “Unless schools are places of learning for teachers, they cannot be places of learning for students” (Bernauer, 1999, ¶ 15).

A 2000 study by the National Staff Development Council examined award-winning professional development programs at eight public schools that had made measurable gains in student achievement. The study found that in each of the schools, “the very nature of professional development [had] shifted from isolated learning and the occasional workshop to focused, ongoing organizational learning built on collaborative reflection and joint action.” Specifically, the study found that the schools’ professional development programs were characterized by collaborative structures, diverse and extensive professional-learning opportunities, and an emphasis on accountability and student results (¶7).

Sparks and Hirsh (1997) created a comparative table to capture the essence of the change in professional development which captures much of what research has determined comprises professional development that is effective in changing practice and assuring student success. They state that such professional development “must affect the knowledge, attitudes, and practices of individual teachers, administrators, and other school employees, but it must alter the
cultures and structures of the organization in which those individuals work” (p. 1). In order to make a difference in teaching and classroom practices, Sparks and Hirsh (1997) illustrated that a shift must be made when designing professional development. Table 1 outlines shifts in the context, content, and process of professional development that must be made.

Table 1

*Shifting Professional Development Planning*

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on teacher needs only</td>
<td>Focus on student learning outcomes</td>
</tr>
<tr>
<td>Focus on individual development</td>
<td>Focus on individual, school, and system-wide development and improvement</td>
</tr>
<tr>
<td>Transmission of knowledge, skills, strategies</td>
<td>Inquiry for teaching and learning</td>
</tr>
<tr>
<td>Pull-out training</td>
<td>Job-embedded learning</td>
</tr>
<tr>
<td>Generic teaching skills</td>
<td>Combination of content knowledge and content-specific teaching skills</td>
</tr>
<tr>
<td>Fragmented, piecemeal, one-shot</td>
<td>Driven by clear, coherent, long-term strategic plan</td>
</tr>
<tr>
<td>District direction and decision-making</td>
<td>School direction and decision-making</td>
</tr>
<tr>
<td>Professional developers as trainers</td>
<td>Professional developers as facilitators, consultants, evaluators</td>
</tr>
<tr>
<td>Professional development as some people’s job</td>
<td>Professional development as everyone’s job</td>
</tr>
<tr>
<td>Professional development for teachers</td>
<td>Professional development everyone</td>
</tr>
</tbody>
</table>

(table continues)
Table 1 (continued)

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness and one or two session workshops</td>
<td>Professional development that provides adequate time for learning, practice and adequate follow-up</td>
</tr>
<tr>
<td>Individual decisions</td>
<td>Collegial decisions and discussions</td>
</tr>
<tr>
<td>Individual /general application</td>
<td>Stimulating and supporting site-based initiatives</td>
</tr>
<tr>
<td>Professional development without accountability for student achievement</td>
<td>Professional development with accountability for student outcomes</td>
</tr>
<tr>
<td>Professional development as frill</td>
<td>Professional development as essential</td>
</tr>
<tr>
<td>Professional development for teacher</td>
<td>Professional development for all school community</td>
</tr>
</tbody>
</table>


As suggested in this literature review, studies have been completed to substantiate the link between effective professional development activities and student achievement; yet, doubt exists as to any conclusive proof that professional development increases student achievement (Killion, 1999, 2002b, 2002c). Certain elements must be present in the professional development activities to make the connection.
Overview of Professional Development Models

There were a variety of professional development models which must be considered when districts are deciding on programming structures. Drago-Stevenson (2007) asserts today’s K–12 schooling challenges demand changes in the way adults’ know that is transformational learning. Because many models of professional development employed in K–12 do not adequately consider how adults make sense of their experience, they lack a framework for facilitating professional development (p.74).

Guskey (2000) identified seven major models of professional development that serve as a framework for providing educators with a variety of options for facilitating professional development:

1. Training – Training could involve large group presentations, discussions, seminars, workshops, demonstrations or role playing. Training is most effective when organized with clear objectives and outcomes, as well as participants involved in modeling, feedback, and coaching within a school setting.

2. Observation/Assessment – Teachers observe colleagues implementing various instructional strategies, classroom management techniques, lesson formats, and presentations of lessons. When teachers have the opportunity to observe one another, both gain knowledge through feedback and collaboration.

3. Involvement in a Development/Improvement Process – Educators participate in the revision of curriculum, instructional enhancement or program development. Participants gain new knowledge and practice shared decision making.
4. Study Groups – Building faculty are involved in collaborative efforts to find solutions to school, student, or program concerns. Study groups share ideas and research topics and make recommendations for solutions.

5. Inquiry/Action Research – Educators use specific steps to formulate questions about the profession and find answers based on current practice, knowledge, and research.

6. Individually Guided Activities – Teachers determine individual professional development goals and select opportunities that meet these needs. This model allows for individual choice which enhances participant motivation.

7. Mentoring – Experienced teachers pair with less experienced peers for purposes of shared dialogue, ideas, observations, and teaching techniques.

In addition, the Westchester Institute (n.d.) identified several other models to consider when designing high quality professional development. These approaches include the following seven models:

1. Teacher Networks – These networks offer the teachers a supportive community beyond their own school building. They are usually organized around specific subject matter and seek to deepen the understanding of content matter and teaching strategies.

2. Joint Work – Joint work involves shared responsibility for tasks such as curriculum writing, development of assessments, and team teaching. It also encourages teachers to have productive exchanges and reflections on their teaching practices.

3. Collaborations between Schools and Universities – Organizations actively promote partnerships between colleges and K–12 schools. These programs help teachers gain
access to new knowledge and enable professors to develop a better understanding of how to teach their students.

4. Professional Development Schools – A special form of collaboration between K–12 schools and higher education is formed. This approach brings novice and experienced teachers together with university faculty to improve practice.

5. Action Research Projects – Teachers can conduct research in their classrooms in cooperation with their colleagues and university professors. The main reason for this research is to collect and analyze data for the purpose of understanding and improving teaching practices.

6. Mentoring Programs – Mentoring programs typically match experienced teachers with beginning teachers for the purpose of sharing knowledge and expertise.

7. Peer Coaching – Like mentoring, peer coaching allows teachers to share experiences, build relationships, and build shared responsibility for improving teaching strategies. This usually involves teachers on the same professional level as observations in each other’s classrooms occur and constructive feedback is offered.

Districts must consider the climate and culture currently impacting teacher engagement in professional development when considering models of implementation and programming needs. Infusing the characteristics of effective professional development into the seven models described earlier might serve to create a foundation that could be used to support the implementation of a professional development program.

**Historical Perspectives on Federal Mandates and Professional Development**

Federal acts leading up to No Child Left Behind (2001) have been instrumental in paving the way for supporting an increase in effective professional development specifically for schools
that are struggling. Over the past forty years, accountability and reform have focused on specific groups within the total population. Title 1 of the Elementary and Secondary Education Act of 1965 focused on low-achieving and poor children. In 1975, the Individuals with Disabilities Education Act was created to ensure a free and appropriate education for students with disabilities. These acts were all positive steps toward ensuring quality in education for a portion of the population. However, when the *A Nation at Risk* (National Commission on Excellence in Education, 1983) was published, warning that stringent measures must be taken immediately in order for American students entering the workforce to continue to be competitive in the world economy, this warning got the attention of the public, Congress, the President, and schools throughout the nation. This report called for higher standards at all levels and warned that this was essential to the survival of our nation (Jennings, 2002).

In 1989, President George Bush established goals for school success. Among these goals was one relating to professional development. The goal stated,

By the year 2000, the nation’s teaching force will have access to programs for the continuous improvement of their professional skills and the opportunity to acquire knowledge and skills needed to instruct and prepare all American students for the next century. (Northwest Regional Educational Laboratory, 1998, p. 4)

In support of this, GOALS 2000: Education America Act, Pub. L. No. 103-227, §102, 108 Stat. 125 (1994) was enacted into law. High quality professional development was noted to be an essential ingredient for any successful school reform program, with teachers defined as the core component. An expectation by the Federal Department of Education was that teachers be committed to their profession and prepared to deliver instruction linked to content standards to a
diverse population of students. Professional development was noted as a means to assist teachers in acquiring new knowledge and skills for delivery of new instructional practices.

The National Commission on Teaching and America’s Future (2003) stated that the No Child Left Behind Act of 2001 reaffirmed the need for quality teachers for every child in the United States. In its report, *No Dream Denied: A Pledge to America’s Children* (2003), the commission built a set of strategies based upon their three earlier premises. The three strategies were to promote teaching and learning success by organizing schools around theories of teacher development, require high quality teacher preparation to promote teacher retention and good teaching practice, and develop a high quality teaching profession through sponsoring career path teacher growth. To address each of these strategies meant offering effective professional development within the schools.

The No Child Left Behind Act of 2001 outlined specific requirements for the professional development activities conducted in schools. The definition of professional development within this federal legislation reinforced a focus toward ongoing, embedded professional development experiences. The definition of professional development in this federal mandate stated that activities were to utilize the following practices: (a) improve teachers’ knowledge of academic subjects; (b) integrally link to the school and district education improvement plans; (c) provide educators with the knowledge and skills to ensure students meet state defined academic content standards and achievement standards; (d) improve classroom management skills; (e) offer high quality, sustained, intensive, and classroom focused opportunities that have an impact on classroom instruction and teacher’s performance and do not include short-term workshops or conferences; (f) support the training of highly qualified teachers; (g) advance teacher understanding of effective instructional strategies based upon scientifically-based research and
strategies for improving student achievement; (h) align with state academic content standards, achievement standards, and assessments; (i) permit active participation of teachers, principals, parents, and administrators of the school; (j) give teachers and staff of limited English proficient children the knowledge and skills to provide instruction as well as support to these children; (k) provide training for educators in the use of technology and its integration into classroom practices; (l) utilize evaluations on a regular basis to determine impact on improved teacher effectiveness and improved student achievement in order to improve the quality of professional development experiences; (m) provide instruction for strategies of teaching children with special needs; (n) include instruction in the use of data and assessments to impact classroom practices; and (o) include instruction in ways that all educators may work effectively with parents.

Standards-based Professional Development

One benefit of the No Child Left Behind Act (NCLB) is the heightened attention on educator’s learning (Hirsh, 2006). The National Staff Development Council standards address all of NCLB requirements. Limiting professional development planning to the NCLB definition will not produce high quality professional development. NSDC’s standards emphasize the importance of working simultaneously on context and process issues, as well as content issues (Hirsh, 2006) thus leading to improved student achievement.

One might discern that high quality professional development should be based on research and examples of best practices. Perhaps professional development should be grounded in research-based instructional strategies that not only inform participants about what works, but also describe under what conditions the strategy might have been most beneficial to student learning and when it might have been less successful. “Quality professional development should
be based on research and standards—concentrating on strategies that have proven value in improving student learning” (Norton, 2001, p. 31).

Well designed, carefully planned and financially supported professional development is an essential component in all educational improvement efforts (Lowden, 2006). Professional development within a district may include the traditional activities like workshops and course work or less traditional activities, such as grade, team, or department collaboration, as well as vertical teaming collaboration. It may include both formal and informal learning opportunities for teachers, principals, and other staff members. As districts establish what is regarded as professional development, both formal and informal and standards are set for professional development. According to Guskey (2005), setting standards allowed educators to direct and focus reform initiatives by providing consensus about what was important for students to learn and what skills were necessary. In summary, standards brought a much needed focus to curriculum development efforts, forms of student assessment, and effective methods of professional development.

An outgrowth of the standards-based movement was the establishment of the National Staff Development Council (NSDC), a professional association committed to enhancing professional development programs in order to improve student and teacher performance. This Council created a set of standards for high quality professional development. While the NSDC standards are designed to address the requirements of NCLB, they also focus on the importance of considering content, process, and context in the delivery of professional development. The standards were contained in a document which stated, “Collaboration with more than 25 educators and policy makers from more than 15 professional education organizations, the standards represent consensus about the prerequisites of context, process, and content for staff
development that results in higher levels of learning” (Mizell, 2001, p. 19). These 12 standards for effective staff development were “the product of research, hard thinking, discussion, and debate among educators grounded in the realities of school systems’ and schools’ operations” (Mizell, 2001, p.19). Content standards focus on accountability for student learning to be equitable and for teaching practices to be grounded in research-based methodology. Ongoing evaluation and collaboration regarding teaching practices and student outcomes are the primary focus of the process standards. Context standards ask questions, such as who would be involved in professional development and what resources are available to facilitate the professional development.

Table 2 outlines the context, process, and content standards used when evaluating high quality professional development. The three standards incorporate twelve specific subheadings, identified in parentheses in Figure 1, for districts on which to gauge professional development practices currently in place. Within each subheading, a descriptor is included to aid districts in the evaluation of standards based professional development.
Table 2

**National Staff Development Council Standards (NSDC, 2003)**

<table>
<thead>
<tr>
<th>Context Standards</th>
<th>Process Standards</th>
<th>Content Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizes adults into learning</td>
<td>Uses disaggregated student data to determine adult learning priorities, monitor progress, and help sustain continuous improvement.</td>
<td>Prepares educators to understand and appreciate all students, create safe, orderly and supportive learning environments, and hold high expectations for their academic achievement. (Equity)</td>
</tr>
<tr>
<td>communities whose goals are aligned with those of the school and district. (Learning Communities)</td>
<td>(Data-Driven)</td>
<td>(Equity)</td>
</tr>
<tr>
<td>Requires skillful school and district leaders who guide continuous instructional improvement (Leadership)</td>
<td>Uses multiple sources of information to guide improvement and demonstrate its impact. (Evaluation)</td>
<td>Deepens educators’ content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to use various types of classroom assessments appropriately. (Quality Teaching)</td>
</tr>
<tr>
<td>Requires resources to support adult learning and collaboration (Resources)</td>
<td>Prepares educators to apply research to the intended goal. (Research-Based)</td>
<td>Provides educators with knowledge and skills to involve families and other stakeholders appropriately. (Family Involvement)</td>
</tr>
<tr>
<td>Provides educators with the knowledge and skills to collaborate.</td>
<td>(Design)</td>
<td></td>
</tr>
</tbody>
</table>
The NSDC’s standards (2001) were designed to assist educators in developing the “insights, knowledge, and skills they need to become effective classroom and school leaders, better able to increase student learning” (p. vi). The standards were grounded in the belief that students and educators would benefit from effective professional development practices; therefore, improved teacher performance in the classroom and ultimately improved student achievement would be achieved. The National Staff Development Council (2003) noted that all 12 standards must be used together, as the results for improvement were regarded as less likely if even one standard was missing.

Research conducted on this issue appears to substantiate the need to implement professional development using all 12 standards. Del Farvero (2003) examined the extent the context, process and content standards of the National Staff Development Council Standards influenced student performance on the New York Regents tests. Principals completed a self-assessment survey (National Staff Development Council and National Association of Secondary Principals, 1995) and the responses were used to measure the extent that the standards existed within the participants’ schools. Based upon the results of a series of multiple linear regression analyses, high expectations for students was the only significant predictor variable of student performance.

