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Support Mechanisms as Influences of Success in the Certification Process of the National Board for Professional Teaching Standards

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Support Mechanisms as Influences of Success

in the Certification Process of the

National Board for Professional Teaching Standards

By

Emily B. Hundley

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Approved by

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ABSTRACT

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SUPPORT MECHANISMS AS INFLUENCES OF SUCCESS IN THE

CERTIFICATION PROCESS OF THE NATIONAL BOARD

FOR PROFESSIONAL TEACHING STANDARDS

This study examined the types of support received by National Board Certified Teachers, the importance of the support, and the relationship between receipt of support and achievement of certification by the National Board for Professional Teaching Standards. Qualitative and quantitative methods of gathering data were used during this study. Six National Board Certified Teachers were interviewed by telephone and emergent category analysis was performed on these data to determine the types of support these teachers received. The results were used to create the survey for this study which was sent to a random sample of teachers who had completed the National Board certification process. This survey asked respondents to rank the importance of each support mechanism, whether they received the given type of support, whether they achieved certification, and respondents were asked to give demographic information. Each of the support mechanisms was perceived to be important by the respondents. Significance was found between achievement of certification and reading for content and collegial support. No significance was found for receipt of mentoring, financial support, proofreading, time release, family support, use of technology, time line, logistical information, and workshops. Ancillary findings included significance among types of support based on sex, race, years of experience, type of school district, and percentage of free and reduced lunch eligible students.

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Chapter I
Introduction

Teaching matters. Good teaching matters (Berg, 2003; Cohen, 2003; Hamsa, 1998; Jenkins, 2000; Kaplan & Owings, 2003; Lewis, 2004; Shakowski, 1999; Siciliano, Jurs, Ashby, & Weibke, 1999; Stronge, 2002; Stronge & Hindman, 2003; The National Commission on Teaching & America's Future [NCTAF], 1996). Most experts agree that the single most effective way to increase student achievement is to increase the quality of teaching (Haycock, 1998; Stronge & Hindman, 2003). If good teaching matters, it is up to educational administrators to do all within their power to change the culture of their school and improve their teaching force (Fullan, 1991). Administrators can identify the qualities of effective teaching, and recruit and retain good teachers, thus providing their students with a high-quality education (Blase & Blase, 1998). To this end, the National Board for Professional Teaching Standards (NBPTS), a non-profit, non-partisan group, offers a voluntary certification process for teachers that identifies exemplary teaching (Jenkins, 2000; NCTAF, 1996; Shakowski, 1999). Since National Board Certified Teachers are more effective than teachers who have not obtained the certification (Goldhaber, D.D. & Anthony, E. 2004; Vandervoort, L.G., Amrein-Beardsley, A., & Berliner, D.C., 2004), schools and children stand to benefit from having these exemplary teachers in their classrooms. The purpose of this study was to determine if specific sources of support helped teachers attain this certification.

The National Board certification process is valuable to teachers (Berg, 2003; Hamsa, 1998). Research indicates that the year-long process of seeking certification can be a most valuable professional growth experience for teachers (Bohen, 2001; Browne, Auton, Freund, & Futrell, 1999; Darling-Hammond, 1999; Jenkins, 2000; Shakowski, 1999; Siciliano et al., 1999). Professional development opportunities that are provided for teachers need to be empirically-based (Schmoker, 2004) and meaningful to teachers in their classrooms (Berg, 2003; Schmoker, 2004; Shakowski, 1999). Otherwise, these activities will not address the single most important issue in education – increasing the quality of instruction which results in increased student achievement.

The high-quality professional development offered through the certification process of the National Board for Professional Teaching Standards can be a daunting and challenging experience for teachers who pursue this national certification (Goldhaber & Anthony, 2004; Shakowski, 1999; Siciliano, 1999). Many candidates seek support from others within the educational community while they complete the certification process (Browne et al., 1999; Hamsa, 1998; Siciliano et al., 1999). Principals, teaching colleagues, and informal or formal support programs can support teachers through the certification process. Identifying specific sources of support that are effective in making candidates successful in their quest for national certification is very important to advancing the profession.

<div align="center">Background</div>

The single most important goal in education is the achievement of students (Carnegie Corporation of New York, 2003; Darling-Hammond, 1999). The single most effective way to increase student achievement is to increase the effectiveness of the teacher (Cohen, 2003; Shakowski, 1