A study of Catholic secondary schools in California was conducted by Phelps (2003), which most closely modeled this research study. Phelps used a modified version of the NSDC (2001) self-assessment tool to investigate the perceptions of teachers and administrators on the professional development programs and practices within their schools. The findings indicated that the participating secondary schools did not possess sufficient knowledge, organizational structures, and expertise to meet all of the NSDC’s standards (2001). Although the large
majority of the school leaders valued professional development, these schools did not meet six of the 12 standards. Obstacles to professional development included (a) the lack of time, (b) past experiences with staff development programs, (c) the absence of learning teams, (d) the absence of an effective evaluation system, (e) the lack of resources, (f) the lack of understanding of adult and student learning, and (g) the mediocrity tolerated by administrators in curriculum and instructional practices. The strategies suggested by participants for overcoming obstacles were (a) collaboration with colleagues, (b) support and leadership, (c) salary incentives for educators, (d) schedule changes to provide time for learning and planning by teachers, and (e) the promotion of a culture of continual adult learning.

A review of the National Staff Development Council’s (NSDC) Standards for Staff Development and A New Vision for Staff Development (Sparks & Hirsh, 1997) notes some possible errors made by educators when planning professional development. Nine common errors are identified as follows:

1. Fads and Quick-Fix Approaches – Schools sometimes choose faddish improvement innovations that involve one-shot training with no follow-up support. Lack of adequate training leads to poorly or incorrectly executed implementation of innovation. This effort often is abandoned before its effectiveness is adequately evaluated.

2. Unutilized Data – Every school has assessment data. However, sometimes that data is not utilized in a constructive manner.

3. The Happiness Quotient – Too often, professional development is evaluated on its “happiness quotient” or entertainment value rather than its quality or worth.
4. “Sit and Get” Professional Development Event – One-shot workshops professional development experiences often fail because they do not offer the ongoing assistance and feedback that is necessary to fully learn, practice and refine a new strategy.

5. Expert Information Dissemination – Professional development that relies on lecturing and instructing in which educators are passive recipients of received wisdom is less desirable than models that incorporate facilitation, interaction, collaboration, coaching, guiding, and supporting.

6. Teacher as the Sole Focus – Teachers have a great impact on increased student achievement. However, additional school staff and others must also be familiar with the professional development tied to improvement efforts to ensure continuity. Administrators and central office staff must also be aware of the new learning in order to effectively monitor, support, and assess the improvement efforts.

7. Professional Development as a Frill – Professional development should not be considered a “frill” or “extra” that can easily be cut when finances are tight.

8. Initiative Overload – When too many initiatives are implemented at once, time, energy, and resources become diluted, decreasing the chances of meaningful, lasting change. With multiple demands, teachers become frustrated and confused.

9. Insufficient Time – Real learning cannot take place in the 15 minutes before students arrive at school and the 10 minutes after the students are dismissed. Schools must be creative in establishing extended periods of release time for teachers to study, share, observe, collaborate, plan, and reflect. (U.S. Dept. of Education, n.d., ¶s 1–9)

The Center for Education Policy School of Education at the University of Massachusetts Amherst completed a survey of Massachusetts Professional Development Directors (Churchill,
Effrat, Brooks, Ryan, & Spurr, 2001). The respondents raised several issues that impact the ability to offer high quality professional development activities. Seven of the issues are identified as follows:

1. The Problem of “Singletons” – Providing content-based professional development for single course within a small district was a challenge.

2. Substitute Shortage – Finding substitutes limited the ability to have teachers involved in professional development during the school day.

3. Variation in District Professional Development Days – Districts varied in the number of professional development days offered.

4. Parent Resistance to Early Release Days – Early release days faced resistance from parents who needed to make alternate childcare arrangements during the workday.

5. Time for Teacher Learning – After school workshops faced the challenge of a teacher already tired from a full day’s work with students.

6. District versus Building-level Priorities – Buildings within the same district may have varied the ways professional development days were spent.

7. Capacity for Planning – Professional development directors had to wear a variety of hats and have other responsibilities that sometimes limited the ability to plan high quality professional development activities.

Marshall, Pritchard, and Gunderson (2001) identified four practices that had little or no positive impact on school improvement in the area of professional development:

1. Individual Choice – There is no indication that offering individual choice in planning professional development translates into improvement in education. The problem is
that individual efforts have no consistency of purpose – no common direction with a specific end in mind to guide the initiatives.

2. Use of Teacher Needs Assessments – These “want” lists are of little value.

3. Incentives – External incentives do not work.

4. Departments – Department structure in providing professional development is an impediment because artificial barriers were firmly in place. Typically, insufficient time was allocated for department meetings, resulting in much less meaningful professional development.

Taking into account (a) nine errors that may occur during planning professional development, (b) seven issues that impact the ability to offer high quality professional development, and (c) four practices that have little or no positive impact on school improvement in the area of professional development, one might discern the importance of planning, preparation, and follow-through can have on creating a successful program. Researching and having the knowledge of these possible challenges related to the success of a district’s professional development plan may prevent unnecessary barriers during initial implementation. One could assume that by carefully planning and evaluating all potential professional development practices, districts could avoid many, if not all, challenges.

**Principals’ Role in Implementing Effective Professional Development Programs**

Many leadership behaviors had correlated positively with student achievement (Blankstein, 2004). Guskey, (1985) suggests that neither training alone nor training followed by implementation was sufficient conditions for change. Research demonstrates that there is, in fact, a substantial relationship between leadership and student achievement (Darling-Hammond, 1998).
A principal of any school building has the insurmountable task of leading staff members to enhance student achievement while managing day-to-day tasks. School leaders are charged with finding methods to motivate and educate teachers through collaborative efforts and management of the school environment. Colantonio (2005) states

If a school’s goal is to improve the quality of the educational environment that it provides for its students – one that encourages creative thinking and problem solving, cooperative learning, and higher levels of thinking, then a principal must create the same type of atmosphere for those individuals most directly responsible for the success of students and schools, namely teachers. A model that allows principals to integrate the two, sometimes, disconnected functions of instructional supervision and professional development will contribute to achieving the goal of schools as learning organizations and will help students in each and every classroom achieve. (p. 34)

The principal’s role in professional development is multi-faceted with each component crucial to the success and sustainability of any program. “One challenge facing principals who are accountable for school-based teacher professional development is structuring a process that creates an enthusiastic atmosphere of mutual inquiry and growth among staff members as well as mutual accountability for student achievement” (Terehoff, 2002, p. 65). According to Richardson (2008), as a principal works to establish professional development programming in a school building, the following principal practices play a crucial role in the development process:

(a) holding teachers accountable for their teaching and classroom practices as well as student achievement, (b) supervising all team meetings to ensure that collaboration exist and discussions are tied to school goals, (c) taking responsibility for finding time for teams to meet and protect professional development time from interruptions, (d) ensuring that data is available for teachers
to make decisions based upon student performance. Chrisman and Supovitz (2005) added one: learning “about instructional communities themselves so that they can then focus the work of these communities on instructional practice” (p. 650). To summarize, a principal has multiple responsibilities when establishing a building-wide professional development program.

Even if principals are accountable for the above responsibilities, it seems that a collaborative effort among stakeholders must exist in order to see growth in professional development programming. Mahon (2003) agreed, “… principals alone cannot produce improvements in student learning. School improvement is not all about the principal. It is about the principal’s ability to engage teachers in the process” (p. 51). Recognizing the teachers’ experiences when providing adult learning opportunities may be the most important task of administrators. One may then conclude that to improve student achievement, principals should motivate and engage teachers in professional growth opportunities while providing a supportive environment and effective guidance to remain focused on the goals set forth.

Often, the school district establishes professional development models within which the principal must operate. However the model is established, once a principal or school district selects a model, it is imperative that they monitor progress and minimize challenges that could undermine the success of the proposed professional development plan.

Many schools engage in professional development geared toward individual’s interests rather than toward increasing student achievement (Elmore, 2002; Neville & Robinson, 2002). According to Haslam and Seremt (2001), principals should encourage opportunities for teacher experimentation, reflection, and discussion focusing on classroom instruction and they should be built into the school day. “Collegial relationships, fostered via formal and informal mentoring, can initiate a deeper reflection about practices, offers encouragement that supports ongoing
growth, and increase the job satisfaction needed for teachers to move through more mature career stages” (Danielson, 2002, p. 185). He further said that when teachers were provided opportunities to collaborate with one another about best practices, student work, and content knowledge, professional growth became an ongoing process that enhanced teaching and classroom practices. “To improve professional development, it is more important to focus on the duration, collective participation, and the core features (i.e., content, active learning, and coherence) than type” (Garet, Porter, Desimone, Birman & Suk Yoon, 2001, p. 936). One might conclude that the components of effective professional development should be considered as districts begin to evaluate the models that will serve to facilitate student achievement.

Studies suggest that the more time school professionals spend on professional development, the more significantly they change their practices (Borko & Putnam, 1995; Parsad, 2001) and that participating in professional learning communities optimizes the time spent on professional development (Louis & Marks, 1998). One national survey found that in nine of ten content areas, most teachers said they spent one day or less on professional development during the previous year (NSDC, 2001). While adequate time for professional development is essential, research indicates that by itself, more time does not guarantee success. Therefore, if the sessions do not focus on the subject matter content that research has shown to be effective, then the duration will do little to change instructional practices and improve student learning (Garet et al., 2001).

Another essential element in assuring that professional development will be successful is engaging in evaluative endeavors that will garner important information about the impact of the professional development activities. Growing expectations for teachers and student learning lead to an increased interest in the content and quality of professional development. “Evaluation
should be considered during the earliest stages of planning and continued throughout the
development, implementation, follow-up, and maintenance. It cannot be something that is simply
tacked on at the end, hoping for good results” (Guskey, 2000, p. 92). In addition, one might ask
if professional development efforts are improving teaching practices and student learning. For
schools to evaluate the effectiveness of a professional development program, it makes sense that
they must have some background knowledge of the basic principles that constitute effective, high
quality, professional development.

It is vital to use multiple strategies to evaluate professional development such as (a)
develop and implement questionnaires and surveys to assess teachers’ perceptions of the quality
of professional development available and the impact of the professional development on
instructional practices, (b) survey students to elicit perceptions on the effectiveness of classroom
instruction and its impact on meeting learning needs, (c) use data gathered from both formal and
informal methods of evaluating staff members’ professional development needs and perceptions
on current professional development activities and programs, and (d) commit to staying the
course while remaining open to the possibility that the professional development plans/structures
may need adjustment for continuous improvement. Black (2007) concluded that the key to this
evaluative process is actually using the information gathered from the needs assessment and
perceptions surveys to take action, and at times, take risks.

It could be concluded that evaluating professional development practices is imperative in
maintain appropriate, high quality professional development programming designed to meet the
needs of all staff. Multiple tools on how to evaluate a district’s professional development
program are accessible to districts that are in the process of revising current programs. Guskey
(2005) concludes through a systematic cycle of evaluation, a districts’ professional development program will continuously evolve to meet the current needs of staff and students.

This chapter presented an overview of literature on the characteristics of successful high poverty schools and professional development for educators. The literature review also dealt with the role of the principal in implementing professional development that will help assure student success. The following chapter describes in detail the methodology used to investigate the relationship between principals’ perceived professional development practices and the impact on student achievement in high and low performing high poverty schools and the extent to which age, gender, experience, and school size and what variables can be attributed to the role of principals in these schools. Chapter III includes an overview of the methodology, purpose, research questions, population and sample, data collection, and data analysis.
CHAPTER III. METHODOLOGY AND PROCEDURES

The purpose of this study was to determine if there are differences among Torchbearer and Non-Torchbearer Schools principals’ professional development practices as measured by principals’ perceptions of the implementation of the NSDC standards. Student success may be facilitated to the extent that the NSDC standards are embraced by schools. A secondary purpose was to describe the differences in characteristics and school size of these two groups. No inferential analysis for this.

This chapter presents the methods and procedures used in collecting, analyzing, and interpreting the data from this study. Five research questions were addressed:

6. What are the characteristics of principals of Torchbearer Schools and principals of Non-Torchbearer Schools in terms of (a) gender, (b) age, and (c) years of experience as principal (d) and in school size?

7. To what extent are there differences (at the .05 level) in the perceived implementation of the following National Staff Development Council (NSDC) standards: (a) processes (data driven, evaluation, research-based, design, learning, and collaboration); (b) content (equity, quality teaching, and family involvement); and (c) context (learning communities, leadership, and resources), for principals in Alabama Torchbearer Schools and their counterparts in Non-Torchbearer Schools?

8. To what extent are there bivariate correlations and partial correlations controlling for principal type among the 12 subscales of the NSDC standards and on all scales combined?
9. To what extent are there differences in the factors that principals in Torchbearer and Non-Torchbearer Schools perceive as facilitating the implementation of NSDC standards in their schools?

10. To what extent are there differences in the factors that principals in Torchbearer and Non-Torchbearer Schools perceive as hindering the implementation of NSDC standards in their schools?

**Significance of the Study**

In the age of accountability, school districts must ensure that students meet higher standards. School leadership and teacher performance are at the pinnacle of student success. The *No Child Left Behind* Act of 2001, National Staff Development Council Standards, coupled with new standards for state and national accountability create an atmosphere that is results and data-driven.

Research-based professional development and training has been provided for those in other professions for a number of years (Hirsch, 1997). Research indicates that it is imperative that individuals in the education profession become equipped with the knowledge and skills that positively impact their performance while likewise using their increased skills to influence the academic performance of their students (NSDC, 2001).

Research indicates that student achievement will remain stagnate unless professional development is addressed as the key to student success (Joyce & Showers, 1998). Students in Alabama Torchbearer Schools and Non-Torchbearer Schools are performing differently as indicated on Alabama Reading and Math Test (ARMT) and Alabama High School Graduation Examination (AHSGE). Determining Torchbearer and Non-Torchbearer principals’ perceived professional development practices may provide important evidence about whether professional
development practices are or are not a factor in fostering student learning in high poverty schools in Alabama.

This information could be valuable to school principals in the state and nation, particularly, principals in high poverty-low achieving schools. On the other hand, if this study indicates there are no differences in how professional development is being implemented, then factors that are creating positive changes will need to be further explored. However, if this study indicates principals in Torchbearer Schools perceive their professional development practices more favorably than their counterparts, principals in Non-Torchbearer Schools; this may indicate that high quality professional development is related to student success on standardized tests. Principals in Torchbearer Schools have cited professional development as an important element in school success (Alabama Leadership Academy, 2009); yet, no study has been done to determine the extent to which these professional development practices follow the NSDC guidelines and whether professional development practices in Torchbearer Schools differ for those in Non-Torchbearer Schools.

**Survey Instrument**

The National Staff Development Council (NSDC) Self Assessment Survey was the instrument used in this study. NSDC contracted with the Southwest Educational Development Laboratory (SEDL) (2003) to develop an assessment instrument based on the twelve national staff development standards, described in detail in Chapters 1 and 2. The instrument is designed to be completed by principals, teachers and other school staff to measure the degree to which a school’s professional development program adheres to these standards; thereby providing schools across the nation with a mechanism for diagnosing and aligning their professional development programs with the NSDC standards.
There are twelve standards. They are categorized into three groups: context, process and content standards. Each standard is a statement of a staff development expectation. The standards also include the levels of performance to which schools can aspire. The survey contained three to five items per standard representing essential aspects of each of the 12 NSDC standards. Items were rated on a three-point scale (1 = Low – not present; 2 = Medium – inconsistently present; 3 = High – consistently present). Scores added in all categories to obtain a total school score representing high, medium, or low adherence of the school’s professional development program to the NSDC standards from the principals’ perspective.

**Item Construction**

The initial set of items for the instrument was developed by SEDL’s Evaluation Services (ES) staff members (SEDL. 2003). They generated a pool of 360 items (30 items per standard). Items were reviewed, edited, and 10 per standard were selected for the first draft of the assessment instrument. The instrument was next reviewed by four experts, selected by NSDC, who had contributed to the development of the standards. A focus group of teachers provided further feedback as to whether the items were relevant to their experiences, and whether the wording made sense. Instrument review and refinement also occurred after each pilot of the assessment instrument resulting in the current 60-item scale.

**Pilot Study Procedure**

NSDC staff contacted schools nationwide to select volunteers to participate in one of three pilot studies of the assessment instrument (SEDL, 2003). Twenty schools for each of the three pilot studies were selected and consented to participate. NSDC staff also asked individuals with extensive knowledge of the NSDC standards, and who were knowledgeable about the professional development programs at the various pilot schools, to complete a rating form about
the schools. These individuals rated the degree to which they perceived a particular pilot school’s professional development program as demonstrating characteristics of the NSDC standards. In the first pilot study, the instrument contained 100 items. The final instrument was to have 60 items. The process of reducing the bank of items from 100 to 60 began with the first pilot study. After being rated by the pilot schools, items were edited, rewritten or discarded based on statistical analyses and experts’ feedback. Using the same process, the instrument was reduced to 63 items for the second pilot study, and finally to 60 for the third pilot study.

**Reliability**

Reliability refers to the consistency of measurement (SEDL, 2003). With respect to measuring the degree of adherence of a school’s professional development program to the NSDC standards, Southwest Educational Laboratory examined the reliability (or consistency) of the NSDC Self Assessment Inventory (SAI) for measuring the various components that characterize the standards. Reliability was investigated using Cronbach’s alpha (Cronbach, 1971), which is a measure of the internal consistency of an instrument. Internal consistency assesses the extent that all items in a scale (or all items within subscales) correlate with each other. An alpha coefficient ranges from 0 to 1. Higher coefficients indicate higher levels of instrument consistency. Both overall reliability and subscale reliability were assessed on the SAI. Overall instrument reliability was consistent and high across all three pilot studies achieving an alpha coefficient of .98 in each study (citation). This analysis also showed stability or consistency for the SAI as a measurement tool across three pilot studies.

Subscale reliability was also analyzed to examine how well the items in each subscale grouped together and differed from items in other subscales (SEDL, 2003). Alpha coefficients ranged from .71 to .92, signifying good to strong subscale reliability across the three pilot studies.
While smaller coefficients are seen for the third pilot study, they still indicate good reliability and may be an effect of the smaller sample size for that pilot study (SEDL, 2003). The analyses also indicate stability or consistency in measurement across the three pilot studies.

**Validity**

Examining the validity of an instrument answers the question of whether the instrument is a true measure of what it claims to be measuring (SEDL, 2003). Several types of validity are appropriate to investigating the soundness of the NSDC SAI for measuring the adherence of schools’ professional development programs to NSDC standards. The three types of validity discussed for this instrument are content, criterion-related, and construct validity.

**Content Validity**

Content validity refers to how well the items on the SAI represent the practices of good professional development programs as outlined in the NSDC standards (SEDL, 2003). According to Allen and Yen (1979), “Content validity is established through a rational analysis of the content of a test, and its determination is based on individual, subjective judgment” (p. 95). As discussed in the above sections on item construction and procedures, the process for refining the SAI item content included rewording and clarifying items to reflect the most accurate description of the NSDC standards according to NSDC experts. Discussions were held between experts and ES instrument developers to ensure that the developers clearly understood the intent of the standards. Teacher-reviewers provided input on how teachers would perceive and interpret the items, and suggested wording and other changes. Continued input of this nature was solicited by the developers during each pilot study of the instrument. Content validity for the SAI was achieved through this process (SEDL, 2003).
Criterion-Related Validity

A second type of validity that was examined by the Southwest Regional Laboratory (SEDL, 2003) was criterion-related validity, which is an appropriate assessment “when scores can be related to a criterion” (Allen & Yen, 1979, p. 97). This analysis assessed the degree to which the SAI responses by school staff compared to an external measure or criterion (expert raters) of the extent to which schools’ professional development programs adhered to the NSDC standards. A discriminate function analysis was performed on each set of pilot data to examine evidence of criterion-related validity. Discriminate function analysis is a process that results in the creation of groups — in this case, high or low with respect to the adherence of a school’s professional development program to the NSDC standards (SEDL, 2003). It then reveals how well a measure categorizes the variable. In this analysis, teacher school ratings were categorized and compared to the expert school ratings. As noted earlier, individuals with knowledge about various pilot schools’ professional development programs and the NSDC standards were asked to rate the schools (high, medium, low) on the extent to which the programs demonstrated an alignment with various components of the standards. School scores, as rated by experts, were divided into two groups (high/low) because few experts scored school professional development programs as low. Since most were rated medium or high, the two naturally occurring categories were used and were dichotomized as “high” and “low” for analyses (SEDL, 2003). Ratings were totaled for each school and then schools were classified into two groups divided at the 50th percentile. Expert scores that fell below the 50th percentile were categorized as “low” and those above the 50th percentile were identified as “high.”

Construct Validity
Allen and Yen (1979) define construct validity as “the degree to which [a test] measures the theoretical construct or trait that it was designed to measure” (p. 108). The SAI was developed to measure the extent to which schools’ professional development programs adhere to the NSDC standards (SEDL, 2003). The NSDC standards are asserted to be “best practices” for school professional development programs and consist of twelve areas of focus (NSDC, 2003).

The construct validity of the SAI was examined by performing a factor analysis on each set of pilot data to determine if the items separated into twelve distinct “factors,” or areas of focus (SEDL, 2003). This would be expected if the items well-characterized the standards and if there are indeed twelve independent standards. Using a principal components analysis and Varimax rotation procedures, Eigen values of one or greater were used as the criteria for factor extraction (SEDL, 2003). In the first pilot data set, a seven-factor structure accounted for approximately 54% of the total variance. For the second pilot data set, a six-factor structure emerged accounting for approximately 67% of the total variance. A five-factor structure, accounting for about 59% of the total variance was found in the third sample (SEDL, 2003).

Since there are some demographic factors that may relate to student success and to answer research question one: What are the characteristics of principals of Torchbearer Schools and principals of Non-Torchbearer Schools in terms of (a) gender, (b) age, (c) years of experience as principal, and (d) school size, a demographic questionnaire was designed and developed by the researcher. The following demographic data were collected from each participant: (a) gender, (b) age, (c) years of experience as principal, and (d) school size. Age as reported by the respondent was arranged into four groups: 25–35; 36–46; 47–57; 58. An open-ended qualitative questionnaire was developed by the researcher to answer research questions
four and five. This questionnaire supplemented the NSDC survey and demographic questionnaire. The questionnaire asked the following questions:

1. What are the perceived barriers to the implementation of high quality professional development activities in Torchbearer Schools and Non-Torchbearer Schools?
2. What are the perceived factors that facilitated the implementation of NSDC standards in Torchbearer and Non-Torchbearer Schools?

Population

Two groups were identified to participate in this study. One group, identified as Torchbearer School Principals, are principals in high poverty and high performing schools which have been awarded the Alabama Torchbearer School designation since the 2004-2005 school year. To qualify as a Torchbearer School, the school must meet the following criteria:

6. Identified as Meeting the Challenge School, Advancing the Challenge School, and Exceeding the Challenge School according to the state rewards plan;
7. At least 80% of the student population receiving free/reduced meals;
8. Have at least 80% of students to score at Levels III or IV on the Math section of the Alabama Reading and Mathematics Test (ARMT);
9. Have at least 80% of students to score at Levels III or IV of the Reading section of the Alabama Reading and Mathematics Test (ARMT);
10. Have at least 95% of twelfth grade students pass all required subjects of the Alabama High School Graduation Exam (AHSGE); and
11. Have a graduation rate above the state average (high schools).

Since the inception of the Torchbearer Program, seventy nine elementary, middle, and junior high schools met these criteria. There has been only one high school awarded the
designation of Torchbearer School. Since the number of high schools in the group was so minimal, high schools were excluded from the population of this study.

A comparison population of lower-performing elementary, middle, and junior high schools serving low-income students were selected using data from the Alabama Department of Education’s (ALSDE) web site (www.alasde.edu). First, the ALSDE’s list of schools that did not make Adequate Yearly Progress for school year 2007–2008 was used to determine which schools met this criterion. Then, in order to assure the matched school population, the ALSDE database on those schools was consulted to identify which of those schools served populations in which 70% or more of the students qualified for free or reduce priced lunch. Statewide, a total of 50 schools met these criteria.

**Data Collection Procedures**

Permission to use the NSDC survey was granted by the National Staff Development Council (Appendix 1). After approval was received from the University Internal Review Board (Appendix 2), 70 NSDC surveys supplemented by a demographic questionnaire and open-ended qualitative questionnaire were mailed to principals of Torchbearer Schools and 50 NSDC surveys supplemented by a demographic questionnaire and open-ended qualitative questionnaire were mailed to principals of Non-Torchbearer Schools. Fifty-nine (59) surveys were returned by principals of Torchbearer Schools and 29 surveys were returned by principals of Non-Torchbearer Schools. The surveys were mailed from Auburn, Alabama, to the principals of Torchbearer and Non-Torchbearer Schools and included an appropriate cover letter explaining the nature of the study. The NSDC survey, demographic questionnaire, and open-ended questionnaire were sent as a mail-in survey and were color coded: (1) yellow, representing principals of Torchbearer Schools and (2) blue, representing principals of Non-Torchbearer
Schools. Each survey package included a pre-stamped addressed envelope in which to place the completed survey, demographic and open-ended questionnaire. The researcher number coded (1, 2, 3, ….) each survey as it was returned. The number code was placed in the upper right hand corner of the survey after the completed survey was mailed back to the researcher, and was not used to identify who had returned the survey. The number code only identified the order in which the surveys were mailed in from the principals of Torchbearer and Non-Torchbearer Schools and for organizational purposes and input into SPSS. Participants were asked to return responses within ten days. Minimal responses were received within the ten day period and there was a follow up mailing of the survey. Surveys were also distributed at professional development conferences in an attempt to maximize the response rate.

**Data Analysis**

Quantitative and qualitative analysis were used in this study.

- Descriptive statistics were used to examine demographic data.

- A one-way analysis of variance (ANOVA) was conducted to assess differences in the perceived implementation of the National Staff Development Council (NSDC) standards (process, content, and context) for principals of Torchbearer and Non-Torchbearer Schools. An alpha level of .05 was used in these analyses.

- Bivariate correlations and partial correlations were conducted to assess Qualitative data were analyzed using the constant comparative method (Patton, 1990). Each of the responses was hand-coded by the researcher to into categories. Categories are created when a researcher groups or clusters the data, and it becomes the basis for the organization and conceptualization of that data. Patton (1990) refers to two key sources in the organization of data: “1) the questions that were generated during the conceptual phase of the
study and 2) analysis, insights, and interpretation that emerged through data collection” (p. 378). Patton describes this procedure as the creative process of discovering “patterns, themes, and categories that capture the primary meaning of the data” (Patton, 1990, p. 406).

**Conclusion**

This chapter described the quantitative and qualitative nature of this study. The quantitative and qualitative instrument used to gather data was also described. In addition, data collection and analysis procedures were described and validity and reliability were discussed. Chapter IV describes the findings of the study based upon the data that were collected.
CHAPTER IV. MANUSCRIPT 1:

ROLE OF THE PRINCIPAL IN CREATING SCHOOL SUCCESS AND ACADEMIC ACHIEVEMENT IN HIGH POVERTY SCHOOLS

Introduction

Never before in the history of education has there been so much attention paid to moving all public school students to high levels of achievement (Ylimaki, 2007). Policies and laws such as No Child Left Behind Act (2001) and a history of reports through the years (National Commission on Teaching and America’s Future, 2003; National Policy Board for Educational Administration, 2002, p. 2; National Staff Development Council (NSDC), 2000) have emphasized the need to improve schools. Research indicates that to create high quality schools requires setting high standards for all students (Carter, 2000; Kannapel & Clements, 2005), populating every school with leaders and teachers that are highly qualified and competent (Fullan, 2002; Hale & Moorman, 2003; Leithwood & Riehl, 2003), and assuring that school leaders and teachers participate in high quality professional development practices that are aligned with professional development standards that promote student achievement (Blankstein, 2004).

Traditionally, schools with high poverty rates have struggled to educate students successfully (Carter, 2000; Kannapel & Clements, 2005). Schools with high concentrations of children of poverty face significant school improvement challenges. Research indicates that poverty can have a significant impact on student achievement (Brooks-Gunn & Duncan, 1997).
Children living in poverty are more likely to fall behind their classmates, be labeled as problem students, be absent, truant, and eventually drop out of school altogether, and have negative success on standardized tests. It is understood and virtually known that principals are a key to school success and student learning (Schargel, Thacker, & Bell, 2007). This is strongly substantiated for the specific cases of highly effective schools serving high poverty populations (Carter, 2001; Schargel, Thacker, & Bell, 2007).

More than 20 years ago, educators began exploring how schools with high numbers of poor students could be as successful in student performance as schools in more advantaged communities. Research on similar populations has found that students who live in poverty experience school differently from more affluent students (Williams, 2003; Griffith, 2002; Comer, 2001). However, students in high poverty schools can perform well (Kannapel & Clements, 2005; Simon & Izumi, 2003).

During the present school accountability era, identifying specific elements that help schools steadily raise the level of student achievement is important to stakeholders including school administrators, teachers, parents, and politicians (Gieselmann, 2009). Research has indicated that certain characteristics are associated with increased student achievement and performance in schools traditionally viewed as low performing with a large number of students living in poverty (Kannapel & Clements, 2005). Effective leadership matters in high poverty schools and if schools are not participating in high quality professional development, student achievement will remain stagnant (Joyce & Showers, 1998).

Carter (2000) reported successful high poverty schools have staff that support the belief that all students can and will learn. High poverty schools with principals and faculties that believe in their students, set high goals for their students, and engage in professional
development activities that promote supportive and nurturing classroom environments have students with higher student achievement scores (Carter, 2000; Kannapel & Clements, 2005).

Although the literature indicates students can achieve in a high poverty situation, many still have the belief poverty equates low achievement in schools. As a result, low expectations, low standards for teaching and learning, ineffective leadership and low academic success for students who find themselves in poverty is still a reality.

To counteract this belief, in 2004 the state of Alabama created the Torchbearer Schools Program to recognize high-poverty, high-performing public schools. The Alabama Leadership Academy (ALA) at the Alabama State Department of Education was established to increase the achievement of all students in Alabama by supporting the growth and development of superintendents, principals, and teachers as instructional leaders. The ALA seeks to increase the quality and capacity of leadership in every school in Alabama (www.alex.state.al.us). A book study conducted by the Alabama Leadership Academy formed the basis of the Torchbearer Program. The focus of the book study used Samuel Casey-Carter’s book, No Excuses: 21 Lessons from High-Performing, High Poverty Schools. This book outlines research-based methods for raising student achievement in 21 high-poverty population schools in the nation. The belief of many who attended the book study was that Alabama had no high-poverty, high-performing public schools (Alabama Leadership Academy, 2006). The members of the Alabama Leadership Academy, which included Alabama State Department of Education personnel, created The Torchbearer Schools Program to recognize high-poverty, high-performing public schools in Alabama and counteract this belief. Since the inception of the program, seventy-nine schools have met all criteria and were recognized with a monetary reward by the Alabama State
Education Department (ALSDE) as Torchbearer Schools. To be considered for recognition as a Torchbearer School, schools must meet the following criteria:

- Have at least an 80 percent poverty rate (percent free/reduced-price meals).
- Have at least 80 percent of students to score at Levels III or IV on the Reading section of the Alabama Reading and Mathematics Test (ARMT).
- Have at least 80 percent of students to score at Levels III or IV on the Math section of the Alabama Reading and Mathematics Test (ARMT).
- Have at least 95 percent of twelfth-grade students pass all required subjects of the Alabama High School Graduation Exam (high schools).
- Have a graduation rate above the state average (high schools).

Twenty two schools have been awarded this designation more than once since the program began in 2004. Of these schools 20 were elementary schools, and two were middle/junior high schools. There has been only one high school awarded this designation since the inception of the Torchbearer Schools program (www.alex.state.al.us).

The Alabama Leadership Academy (2006) conducted site visits in Torchbearer Schools to discern why Torchbearer Schools were successful when other schools with similar demographics had been less so. Torchbearer Schools had several traits in common but the most striking commonality among these schools was principals, teachers, and students who were excited about learning (ALA, 2006). The Torchbearer School principals indicated in a Principal Survey administered in year three of the program by the Alabama Leadership Academy (2009) that they believed that poverty is no excuse for poor achievement. The principals also indicted that the strength and commitment of their professional development program is a factor in their success. Principals reported that teachers in Torchbearer Schools participate in professional
development that allows them to provide input into instructional decisions. They also noted that high-level, on-going, capacity building professional development is a priority in their schools.

**Statement of the Problem**

Research indicates that the principal is an important element in school success (Leithwood & Riehl, 2005; Marks & Printy, 2003; Ylimaki, 2007). This study sought to determine whether factors, related to the principal and the school that could be elements in the success or lack of success in these schools. This study examined demographic data related to principals of these schools to determine whether differences existed in terms of gender, age, and years of experience as principal. It also examined the size of the school.

Currently, little research exists about the principals of Alabama Torchbearer Schools and the role that they play in creating school success and academic achievement in high poverty schools. Lindahl (2008) compared the organizational culture and climate of Alabama Torchbearer Schools and Non-Torchbearer Schools serving low-income students. The results from this study strongly supported the fact that the Torchbearer Schools had significantly more positive school climates than their counterparts, Non-Torchbearer Schools. However, Lindahl’s study did not address the principals’ role in the success of high poverty high achieving schools. Even though they look alike in terms of demographics, students in Alabama Torchbearer Schools and Non-Torchbearer Schools are performing differently. Determining whether there are demographic differences in Torchbearer and Non-Torchbearer principals’ perceptions of their years of experience and the size of the schools they serve, student achievement may provide important in fostering success in similar schools.

**Limitations**

This study had the following limitations:
4) Since only one high school have been identified as Torchbearer schools, only elementary, middle/junior high schools in Alabama were included in this study.

5) Although findings from the study may be generalized to schools and principals in Alabama with similar populations to those in this study, the findings cannot be generalized beyond the state.

6) It is presumed that principal responses on the NSDC survey, demographic and qualitative responses reflected their honest perceptions.

Sample Population

Two groups were identified to participate in this study. One group, identified as Torchbearer School principals, are in high poverty and high performing schools which have been awarded the Alabama Torchbearer School designation beginning the 2004–2005 school year. Since the inception of the Alabama Torchbearer School Program, seventy-nine elementary, middle, and junior high schools meet these criteria. Principals from fifty-nine Torchbearer Schools agreed to participate in the study.

A comparison population of principals from low-performing elementary, middle, and junior high schools serving low-income students were selected using data from the Alabama Department of Education’s (ALSDE) web site (www.alasde.edu). First, the ALSDE’s list of schools that did not make Adequate Yearly Progress for school year 2008–2009 was used to determine which schools met this criterion. Then, in order to assure the matched school population, the ALSDE database on those schools was consulted to identify which of those schools served populations in which 70% or more of the students qualified for free or reduce priced lunch. Statewide, a total of 50 schools met these criteria. Twenty-nine principals from Non-Torchbearer Schools participated in the study.
Data Collection

This was a two-part study which utilized a survey, demographic questionnaire, and an open-ended qualitative questionnaire. To describe the characteristics of principals of Torchbearer Schools and Principals of Non-Torchbearer Schools in terms of (a) gender, (b) age, (c) gender years of experience, and (d) in school size, a demographic questionnaire designed by the researcher was utilized. After approval to conduct the study was received from the University Internal Review Board, the demographic questionnaire and a letter asking for participation were sent to all principals in the population. A stamped, self-addressed envelope in which to place the completed survey was also included. A second mail-out was sent three weeks later.

Data Analysis

There were eighty-eight valid responses, yielding an overall response rate of 73 percent. Fifty-nine or 84% of the principals in Torchbearer Schools responded. Twenty-nine or 58% of the principals in Non-Torchbearer Schools participated. Descriptive statistics were used to determine if there were differences in the demographic data relative to Principals of Torchbearer Schools and Principals of Non-Torchbearer Schools.

Results

Gender

The gender of principals in the two types of schools is reported in Tables 3, 4, and 5.
Table 3

Gender Torchbearer and Non-Torchbearer Principals

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>29</td>
<td>33.0</td>
<td>33.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>59</td>
<td>67.0</td>
<td>67.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4

Gender Torchbearer Principals

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>23</td>
<td>39.0</td>
<td>39.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>36</td>
<td>61.0</td>
<td>61.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5

*Gender Non-Torchbearer Principals*

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valid</td>
<td></td>
<td>Male</td>
<td>8</td>
<td>28.0</td>
<td>28.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>21</td>
<td>72.0</td>
<td>72.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>29</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Overall, two-thirds of the principals in these schools were female. In the Torchbearer Schools, 39% of the principals were male and 61% were female. The differences in the Non-Torchbearer Schools were even greater. In these schools, only 28% of the principals were males, while 72% were females.

**Principal Age**

Data related to principal age is reported in Table 6.
Table 6

Principal Age

<table>
<thead>
<tr>
<th>Principal</th>
<th>Age 25–35</th>
<th>36–46</th>
<th>47–57</th>
<th>58 and more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torchbearer</td>
<td>0</td>
<td>12</td>
<td>37</td>
<td>10</td>
</tr>
<tr>
<td>%</td>
<td>0</td>
<td>20.3%</td>
<td>62.7%</td>
<td>16.9%</td>
</tr>
<tr>
<td>Non-Torchbearer</td>
<td>3</td>
<td>6</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>%</td>
<td>10.3%</td>
<td>20.6%</td>
<td>44.8%</td>
<td>24.1%</td>
</tr>
</tbody>
</table>

The data related to the age of principals in these schools indicates some similarities but there are also some interesting differences. Although the percent of principals age 36–46 are almost the same (20.3) and (20.6), it appears that there are older principals in the Torchbearer schools than in the non-Torchbearer Schools. The percent of Torchbearer principals, ages 47–57, is 62.7% while the percent in the other schools is 44.8%. Additionally, the percent of principals’ ages 58 or higher is 24.1% in the non-torchbearer schools and 16.9% in the Torchbearer Schools. At the opposite end of the continuum, there were 3 principals (10.3%) in the non-Torchbearer Schools who reported being in the 25–35 year age range, while no principals in the Torchbearer Schools fell in to this category.

Experience

Data related to Principal experience is reported in Table 7.
Table 7

*Principal Experience by Years*

<table>
<thead>
<tr>
<th>Principal</th>
<th>0–3 years</th>
<th>4–6 years</th>
<th>7–9 years</th>
<th>10–12 years</th>
<th>13–15 years</th>
<th>16–18 years</th>
<th>19–25 years</th>
<th>26 years and more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torchbearer</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>23</td>
<td>8</td>
<td>14</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Percent</td>
<td>0</td>
<td>8.4%</td>
<td>5.0%</td>
<td>38.9%</td>
<td>13.5%</td>
<td>23.7%</td>
<td>6.7%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Non-Torchbearer</td>
<td>9</td>
<td>5</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Percent</td>
<td>31.0%</td>
<td>17.2%</td>
<td>24.1%</td>
<td>6.8%</td>
<td>6.8%</td>
<td>6.8%</td>
<td>3.4%</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

The data related to experience of principals in these schools indicates more differences than similarities. Although the percent of principals with 0–3 years experience was greater for the Non-Torchbearer principals (31.0%), no principals in the Torchbearer Schools fell into this category. It appears that there are more experienced principals in the Torchbearer Schools, than in the Non-Torchbearer Schools. The percent of Torchbearer principals reporting 10–12 years experience is 38.9%, while the percent in the other school is 6.8%. Furthermore, the percent of principals with 16–18 years of experience is 23.7% in the Torchbearer Schools and 6.8% in the Non-Torchbearer Schools. Additionally, the percent of Torchbearer principals, reporting 13–15 years experience is 13.5% and 6.8% in the Non-Torchbearer Schools. Likewise, the percent of principals with 7–9 years experience is 24.1% in the Non-Torchbearer Schools and 5.0% in the Torchbearer Schools. There were five principals in the Torchbearer Schools (8.4%) and Non-Torchbearer Schools (17.2%) who reported being in the 4–6 years range. At the opposite end of the continuum, 6.7% of Torchbearer principals reported being in the category of 19–25 years and
two (3.3%) reported 26 years or more of experience; whereas there was one principal reporting in both categories of 19–25 years and 26 years or more of experience for the Non-Torchbearer Schools.

**School Population**

The data related to school size indicates Torchbearer Schools are smaller than Non-Torchbearer Schools. Overall, two-thirds of the principals in Torchbearer Schools reported school populations of less than 300. The differences in the Non-Torchbearer schools were even greater. In these schools, 53.8% reported they were in schools that had student populations in the category of 300–500 (see Table 8).

Table 8

*Principal by School Population*

<table>
<thead>
<tr>
<th>School Population</th>
<th>less than 300</th>
<th>300–500</th>
<th>501–750</th>
<th>751–1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torchbearer</td>
<td>38</td>
<td>15</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Percent</td>
<td>66.7%</td>
<td>26.3%</td>
<td>5.3%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Non-Torchbearer</td>
<td>5</td>
<td>14</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Percent</td>
<td>19.2%</td>
<td>53.8%</td>
<td>15.4%</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

These data present some interesting differences which may help explain some of the differences in student performance in these schools. A discussion of the implications and conclusions for these results follows.
**Discussion**

High poverty schools face many challenges; however, research has confirmed that effective educators can improve the academic outcomes of low-income students and provide them with hope and promise for the future (Banks, 2001; Carter, 2000; Haberman, 2005; Kannapel & Clements, 2005). Leadership matters in these types of schools and the literature indicates that the principal is an important element in school success (Leithwood & Riehl, 2005; Marks & Printy, 2003; Ylimaki, 2007). Stepping back from the fact that all of these principals who participated in this study are in schools that are high poverty, one group appears to be successful in improving student achievement and their counterparts are not. The question must therefore be asked, “What accounts for their success in such schools?” The findings from this study suggest that age, gender, experience and school size may be factors that have impacted the roles of principals in improving student achievement in Alabama Torchbearer schools.

**Gender**

The movement of women into the ranks of administration in public education has gained momentum. More recent research (Blackman & Fenwick, 2000; Boris-Schacter & Lager, 2006) indicate that the number of women taking leadership positions in elementary schools has risen over the past ten years. This is true in Alabama as well. In 2000, Kochan, Spencer, and Mathews reported the state average for female principals in Alabama was 38%. The percent of female principals in the state is 49%. However, although presumably not related to differences in school success, the percent of women in these high poverty schools stands at 67% of the principals. The state average is 49%.

Surprisingly, this study revealed 61% of Torchbearer principals are female and the differences in the Non-Torchbearer Schools were even greater. In these schools, 72% were
females. Placing leadership differences aside, the question has arisen regarding the placement of women principals in certain schools. Shakeshaft (1986) discovered that men and women approach the job of educational administration differently and respond in ways that are dissimilar. Women tend to have a different leadership style and effectiveness may depend on this alternate approach and the types of schools they are assigned to. Regan and Brooks (1995) identified five feminist attributes to leadership: collaboration, caring, courage, intuition, and vision. Research studies of characteristics of successful high poverty schools include high levels of collaboration, a supportive learning environment and effective school leadership. In the past, women were seen as being selflessly nurturing, domestic, and more motherly in manner (Popiel, 2004) and this may impact the placement of female principals at particular schools. Previously reviewed studies confirm principal gender did predict student achievement (Brown, Grayson, Brunner, Grogan, & Hackney, 2006; Eagly, Karau, & Johnson, 1992; Kochan, Spencer, & Mathews, 2000; Shakeshaft, 1989) and female principals are able to work with their school communities to create successful schools (Lyman, Ashby, & Tripses, 2005; Smulyan, 2000; Young & McLeod, 2001).

The literature indicates that women principals can be successful and emerging from the literature is the fact that female principals tend to be successful in high poverty schools. One wonders therefore why although 72% of the principals in the Non-Torchbearer Schools were women, this factor does not appear to explain the difference between the two types of schools. Some research does indicate that women are often placed in schools with high poverty and which are difficult to operate (Bloom & Erlandson, 2003). It appears that this is occurring in Alabama. Research should be done to determine why this is true. It may be that school systems are relying on research that indicates women can create more collaborative communities in schools which
lead to success. However, it may also be that women have a more difficult time in getting principalships than men and therefore tend to apply for and take positions which are difficult. Further research should be conducted to examine this outcome more fully.

Age

The findings suggest that principals in the Torchbearer Schools were somewhat older than non-Torchbearer principals. The new generation of school principals is older (Gates, et al., 2003). For women principals this may be partially due to their own career choices and tendency to move into administration later in life than do men (Shakeshaft, 1989, 2007). Previous studies on Alabama Torchbearer Schools (Lindahl, 2008) acknowledge the impact of these principals on the school culture and climate but there is no research on the impact of principal age and student achievement. Principal age could imply better preparation and understanding of school leadership functions. We know the Torchbearer principals are somewhat older than their counterparts, principals in Non-Torchbearer schools, and we can assume that because they are somewhat older, they may have a better understanding of the curricular and accountability demands of the principalship. The data from this study suggest future research studies are warranted as to the impact of principal age and if this is indeed why such principals are successful in their schools.

Experience

Perhaps related to age, the principals in the Non-Torchbearer Schools have much less experience than those in the Torchbearer Schools. This study did not investigate how many years these principals had at their present school, which research indicates is important, but 72.3 percent of Non-Torchbearer principals have less than ten years of experience while only 13.4 percent of Torchbearer principals do. This is significant in that the schools that are high poverty
and low achieving have principals with less experience than their counterparts who are high poverty and high achieving. This finding indicates that experience matters in leading schools where poverty impacts student achievement. This finding is supported by other research.

Bista and Glasman (1998) determined there was a positive relationship between total years of principal experience and school improvement. The researchers discovered the total years of principal experience likened with more effective leadership abilities that impacted student achievement and this may be attributed to why Alabama Torchbearer principals are successful. This finding bears further study and examination within the state and local school systems. Superintendents should also examine their hiring practices and principal assignments when promoting principals specifically when they have schools that are rifled with challenges. Since experience appears to matter, it may be important for superintendents to establish collaborative opportunities to connect experienced high performing principals with less experienced principals. In this way, Torchbearer principals could serve in the roles of coaches, mentors, and role models for others. These principals, who appear to have a wealth of knowledge, can provide insight to the less experienced principals on creating an environment where students are successful. In addition, it would seem important for superintendents and others who select principals to consider the issue of experience and age, previously noted, when selecting principals in schools with low student performance.

**School Size**

School size was a factor that was considered in this study. Overall, two-thirds of the principals in Torchbearer Schools reported school populations of less than 300 while 53.8% of the Non-Torchbearer principals reported they were in schools that had student populations of 300–500 and only 19.2% reported working in schools of less than 300. Furthermore, 5.3% of the
Torchbearer Schools reported a population of over 500 and 15.4% of the Non-Torchbearer schools had a population of greater than 500. In addition, two principals in Non-Torchbearer School reported they were in schools that had student populations of 750 or more while one principal in the Torchbearer Schools reported a school population of 750 or more.

There is a growing body of literature that indicates that children, especially those struggling academically, benefit from being in smaller schools, due primarily to the increased likelihood of having a close personal relationship with at least one administrator (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Advocates for small schools have argued that they can raise student achievement, especially for low income students simply because of their size (Bracey, 2001) and Leithwood et al. (2004) contend at the elementary level, the optimum size is 250–300 students. The data from this study supports this finding. This information could be useful to school districts when implementing school reform and considering how to foster student achievement in low-performing schools. If it is not possible to restructure schools to make them smaller, those involved may want to consider developing a schools within a schools program (Howley, & Bickel, 2000) or using a similar model to create a more personal environment for students.

**Summary**

The results of this study suggest that, principal experience, age, and school size may have impacted student achievement in high poverty schools. We know the majority of principals in Torchbearer Schools are more experienced and older than their counterparts in Non-Torchbearer Schools and these principals lead in smaller schools. The findings also support other research indicating that small schools can raise student achievement, especially for low income students (Bracey, 2001). The findings provide Alabama school districts with a better perspective of the
elements needed to address student achievement in schools where poverty is a factor. Without question, turning around a school is a complex process in which leadership is a priority. Providing data that document why principals are effective, even in the most challenging settings, extends the line of research inquiry about what colleges of education as well as school districts can do to address student achievement in high poverty schools. Based on these data, high poverty schools have their own set of unique challenges. Superintendents in Alabama may need to review their current practices in regards to principal selection, particularly in settings that are challenging. They may also want to examine school size and develop plans for lowering size or creating patterns of practice that focus more clearly on student learning.

Additionally, mentoring opportunities for experienced and less experienced principals in high poverty schools may require greater attention from superintendents with regard to promoting student achievement. It is imperative that less experienced principals receive the necessary support that allows them to be effective. Furthermore, superintendents could consider the placement of new principals under the direction of these experienced principals. Even though prior teaching experience was not investigated, studies that focus on what prior teaching experience can bring to the administrative experience that will help principals to be successful in all schools are needed.

While this study has illuminated important aspects of the role of the principal in creating school success and academic achievement in Alabama high poverty schools, many questions still remain. Continued research regarding principal leadership in high poverty schools is critically important to amass evidence that informs our understandings of who are effective principals in high poverty schools and how best to support them. Enhanced research efforts regarding internal practices, principal leadership styles, professional development and other factors that may
enhance success should also be conducted so that all students will be given an opportunity to succeed in school and in life.
CHAPTER V. MANUSCRIPT 2:

PROFESSIONAL DEVELOPMENT AND STUDENT ACHIEVEMENT IN HIGH POVERTY SCHOOLS: MAKING THE CONNECTION

Introduction

A growing emphasis on student achievement as a result of No Child Left Behind legislation (NCBL, 2001) and a strong emphasis on accountability (National Middle School Association, 2003) has left many schools searching for ways to improve student learning and achievement. This emphasis upon high levels of achievement for all students is unprecedented in our country (Ylimaki, 2007). This has led to an emphasis on improving schools, having highly competent leaders and teachers, and fostering and implementing high quality professional development for teachers and leaders.

This need for change has been emphasized most strongly for students who have traditionally been underperforming in schools. Most of these students are in schools where there are high rates of poverty among students (Kannapel & Clements, 2005). More than two decades ago, educators began exploring how schools with high numbers of poor students could be as successful in student performance as schools in more advantaged communities. Research indicates that students who live in poverty experience school differently than more affluent students (Comer, 2001; Griffith, 2002; Williams, 2003). However, research has also discovered that students in high-minority and high poverty schools can perform well (Kannapel & Clements, 2005; Simon & Izumi, 2003). The literature describes several common elements that appear to
correlate positively with student achievement in high poverty schools. High poverty schools with principals and faculties that believe in their students, set high goals for their students, and engage in professional development activities that promote supportive and nurturing classroom environments have students with higher student achievement scores (Desimone, Smith & Phillips, 2007; OSPI, 2002).

High quality professional development programs are an essential component in school improvement (Hirsh, 2009) and in meeting goals established by the federal mandates of No Child Left Behind (NCLB) and state mandates. NCLB (2001) requirements focus on improving student achievement, increasing accountability for student performance, and expanding parental involvement leading to the need for hiring and retaining highly qualified teachers. These requirements have driven districts to evaluate current professional development practices as they work to develop programs that support improvements in teaching and classroom practices (NSDC, 2003).

As the culture of school setting changes, there is a need to change how we have structured and delivered professional development (Sparks & Hirsh, 1997). Professional development practices have historically been unplanned and haphazardly implemented in schools. The literature clearly has dictated what high quality professional development (NSDC, 2003) looks like; however, despite this, many schools have not adopted professional development standards and effective professional development practices and continue to conduct professional development the same way it was done for decades (Blankstein, 2004; DuFour et al., 2004). Furthermore, Sparks and Hirsch (1997) pointed out that “most professional development and school improvement activities continue to leave teachers’ knowledge and skills untouched” (p. 1).
Researchers have shown that effective professional development is an essential element in promoting significant change in school leaders’ practices, teachers’ instructional practices and student learning (Sparks & Hirsh, 1997, as cited in Levine, 2005). Goodlad (1983) states, schools must be “self-renewing systems.” In order to create conditions that promote the growth and development of teachers within a school and subsequently improvement in student achievement, leaders must promote a climate of professional growth through professional development activities that are analytical and reflective of a school’s vision and mission (Guskey, 2000). Educators’ perceptions and beliefs in the importance and effectiveness of professional development practices are repeatedly noted in the research as an essential component in eliciting positive and sustained change in educational practices. “When a school or district believes professional development is the key to improving schools, that attitude permeates everything that they do” (Richardson, 2000, p. 4). Thus, the focus of professional development has shifted from evaluating effectiveness by the number of attendees and whether they enjoyed the workshop to determining the impact of the professional development on student achievement (Joyce & Showers, 2002). The most effective professional development activities for increasing teacher’s knowledge and skills include those that provide teachers with opportunities to actively engage with each other around curriculum and instruction (Desimone, Smith & Phillips, 2007, p. 1087).

**Theoretical Perspective**

The National Staff Development Council in collaboration with major national and state organizations created a set of professional development standards for educators (NSDC, 2008) that could be systematically utilized to design quality professional development programs for educators that would impact student achievement. The first set of standards were adopted in
1995 and the standards offered a framework for creating professional development opportunities that are responsive to school leaders, teachers, and students with an increased focus on student achievement. They also provide an explanation of how to implement high quality professional development in schools. There are 12 standards that are categorized as context, process, or content standards. Each standard is a statement of the professional development expectation and establishes the level of performance to which all schools can aspire. The National Staff Development Council (NSDC) standards (2001) stress that professional development should not be perceived of as “one-shot” opportunities to disseminate information on classroom innovation and reform practices.

In 2001, the NSDC (2003) proposed a revision of the original set of 12 standards in order to identify and document a more solid research-base linkage between professional development practices and improved student learning. The revised NSDC Standards (2003) clearly advocate that “high quality” professional development must be results-driven, standards based and job embedded.

Guskey and Sparks (1996) use these standards to provide a theory of change in a conceptual framework that identifies linkages between professional development provided to educators and improved student learning (see Figure 1). Beginning with the three boxes on the left (context, process, content), the model illustrates the 12 components necessary for high quality professional development.
Figure 1. Staff Development and Improvements in Student Learning (Guskey & Sparks, 1996, p. 35)

The Alabama Leadership Academy

Just as school systems have sought ways to meet the federal standards and improve schooling for all students, states have become involved in this endeavor in a variety of ways (CITATION). In Alabama, one of the initiatives involved the establishment of the Alabama Leadership Academy (ALA). Launched in mid-2001, the Alabama Leadership Academy (ALA) was the first statewide effort by the Alabama State Department of Education to provide ongoing
professional development for principals of all schools ALA is a professional development initiative of the Classroom Improvement Section of the Alabama State Department of Education. The emphasis of the ALA is to increase the achievement of all students in Alabama by supporting the growth and development of superintendents, principals, and teachers as instructional leaders. The ALA seeks to increase the quality and capacity of leadership in every school in Alabama (www.alex.state.al.us). The Alabama Leadership Academy Council meets three times a year to determine issues and content and include fourteen principals, two superintendents, and five Alabama State Department of Education staff members representing Classroom Improvement, Special Education, Federal Programs, and Alabama Reading Initiative Program.

A book study conducted by the Alabama Leadership Academy formed the basis of an initiative labeled the Torchbearer Program. The members of the Alabama Leadership Academy (2006) believed that there were some high-performing, high poverty schools in Alabama. They decided to develop a program that would highlight these schools and facilitate others to succeed. They began by engaging in a book study using No Excuses: 21 Lessons from High-Performing, High Poverty Schools by Samuel Casey-Carter. This book outlines research-based methods for raising student achievement in 21 high-poverty population schools in the nation.

As an outgrowth of this book study, the ALA established the Torchbearer School Program. This program was established to identify high poverty, high performing schools in the state in an effort to honor those who were succeeding and to use the strategies and structures as models for others to emulate. To be considered for recognition as a Torchbearer School, schools must meet the following criteria:

1. Have at least 80% of the student population receiving free/reduced meals;
13. Have at least 80% of students to score at Levels III or IV on the Math section of the Alabama Reading and Mathematics Test (ARMT);

14. Have at least 80% of students score at Levels III or IV of the Reading section of the Alabama Reading and Mathematics Test (ARMT);

15. Have at least 95% of twelfth grade students pass all required subjects of the Alabama High School Graduation Exam (high schools); and

16. Have a graduation rate above the state average (high schools).

Currently, seventy-nine schools have been designated as Torchbearer Schools. The first Torchbearer Schools were identified in 2004–2005. There were thirteen of them. Following their identification, members of the Alabama Leadership Academy (2006) conducted site visits in twenty Torchbearer Schools to discern why Torchbearer Schools were successful when other schools with similar demographics had not been. The Torchbearer principals were administered a Principal survey. Data from the survey and qualitative responses indicated that the Torchbearer Schools had several traits in common but the most striking commonality among these schools was that principals, teachers, and students were excited about learning (2006). In 2008, a Principal survey was administered to principals in Torchbearer Schools and the principals indicated that the strength and commitment of their professional development program is a factor as to why they are successful (ALA, 2009). Principals reported that teachers in Torchbearer Schools participate in professional development that allows them to provide input into instructional decisions and high-level, on-going, capacity building professional development is a priority in their schools.
Statement of the Problem

Currently, little research exists about the Principals of Alabama Torchbearer Schools and the impact of their perceived professional development practices in relationship to the National Staff Development Standards and the role it has in creating school success and academic achievement in high poverty schools. Lindahl, (2008) compared the organizational culture and climate of Alabama Torchbearer Schools and Non-Torchbearer Schools serving low income students. The results from this study strongly supported the fact that the Torchbearer Schools had significantly more positive school climates than their counterparts, Non-Torchbearer Schools. However, Lindahl’s study did not address the role of professional development in the success of high poverty high achieving schools. Even though they look alike in terms of demographics, students in Alabama Torchbearer Schools and Non-Torchbearer Schools are performing differently as determined by student achievement scores on the Alabama Math and Reading Achievement Test, the Alabama High School Graduation Examination, and the percentage of students graduating. Determining whether there are differences in Torchbearer and Non-Torchbearer principals’ perceived implementation of the National Staff Development Council (NSDC) standards and the impact on student achievement may provide evidence about how to positively affect student learning in high poverty schools in Alabama.

Purpose of the Study

The purpose of this study was to determine if there are differences among Torchbearer and Non-Torchbearer Schools principals’ perceptions of implementation of the NSDC standards. Student success may be facilitated to the extent that the NSDC standards are embraced by schools. A secondary purpose was to describe the factors these principals perceived as facilitating and hindering the implementation of NSDC standards in their schools.
This information could be valuable to school principals in the state and nation, particularly principals in high poverty-low achieving schools. On the other hand, if this study indicates there are no differences in how professional development is being implemented, then factors that are creating positive changes will need to be further explored. However, if this study indicates principals in Torchbearer Schools perceive their professional development practices more favorably than their counterparts, principals in Non-Torchbearer Schools; this may indicate that high quality professional development is related to student success on standardized tests. Principals in Torchbearer Schools have cited professional development as an important element in school success (Alabama Leadership Academy, 2009); yet, no study has been done to determine the extent to which these professional development practices follow the NSDC guidelines and whether professional development practices in Torchbearer Schools differ for those in Non-Torchbearer Schools.

**Significance of the Study**

School districts are now being held accountable in making sure that students meet higher standards. School leadership and teacher performance are at the pinnacle of student success. The *No Child Left Behind* Act of 2001 and National Staff Development Council Standards coupled with new standards for state and national accountability create an atmosphere that is results and data-driven.

Research-based professional development and training has been provided for those in other professions for a number of years (Hirsch, 1997). Research indicates that it is imperative that individuals in the education profession become equipped with the knowledge and skills that positively impact their performance while likewise using their increased skills to influence the academic performance of their students (NSDC, 2001).
Research indicates that student achievement will remain stagnant unless professional development is addressed as the key to student success (Joyce & Showers, 1998). Students in Alabama Torchbearer Schools and Non-Torchbearer are performing differently as determined by the criteria set forth to be a Torchbearer School. Determining Torchbearer and Non-Torchbearer principals’ perceived implementation of the National Staff Development Council (NSDC) standards may provide important evidence about whether professional development practices are or are not a factor in fostering student learning in high poverty schools in Alabama.

**Limitations and Assumptions**

This study had the following limitations:

7) Since only one high school has been identified as a Torchbearer School, only elementary, middle/junior high schools in Alabama were included in this study.

8) Although findings from the study may be generalized to schools and principals in Alabama with similar populations to those in this study, the findings cannot be generalized beyond the state.

9) It is presumed that principal responses on the NSDC survey, demographic and qualitative responses reflected their honest perceptions.

**Sample Population**

Two groups were identified to participate in this study. One group, identified as Torchbearer School principals, are in high poverty and high performing schools which have been awarded the Alabama Torchbearer School designation beginning the 2004–2005 school year because they have met the criteria designated for this honor. Since the inception of the Alabama Torchbearer Program, seventy-nine elementary, middle, and junior high schools meet these criteria. Principals from fifty-nine Torchbearer Schools agreed to participate in the study.
A comparison population of principals from lower-performing elementary, middle, and junior high schools serving low-income students were selected using data from the Alabama Department of Education’s (ALSDE) web site (www.alasde.edu). First, the ALSDE’s list of schools that did not make Adequate Yearly Progress for school year 2008–2009 was used to determine which schools met this criterion. Then, in order to assure the matched school population, the ALSDE data base on those schools was consulted to identify which of those schools served populations in which 70% or more of the students qualified for free or reduce priced lunch. Statewide, a total of 50 schools met these criteria. Twenty-nine principals from Non-Torchbearer Schools participated in the study.

**Research Questions**

Four research questions were addressed:

1. To what extent are there differences in the perceptions of principals in Alabama Torchbearer Schools and their counterparts in Non-Torchbearer Schools in the implementation of the following National Staff Development Council (NSDC) standards: (a) processes (data driven, evaluation, research-based, design, learning, and collaboration); (b) content (equity, quality teaching, and family involvement); and (c) context (learning communities, leadership, and resources)?

2. What are the inter-correlations among the 12 subscales for all principals and partial correlations controlling for principal type for the 12 individual subscales of the NSDC standards?

3. To what extent are there differences in the factors that principals in Torchbearer and Non-Torchbearer Schools perceive as facilitating the implementation of NSDC standards in their schools?
4. To what extent are there differences in the factors that principals in Torchbearer and Non-Torchbearer Schools perceive as hindering the implementation of NSDC standards in their schools?

Data Collection Processes

Survey Instrument

The National Staff Development Council (NSDC) Self Assessment Survey was the instrument used in this study. NSDC contracted with the Southwest Educational Development Laboratory (SEDL) to develop an assessment instrument based on the twelve national staff development standards. The instrument is designed to be completed by principals, teachers and other school staff to measure the degree to which a school’s professional development program adheres to these standards, thereby providing schools across the nation with a mechanism for diagnosing and aligning their professional development programs with the NSDC standards.

There are twelve standards. They are categorized into three groups: context, process and content standards. Each standard is a statement of a staff development expectation. The standards also include the levels of performance to which schools can aspire. The survey contained three to five items per standard representing essential aspects of each of the 12 NSDC standards. Items were rated on a three-point scale (1 = Low – not present; 2 = Medium – inconsistently present; 3 = High – consistently present). Need to add reliability and validity information.

Two open-ended questions were added to the survey. They were:

1. What factors facilitated the implementation of NSDC standards in your school?
2. What are the perceived barriers to the implementation of high quality professional development activities in your school?
Permission to use the NSDC survey was granted by the National Staff Development Council (see Appendix 1). After approval to conduct the study was received from the University Internal Review Board (see Appendix 2), the survey and qualitative questionnaire and a letter asking for participation were sent to all principals in the population. A stamped, self-addressed envelope in which to place the completed survey was also included. A second mail-out was sent three weeks later.

**Data Analysis**

For the quantitative data, a one-way analysis of variance (ANOVA) procedure was conducted to assess differences in the perceptions of principals in Alabama Torchbearer Schools and their counterparts in Non-Torchbearer Schools in the implementation of the National Staff Development Council (NSDC) standards: process, content, and context. An alpha level of .05 was used for all statistical tests. Inter-correlations were conducted for the 12 subscales of the NSDC standards and partial correlations were conducted for the 12 individual subscales controlling for principal type.

Since the directions for the open-ended questions asked the respondents to share rather than describe the professional development practices that facilitated and hindered the implementation of NSDC standards in Torchbearer and Non-Torchbearer Schools, most responses were brief and did not provide the thick, contextual descriptions available from qualitative data collection processes such as case studies, observations or interviews. However, the quantity of responses resulted in a body of data from which consistent patterns of thought emerged validating the quantitative data from this study.

The data were analyzed using constant comparative method (Patton, 1990). First, the responses were grouped by similarity of properties. Then categories were developed into which
the data was compressed, combining statements of like properties and it became the basis for the organization and conceptualization of that data.

**Results**

There were eighty-eight respondents, yielding an overall response rate of 73%. Fifty-nine or 84% of the principals in Torchbearer Schools responded. Twenty-nine or 58% of the principals in Non-Torchbearer Schools responded.

A one-way ANOVA statistical procedure was used to determine the extent of differences between the Torchbearer principals and Non-Torchbearer principals for the process standards to respond to the research question “To what extent are there differences in the perceptions of the implementation of the following National Staff Development Council (NSDC) standards: (a) processes (data driven, evaluation, research–based, design, learning, and collaboration); (b) content (equity, quality teaching, and family involvement); and (c) context (learning communities, leadership, and resources), for principals in Alabama Torchbearer Schools and their counterparts in Non-Torchbearer Schools?” Results revealed statistical differences between principals in Torchbearer Schools and principals in Non-Torchbearer Schools for the process standard, $F(1.83) = 229.33$, $p < .01$ partial eta squared = .73. Principals in Torchbearer Schools perceived a higher level of implementation of the process standards (mean = 73.52; SD 4.79) compared to their counterparts in Non-Torchbearer Schools (mean = 51.81; SD 8.40)

A one-way ANOVA statistical procedure was used to determine the extent of differences between the Torchbearer principals and Non-Torchbearer principals for the content standards to respond to the research question “To what extent are there differences in the perceived implementation of the following National Staff Development Council (NSDC) standards: (a) processes (data driven, evaluation, research–based, design, learning, and collaboration); (b)
content (equity, quality teaching, and family involvement); and (c) context (learning communities, leadership, and resources) for principals in Alabama Torchbearer Schools and their counterparts in Non-Torchbearer Schools?” Results revealed statistical differences between principals in Torchbearer Schools and principals in Non-Torchbearer Schools for the content category, $F (1.83) = 360.37, p < .01$, partial eta squared .81. Principals in Torchbearer Schools perceived higher levels of implementation of the content standards (mean = 46.41; SD 2.56) compared to their counterparts in Non-Torchbearer Schools (mean = 32.60; SD 4.47).

A one-way ANOVA statistical procedure was used to determine the extent of differences between the Torchbearer Principals and Non-Torchbearer Principal for the context standards to respond to the research question “To what extent are there differences in the perceived implementation of the following National Staff Development Council (NSDC) standards: (a) processes (data driven, evaluation, research –based, design, learning, and collaboration); (b) content (equity, quality teaching, and family involvement); and (c) context (learning communities, leadership, and resources) for principals in Alabama Torchbearer Schools and their counterparts in Non-Torchbearer Schools?” Results revealed statistically significant differences between principals in Torchbearer Schools and principals in Non-Torchbearer Schools for the context category, $F (1.83) = 322.42, p < .01$ partial eta squared .80. Principals in Torchbearer Schools perceived a higher level of implementation of the context standards (mean = 37.34; SD 2.47) compared to their counterparts in Non-Torchbearer Schools (mean = 23.33; SD 4.74).

When responses for principals of Torchbearer and Non-Torchbearer Schools were combined from the NSDC survey, all correlations were statistically significant at alpha < .01, except for the correlation between standard four (data driven) and standard six (research based)
(r = .12 ;p = .27). Partial correlation is a method used to describe the relationship between two variables controlling for effects of third variable (Ary, 2005). When controlling for type of principal, some of the correlation coefficients were not statistically significant. Table 9 shows correlations among the subscales controlling for principal type.

Table 9

Partial Correlation Coefficients for 12 Standards Controlling for Principal Type

<table>
<thead>
<tr>
<th>Stand 1</th>
<th>Stand 2</th>
<th>Stand 3</th>
<th>Stand 4</th>
<th>Stand 5</th>
<th>Stand 6</th>
<th>Stand 7</th>
<th>Stand 8</th>
<th>Stand 9</th>
<th>Stand 10</th>
<th>Stand 11</th>
<th>Stand 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stand 1</td>
<td>.210</td>
<td>.264*</td>
<td>.094</td>
<td>.117</td>
<td>.170</td>
<td>.243*</td>
<td>.161</td>
<td>.095</td>
<td>.057*</td>
<td>.051*</td>
<td>.122*</td>
</tr>
<tr>
<td>Stand 2</td>
<td>.402*</td>
<td>.515</td>
<td>.331</td>
<td>.110</td>
<td>.387</td>
<td>.561</td>
<td>.413</td>
<td>.098</td>
<td>.107</td>
<td>.177</td>
<td></td>
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<tr>
<td>Stand 3</td>
<td>.439</td>
<td>.020</td>
<td>.057</td>
<td>.267*</td>
<td>.303*</td>
<td>.137</td>
<td>.137</td>
<td>.028</td>
<td>.148</td>
<td></td>
<td></td>
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<tr>
<td>Stand 4</td>
<td>.093</td>
<td>.322</td>
<td>.227*</td>
<td>.336</td>
<td>.586</td>
<td>.000</td>
<td>.166</td>
<td>.002</td>
<td></td>
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<tr>
<td>Stand 5</td>
<td>.030</td>
<td>.170</td>
<td>.270</td>
<td>.348</td>
<td>.069</td>
<td>.214</td>
<td>.164</td>
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<td>Stand 6</td>
<td>.204</td>
<td>.182</td>
<td>.035</td>
<td>.025</td>
<td>.077</td>
<td>.278</td>
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<td>Stand 7</td>
<td>.383</td>
<td>.310*</td>
<td>.181*</td>
<td>.170</td>
<td>.404</td>
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<td>Stand 8</td>
<td>.585*</td>
<td>.079</td>
<td>.370*</td>
<td>.347*</td>
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<td>Stand 9</td>
<td>.040</td>
<td>.231*</td>
<td>.062</td>
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<tr>
<td>Stand 10</td>
<td>.524*</td>
<td>.316*</td>
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<tr>
<td>Stand 11</td>
<td>.503*</td>
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<td>Stand 12</td>
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P < .05; *statistically significant correlations

For the three subscales, process, content, and context, principals in Torchbearer Schools perceived a higher level of implementation of the standards compared to their counterparts, principals in Non-Torchbearer Schools.

All respondents provided feedback on the qualitative questions; however, there were differences in the quality of the responses provided. Since the directions for the open-ended
questions asked the respondents to share rather than describe, principals in Torchbearer Schools tended to share several responses to each question, whereas principals in Non-Torchbearer Schools tended to share minimally, usually giving only one response. Six factors emerged in response to the question, “What factors facilitated the implementation of NSDC standards in your school?” These factors are: (a) shared leadership; (b) teachers serving as instructional leaders; (c) utilization of student data (d) using educational research effectively; (e) collaboration, and (f) focused on culture, diversity, and family. A summary of these findings and the differences between principals of Torchbearer and Non-Torchbearer Schools responses are displayed in Table 10.

Table 10

*Perceived Factors in the Implementation of the NSDC Standards in Torchbearer and Non-Torchbearer Schools*

<table>
<thead>
<tr>
<th>Factors</th>
<th>Torchbearer Principal</th>
<th>Non-Torchbearer Principal</th>
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</thead>
<tbody>
<tr>
<td>Shared leadership</td>
<td>92%</td>
<td>38%</td>
</tr>
<tr>
<td>Teachers serving as instructional leaders</td>
<td>91%</td>
<td>14%</td>
</tr>
<tr>
<td>Utilization of student data</td>
<td>97%</td>
<td>93%</td>
</tr>
<tr>
<td>Collaboration among faculty</td>
<td>93%</td>
<td>55%</td>
</tr>
<tr>
<td>Focused on culture, diversity, and family</td>
<td>90%</td>
<td>31%</td>
</tr>
<tr>
<td>Using educational research effectively</td>
<td>92%</td>
<td>17%</td>
</tr>
</tbody>
</table>
The factor mentioned most often by principals in Torchbearer and Non-Torchbearer Schools was utilization of student data that facilitated the implementation of the NSDC Standards. There was little difference in the level of response between the two principal groups. Ninety-seven percent of principals in Torchbearer Schools identified this factor. Their remarks included such phrases as “focus on student data”, “regular focused student data meetings” and “rely heavily on student data to determine professional development opportunities.” Ninety-three percent of Non-Torchbearer principals responded similarly and this was reflected in such phrases as “understanding the use of student data is critical to the types of professional development implemented” and “use of student data to drive our instruction.”

There were five additional facilitating factors mentioned by the principals. However, there was a stunning difference between the percent of Torchbearer and Non-Torchbearer principals who identified these factors. These factors were: shared leadership, teachers serving as instructional leaders, collaboration among faculty, focused on culture, diversity, and family, and using educational research effectively. Within this group of five, three are closely related but there are subtle differences.

Closely related are the factors shared leadership, teachers serving as instructional leaders, and collaboration among faculty. Overall, there was little difference in the percentage of responses among the closely related factors within the Torchbearer group, but the level of responses between the groups, there were vast differences. Ninety-three percent of the principals in Torchbearer Schools identified the element collaboration as a factor in the implementation of the NSDC Standards and responded with such phrases as “faculty collaboration”, “unified approach to professional development”, and engaged in collaborative inquiry”. In contrast, fifty-
five percent of principals in Non-Torchbearer Schools responded with the phrases “collaborate on professional learning” and “discuss ideas together”.

Closely related to the factor of collaboration, 92% of principals in Torchbearer Schools identified shared leadership and responded with such phrases as “established leadership teams with goals, purposes, and vision” and “leadership teams assisting and supporting the principal in collaborative leadership and management of the school”. Similarly, 91% of the principals in Torchbearer Schools identified teachers serving as instructional leaders as factors in the implementation of the NSDC Standards and responded with phrases such as “teacher leadership”, “teachers are involved in instructional decisions”, and “teachers are involved in developing professional development”.

However, there were differences in the level of responses from principals in Non-Torchbearer Schools for the factors shared leadership and teachers serving as instructional leaders. Sharply different from their counterparts, principals in Torchbearer Schools, thirty-eight percent of principals in Non-Torchbearer Schools identified shared leadership as a factor in the implementation of the NSDC standards and responded with such remarks as “shared leadership among principal and faculty” and the “development of leadership teams”. Surprisingly, 14% of principals in Non-Torchbearer Schools identified teachers serving as instructional leaders as a factor that facilitated the implementation of the NSDC Standards, and responded with phrases such as “teachers help with providing professional development”.

Only 17% of principals in Non-Torchbearer Schools indicated using educational research effectively as a factor in the implementation of the NSDC Standards. Their responses included such phrases as “implementing research strategies” and “using research based professional development programs”. In contrast, 92% of principals in Torchbearer Schools indicated using
educational research as a factor in the implementation and responded with such remarks phrases as “job-embedded professional development focused on research-based instructional strategies”, “participation in sustained research-based professional development”, and “participation in book study groups focused on student achievement”.

Ninety percent of principals in Torchbearer Schools identified on culture, diversity, and family as facilitating factors whereas only 31% of principals responded that this was a positive factor in the implementation of NSDC Standards. Torchbearer Schools shared responses such as “parental involvement a high priority”, “productive and positive culture”, and “professional development based on the diverse needs of the student population”. Principals in Non-Torchbearer Schools responded with similar phrases citing such things as “strong commitment to parental involvement”, “diversity”, and “embracing a positive culture”.

Five factors emerged in response to the question, “What are the perceived barriers to the implementation of high quality professional development activities in your school?” These factors are: (a) time, (b) follow/continuity, (c) partnerships, (d) geographic isolation, and (e) lack of technology. A summary of these findings and the differences between principals of Torchbearer and Non-Torchbearer responses is displayed in Table 11.
Table 11

*Barriers to the Implementation of NSDC Standards*

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Torchbearer Principal n = 59</th>
<th>Non-Torchbearer Principal n = 29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>98%</td>
<td>97%</td>
</tr>
<tr>
<td>Follow-Up/Continuity</td>
<td>93%</td>
<td>91%</td>
</tr>
<tr>
<td>Partnerships</td>
<td>93%</td>
<td>90%</td>
</tr>
<tr>
<td>Geographic Isolation</td>
<td>90%</td>
<td>93%</td>
</tr>
<tr>
<td>Lack of Technology</td>
<td>90%</td>
<td>* less than 1%</td>
</tr>
</tbody>
</table>

Unlike the responses to the factors that facilitated the implementation of NSDC Standards, the responses from principals in Torchbearer Schools and principals in Non-Torchbearer Schools were similar. However, there was one notable difference. Ninety percent of the Torchbearer School principals identified the lack of technology as a barrier to the implementation of NSDC. They used phrases such as “upgrade of technology to support online professional development”, “technology to support professional development”, and “lack of technology in professional development activities”. Only one principal in a Non-Torchbearer school identified this factor with the phrase “lack of technology to support professional development”.

**Discussion**

This study focused on differences among Torchbearer and Non-Torchbearer Schools principals’ professional development practices as measured by principals’ perceptions of the
implementation of the NSDC standards process, content, and context. Additionally, the study focused on the factors these principals perceived as facilitating and hindering the implementation of NSDC standards in their schools. The NSDC’s standards (2001) were designed to assist educators in developing the “insights, knowledge, and skills they need to become effective classroom and school leaders, better able to increase student learning” (p. vi). Student success may be facilitated to the extent that the NSDC standards are embraced by schools. This information could be valuable to school principals in the state and nation, particularly principals in high poverty-low achieving schools. The study utilized quantitative and qualitative analysis and the following conclusions about differences in the perceptions of principals in Torchbearer and Non-Torchbearer as measured by the NSDC standards and the factors these principals perceived as facilitating and hindering the implementation of the NSDC standards were drawn from this study.

First, in general, principals in Torchbearer Schools perceived higher levels of the implementation of NSDC standards (content, process, and context) in their schools than their counterparts in Non-Torchbearer Schools as measured by the NSDC survey. Additional statistical analysis procedures supported this finding. NSDC indicates that all three standards (process, content, and context) of the National Staff Development Standards need to be in place in order to plan, design, and implement the kind of professional development that will impact student achievement (NSDC, 2008). Students in Alabama Torchbearer Schools have higher test scores on the Alabama Reading and Math Achievement Test (ARMT) and the Alabama High School Graduation Examination (Alabama Leadership Academy, 2009) than their counterparts in Non-Torchbearer Schools. We cannot assume that this is only the result of professional development occurring; however, this finding does support other research and thus it appears that
they may be some relationship between the level of implementation and student achievement levels (Guskey, 2000; Hirsh, 2006; Killion, 2002b; NSDC, 2000).

Stepping back from the fact that all of these principals who participated in this study are in schools that are high poverty, one group appears to be successful in improving student achievement and their counterparts are not. The results from this study indicate there are differences in how the principals in the Torchbearer schools and principals in Non-Torchbearer schools perceive the implementation of the NSDC standards. The question must therefore be asked, ”What accounts for differences in the level of implementation of professional development standards in such schools?”

Professional development is most effective when it takes place in vibrant professional learning communities. The Alabama Leadership Academy (2009) reported principals in Torchbearer Schools were committed to being a community of lifelong learners ensuring that all students achieve their maximum potential. The literature provides modest evidence that professional learning communities impact teaching. What, however, does the evidence tell us about the effects on students? In an educational climate that is increasingly directed by the demands of accountability, the viability of professional learning communities will be determined by their success in enhancing student achievement (Hord & Sommers, 2007). This makes it incumbent upon educators to demonstrate how their work in learning communities improves student learning. We know the principals in Torchbearer Schools understand the value and importance of establishing learning communities and this may be why their perceptions of the implementation of the standards are more favorable than principals in Non-Torchbearer Schools as supported by the data from this study. Although this study did not focus on professional learning communities, particularly in high poverty schools, the findings suggest further
qualitative research should be conducted to document the creation of professional learning communities in the Torchbearer Schools and how this may have impacted student success in their schools. Qualitative research may provide a narrower focus and richer investigation of this topic. This topic may not be measured accurately through a Likert scale because respondents may not understand the nature of the questions and they may not be honest in their responses. Interviews can help determine if there is a need for probing questions and honest responses may be reported at a higher level in qualitative research.

Professional development is most effective when there are strong leaders. The Alabama Leadership Academy (2006) reported the Torchbearer principals recognize the value of high-quality professional development, encouraged and facilitated teacher participation in high quality professional development, and communicated about the benefits of professional development to key stakeholders (parents, school boards, community organizations) and this could be attributed to why their perceptions of the implementation of the NSDC standards are different than the principals in Non-Torchbearer schools as suggested in this study. Professional development for school leaders should be grounded in the perspective of schools leaders participating in rigorous, stimulating learning opportunities that will prepare them for the continuous and changing demands of the profession and research indicates that more professional development is needed for school leaders (Holloway, 2006). Maybe principals in Torchbearer Schools have received training in establishing high quality professional development and perhaps their school systems provide more of this. Further qualitative studies are needed to determine what types of training these principals have had in relation to the NSDC standards. This could be achieved through the use of interviews and observations.
These findings suggest that having principals who value and implement high quality professional development may be a factor in positive student achievement in high poverty schools. State departments of education and superintendents would do well to provide training to all principals of high poverty schools on the use of these standards and provide support systems to aid principals in implementing them. Another essential element in assuring that professional development will be successful is engaging in evaluation endeavors that will garner important information about the impact of the professional development activities in such schools. However, what this study did not do was to investigate teachers’ perceptions of the implementation of the NSDC standards. It is important to focus on improving the teacher, according to Guskey (2005), because true educational reform does not take place at the state or local level and as indicated by Holloway (2006), reform takes place at the school building and classroom levels. Studies should be conducted to determine if there are differences teachers’ perceptions and principals’ perceptions on the implementation of the NSDC standards and the actual practices that coincidences or contradicts the principal’s responses.

Factors that Hindered and Facilitated the Implementation of the NSCD Standards

The qualitative findings of this research appear to support the quantitative findings. They are reported in the section that follows. Since there was more agreement about these barriers between these principals, the barriers are reported first followed by the factors that facilitated the implementation of the NSDC standard. The following section discuses the barriers to the implementation of NSDC standards.

Barriers to the Implementation of the NSDC Standards

Except for one element, “lack of technology,” there was agreement on the barriers to implementing the NSDC standards between principals in Torchbearer Schools and principals in
Non-Torchbearer schools. “Lack of technology” was indicated as a barrier by 90% of principals in Torchbearer Schools whereas less than 1% of principals in Non-Torchbearer Schools indentified this as a barrier. SETDA (2008) states that access to technology is a barrier to sustainable professional development, although, technology supports effective professional development by providing opportunities to share resources and collaborate with peers in an anytime, anywhere environment. Schools sometimes find that gaining access to the proper hardware and software tools can be an obstacle when implementing high quality professional development and recent research on professional development programs suggest that technology may be a possible solution for providing professional development to school leaders and teachers, particularly those in geographically isolated schools (Arnold, Newman, Gaddy, & Dean, 2005).

It is difficult to know why there is this difference between the principals’ views. It may be that the principals in the Non-Torchbearer Schools have more technology than those in the Torchbearer Schools and thus they do not see this as a problem. Conversely, it may be those schools have less technology and those principals do not view technology as being necessary to deliver high quality professional development. Additional research should be conducted to gain a clearer understanding of this finding. It might be of value for the State Department of Education to examine the amount of funding spent for technology and the use of technology among and between these schools and systems to aid in determining the extent to which technology is or is not being use to facilitate high quality professional development. This would aid school systems in determining whether more funds are needed and/or what factors are serving as barriers to their use.
All of the principals identified time, follow-up/continuity, partnerships, and geographic location as being hindrances to their ability to implement the NSDC standards. Time is a well known barrier to providing professional development of any kind (OSPI, 2002; SETDA, 2008). The school day and year is packed with requirements. Even on days when teachers have planning days, there are usually meetings and many things to attend to. Thus, this finding is understandable. Follow-up and continuity are elements within the NSDC standards which focus on the need to have professional development that is sustained rather than having the traditional “one day” training sessions (NSDC, 2008). This barrier is closely tied to the time factor and likewise is understandable.

These school systems tend to be in isolated settings so their geographic location may make it difficult for their teachers to attend statewide professional meetings, have access to experts in the field, or have opportunities to visit systems or schools that are implementing innovative practices. This may be one reason that the Torchbearer principals identified lack of technology, which could overcome their isolation as a barrier. The identification of partnerships as a barrier is something that is not found in the literature and the responses of the participants did not give a clue as to why this would serve as a barrier. Further studies through interviews or focus groups would aid in understanding this finding more fully.

Unlike the findings about barriers, there was almost no agreement about factors that facilitated the implementation of the NSDC standards between Torchbearer and Non-Torchbearer. While both groups identified using data as a facilitative factor in implementing the standards, ninety percent or more of Torchbearer principals identified four other factors, while these were mentioned infrequently by the Non-Torchbearer principals. These factors were:
shared leadership, teachers serving as instructional leaders, collaboration, culture, diversity, and family. Interestingly, these factors are closely related to elements with the NSCD standards.

**Culture/Diversity/Family Involvement and the Content Standards**

The facilitating factors of culture, diversity, and family involvement are inherent in the NSDC Content Standards. The content standards are the focal point representing the importance of “what is learned” (Killion, 1998). There are two sub-standards in the content area that are related to these factors: equity and family involvement. The qualitative responses indicate that Torchbearer principals view the education of students as a partnership between the school, home, and the community (family involvement) since 90% of principals in Torchbearer Schools reflected this in their qualitative responses. Furthermore, 90% of principals in Torchbearer Schools indicated in their qualitative responses they understood and appreciated all students by promoting a positive and productive culture (equity). Only 31% of qualitative responses from principals in Non-Torchbearer Schools indicated these elements were related to implementing high level professional development.

A third element in the content standards is quality teaching. Neither group of principals noted anything related to quality teaching as facilitating their implementation of the NSDC. Quality teaching standard indicates educators’ content knowledge is deepened; they use research-based instructional strategies to assist students in meeting rigorous academic standards, and use various types of classroom assessments appropriately (NSDC, 2008). It is likely that since the goal of professional development is to assure high quality teaching, these principals did not relate that to a factor in facilitating professional development activities.
Collaboration, Data Use, and the Process Standards

There are the six sub-standards (data-driven, evaluation, research-based, design learning, collaboration) which underlie the process standards. The process standards of the NSDC establish expectations for the design and delivery of professional development by specifying what is known about effective adult learning in schools (Killion, 1998). Principals in both types of schools (97% of Torchbearer and 93% of Non-Torchbearer) recognized the importance of using student data in implementing their professional development programs. This may be the result of the fact that the state uses data to rank schools and it is also part of the NCLB rankings.

Although principals in both of these schools recognized the importance of using data, 92 percent of principals in Torchbearer Schools and 17 percent of principals in Non-Torchbearer Schools responded “using educational research effectively” as an element that facilitated the implementation of the NSDC standards. It is critical that teams of administrators and teachers take the time to methodically study the research that supports the claims made by advocates of a particular approach to instructional improvement or whole-school reform (Guskey, 2006; NSDC, 2008). The finding from this study supports research by the Alabama Leadership Academy (2009) suggesting that a major factor in the success of Torchbearer Schools was the continuity in research-based instructional practices. Future research should be conducted to determine how using educational research effectively impacts instructional decisions in such schools.

Collaboration and the use of student data to determine the types of professional development offered in relationship to adult learning priorities are a primary focus of the process standards (NSDC, 2008). Ninety-three percent of the Torchbearer principals identified collaboration as a helpful factor in their ability to implement the NSDC standards, while only 55% of the Non-Torchbearer principals viewed this element as of importance.
Research has shown that principals and teachers who work together see substantial improvements in student achievement (Scheurich & Skrla, 2003) and in schools where educators work collaboratively, students can sense the program coherence and consistency and tend to succeed (Little, 1987). Principals in Torchbearer Schools provided further evidence that they understood the value of collaboration by their responses to this question. Skillful leaders distribute leadership responsibilities among teachers and other staff. Additionally, these leaders make certain that their colleagues have the necessary knowledge and skills and other forms of support that enhance student success (NSDC, 2001).

Neither group of principals included any qualitative responses that the evaluation, design, and learning sub-standards were factors that facilitated the implementation of NSDC standards in their schools. Future research should be conducted as to determine how or if the NSDC process standard evaluation, design, and learning influenced student achievement in these schools.

**Shared Leadership and the Context Standard**

The context standards describe a supportive learning environment and the essential qualities of a learning organization (Killion, 1998). Underlying the context standards are the sub-standards learning communities, leadership, and resources. Once again, there are also differences in the qualitative responses of principals of Torchbearer and Non-Torchbearer Schools. While only 14% of Non-Torchbearer principals indicated they were implementing the substandard learning communities and leadership, 91% of the principals in Torchbearer Schools indicated this was a factor in the facilitation of the NSDC Standards in their schools.

The qualitative responses suggest that principals in Torchbearer Schools recognize the value of learning communities whose goals are aligned with those of the school and district. Torchbearer principals also indicated in their responses the “creation of leadership teams which
indicates their willingness to share power which leads to improved student success. In addition, Torchbearer principals indicated “teacher leadership” as a factor facilitating the implementation of the NSDC standards and this may suggest that they view and value leadership that is skillful in guiding continuous improvement. The literature on teacher leadership is emerging as a factor in school success particularly in high poverty schools (Crowther, Kaagan, Ferguson, & Hann, 2002). Teacher leaders facilitate communities of learning and approach professional learning as a means to improve student achievement. Future research should be conducted as to determine how teacher leadership influenced student achievement in these schools and to what extent teacher leadership facilitates the implementation of the NSDC standards.

Interesting, principals in Torchbearer Schools and principals in Non-Torchbearer Schools did not indicate responses concerning the resource standard as factors facilitating the implementation of the NSDC standards. In addition, resources were not indicated as barriers to the implementation of the NSDC standards. Resources are vital to the implementation of high quality professional development and the literature cites lack of resources as a barrier to the implementation of professional development ((SETDA, 2008). There is not enough information presented in this study to determine if the resource standard was a factor facilitating the implementation of the NSDC standards. This warrants future research.

Summary
The results of this study suggest that Torchbearer principals view the professional development standards differently from their counterparts, principals in Non-Torchbearer Schools. This may indicate that the type of professional development used in the Torchbearer schools does implement the standards more than in the Non-Torchbearer schools. Also, while the barriers were the same, facilitating factors in the implementation of the NSDC standards were quite different. Even as they faced the same barriers, Torchbearer principals appeared to
use what is known about effective professional development from the research to overcome these barriers, thus creating student success.

The findings suggest that districts may need to consider exploring how to implement the standards through the use of technology. On-line professional learning communities, education portals, coaching, and mentoring are some of the proven methods for providing sustainable professional development. The use of technology provides principals and teachers the opportunity to collaborate with their peers by sharing knowledge, and best practices.

The study provides Alabama schools districts with a better perspective of the barriers principals face in implementing the NSDC standards and the factors that can assist principals in overcoming these barriers. It also suggests that it is vital that principals have the skills and knowledge they need to implement high quality professional development as it appears that doing so may be of importance in impacting student success on standardized tests and in graduating from high school.
CHAPTER VI. SUMMARY OF RESEARCH FINDINGS

The results of this study are presented in brief summary below, following the framework set forth by the research questions. Findings respective to the characteristics of principals in Torchbearer and Non-Torchbearer Schools relative to gender, age, years of experience as a principal, and size of school; principals in Torchbearer Schools and Non-Torchbearer Schools perceived perceptions in the implementation of the National Staff Development Councils’ (NSDC) standards; perceived factors in facilitating the implementation of the NSDC standards, and the perceived barriers that facilitated or hindered the implementation of the NSDC standards are explored.

A detailed summary of the study results are presented in a series of manuscripts which are in Chapter IV and V. These manuscripts and titles are as follows: Manuscript One: Role of the Principal in Creating School Success and Academic Achievement in High Poverty Schools; and Manuscript Two Professional Development and Student Achievement in High Poverty Schools: Making the Connection”.

Findings from this study suggest that gender, age, experience and school size may be factors that have impacted the roles of principals in improving student achievement in Alabama Torchbearer Schools. These findings are explored in greater depth in Manuscript One. The finding regarding gender revealed 61% of Torchbearer principals are female and the differences in the Non-Torchbearer Schools were even greater. In these schools, 72 % were females.
Findings included in Manuscript One also suggest that principals in the Torchbearer Schools were somewhat older than Non-Torchbearer principals and principals in the Non-Torchbearer Schools have much less experience than those in the Torchbearer Schools. Also, the findings suggest that principals in Torchbearer Schools serve in schools that are smaller than the schools in Non-Torchbearer Schools serve in.

Differences in the perceptions of the level of implementation of the standards of principals in Torchbearer Schools and Non-Torchbearer schools as measured by the NSDC standards and the factors these principals perceived as facilitating and hindering the implementation of the NSDC standards were identified in this study. These findings are explored in detail in Manuscript Two: *Role of Professional Development in Achieving Student Success in High Poverty Schools.*

**Discussion and Further Research**

This study is a step in raising issues about why students are successful in high-poverty schools. High poverty schools face many challenges; however, research has confirmed that effective educators can improve the academic outcomes of low-income students and provide them with hope and promise for the future (Banks, 2001; Carter, 2000; Haberman, 2005; Kannapel & Clements, 2005). Although no single factor accounted for the success of such schools; research on the characteristics of high-poverty, high achieving schools (OSPI, 2002; Kannapel & Clements, 2005) indicate the factors effective school leadership and focused professional development as characteristics found most often in these schools. Stepping back from the fact that all of these principals who participated in this study are in schools that are high poverty, one group appears to be successful in improving student achievement and their counterparts are not. The findings from this study suggest that age, gender, experience and
school size may be factors that have impacted the roles of principals in improving student achievement in Alabama Torchbearer Schools.

The findings from this study provide Alabama school districts with a better perspective of the elements needed to address student achievement in schools where poverty is a factor. Without question, turning around a school is a complex process in which leadership is a priority. Providing data that document why principals are effective, even in the most challenging settings, extends the line of research inquiry about what colleges of education as well as school districts can do to address student achievement in high poverty schools. Superintendents in Alabama may need to review their current practices in regards to principal selection, particularly in settings that are challenging. They may also want to examine school size and develop plans for lowering size or creating patterns of practice that focus more clearly on student learning.

The literature indicates that women principals can be successful and emerging from the literature is the fact that female principals tend to be successful in high poverty schools. Surprisingly, this study revealed 61% of Torchbearer principals are female and the differences in the Non-Torchbearer Schools were even greater. In these schools, 72% were females. Some research does indicate that women are often placed in schools with high poverty and which are difficult to operate (Bloom & Erlandson, 2003). It appears that this is occurring in Alabama. Quantitative and qualitative research should be done to determine why this is true. It may be that school systems are relying on research that indicates women can create more collaborative communities in schools which lead to success. Further research should be conducted to examine this outcome more fully. Studies of successful female principals in high poverty schools would provide models of career choices. Although leadership differences between male principals and female principals in these schools were not investigated, future research is warranted through the
use of leadership inventory surveys, interviews and observations. In addition, prior teaching experience was not investigated; however, studies that focus on what prior teaching experience can bring to the administrative experience that will help principals to be successful in all schools are needed.

We know the Torchbearer principals are somewhat older than their counterparts, principals in Non-Torchbearer schools, and we can assume that because they are somewhat older, they may have a better understanding of the curricular and accountability demands of the principalship. The data from this study suggest future research studies are warranted as to the impact of principal age and if this is indeed why such principals are successful in their schools.

Additionally, mentoring opportunities for experienced and less experienced principals in high poverty schools may require greater attention from superintendents with regard to promoting student achievement. It is imperative that less experienced principals receive the necessary support that allows them to be effective. Furthermore, superintendents could consider the placement of new principals under the direction of these experienced principals. Continued research regarding principal leadership in high poverty schools is critically important to amass evidence that informs our understandings of who are effective principals in high poverty schools and how best to support them. Enhanced research efforts regarding internal practices, principal leadership styles, professional development and other factors that may enhance success should also be conducted.

The No Child Left Behind Act of 2001 has educators focusing attention on the professional development of school leaders. Usually, professional development has focused on the needs of teachers, not school leaders. The right kinds of professional development for school leaders and teachers can directly contribute to improved student performance (Holloway, 2006).
The results of this study suggest that Torchbearer principals view the NSDC professional development standards differently from their counterparts, principals in Non-Torchbearer Schools. This may indicate that the type of professional development used in the Torchbearer Schools does implement the standards more than in the Non-Torchbearer Schools. School leaders play a huge role in the movement toward accountability and instructional improvement in schools. It is important for school leaders to be cognizant of the research on effective professional development and incorporate the elements of effective professional development per recommended research. Professional development needs to provide school leaders with skills they need to be successful instructional leaders. Another vital implication to consider is principals need time to devote to their own professional development. To ensure that school leaders meet the NCBL guidelines, school districts need to rethink how professional development is delivered. Professional development should be accessible and taken over time (Holloway, 2006). Creating centers focused on leadership development and professional development for school leaders could positively influence effective leader actions in schools where there are challenges. This could be facilitated by state agencies and local universities forming partnerships focused on improved leadership preparation programs, new principal induction and mentoring and focused leadership development (Darling-Hammond, Meyerson, LaPointe, & Orr, 2007). By creating a continuum of leadership education, flexible to challenges and priorities, school leaders are more likely to create student success and improved schools.

Also while the barriers were the same, facilitating factors in the implementation of the NSDC standards were quite different. Even as they faced the same barriers, Torchbearer principals used what is known about effective professional development from the research to overcome these barriers, thus creating student success. This is an opportunity for principals in
these Torchbearer schools to be collaborative by serving as a resource pool for those principals in Non-Torchbearer schools.

The findings provide Alabama schools districts with a better perspective of what factors are needed to implement the NSDC standards and how this may address student achievement in schools that are struggling. Districts can make certain that professional development impacts student learning by making sure that it is data-driven, results oriented, and sustainable. The emphasis on professional development for school leaders and teachers will without a doubt continue, and school districts need to investigate how their professional development is delivered in their districts and is it aligned with standards that if implemented will likely impact student achievement. Another consideration is to investigate teachers’ perceptions of the implementation of the NSDC standards in their schools through the use of the NSDC survey and follow up with a qualitative study incorporating interviews, that would compare and contrast the principals’ and teachers’ perceptions of the implementation of the NSDC standards in their schools.

Districts need to consider exploring ways on how to implement the standards through the use of technology. On-line professional learning communities, education portals, coaching, and mentoring are some of the proven methods for providing sustainable professional development. The use of technology provides principals and teachers the opportunity to collaborate with their peers by sharing knowledge, and best practices. Furthermore, greater attention is needed in ensuring that all districts have equitable access to high quality resources.

While these findings are not generalizable to other settings, considering them may be helpful to school districts in Alabama and other school districts looking at ways to improve student achievement in struggling schools. We should always be in search of finding effective
strategies to ensure school leaders are better prepared to lead the instructional improvement in education. It is also hoped that these findings can assist in developing a knowledge base about how professional development is being implemented in struggling schools. Effective research-based professional development can contribute to the continuum of principal and teacher training. More vital, however, high quality professional development and understanding effective leadership can translate into improved student achievement and overall school effectiveness.
REFERENCES


Hord, S. (1997). *Professional learning communities: Communities of continuous inquiry and improvement.* Austin, TX: Southwest Education Development Laboratory.


*No Dream Denied: A Pledge to America’s Children.* (2003).

North Carolina Department of Public Instruction, Evaluation Section, Division of Accountability Services. (2000). *Closing the achievement gap: Views from nine schools.* Raleigh, NC.


March 23, 2009

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Sheila,

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Sincerely,

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APPENDIX 2

APPROVAL LETTER FROM AUBURN UNIVERSITY INTERNAL REVIEW BOARD (IRB)
INFORMATION LETTER

for a Research Study entitled
“An Examination of the Relationship between Principals’ Perceptions of their Professional Development Practices and Student Learning”

Dear Principal:

You are invited to participate in a research study to examine the relationship between principals’ perceptions of their professional development practices and student learning. The study is being conducted by Sheila D. Moore, a Graduate Student, under the direction of Dr. Frances Kochan, Dean, College of Education, Auburn University and Professor in the Department of Educational Foundations, Leadership, and Technology. You were selected as a possible participant because you are a principal in one of the schools and you are age 21 or older.

If you decide to participate in this research study, you will be asked to complete and submit a survey form. Your total time commitment will be approximately 30 minutes. There are no risks or discomforts associated with this study.

There are no monetary benefits or compensation provided for participating. However, completing and submitting the survey will be truly appreciated. There is no cost to you as a participant in this research study.

If you participate in this study, you may request a copy of the results of this study. These results could aid professional education personnel in planning professional development activities within their local school systems. If you would like a copy of these findings please e-mail: mooresd@auburn.edu

If you choose not to participate, you can do so by not returning the survey form provided in this letter. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, Department of Educational Foundations, Leadership, and Technology or your local school district.
Any data obtained in connection with this study will remain anonymous and we will protect your privacy. Information collected through your participation will be used to fulfill doctoral dissertation requirements, presentations at professional meetings, and articles for professional journals.

If you decide to participate in this research study, you are asked to complete and return the enclosed survey form with **10 school working days**. Please mail your completed survey form to:

Sheila D. Moore  
Truman Pierce Institute  
108 Ramsay Building  
Auburn University, Alabama 36849

A self-addressed envelope is provided for you to return the survey form.

If you have any questions about this study, please contact Sheila D. Moore at 334-844-4105, e-mail mooreisd@auburn.edu or Dr. Frances Kochan at 334-844-4446, kochanf@auburn.edu

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hssubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

Regards,

Sheila D. Moore  
Investigator obtaining consent

Date

[Stamp: The Auburn University Institutional Review Board has approved this document for use from 5/11/09 to 4/1/11/10  
Protocol # 09-1024 EX 02/07]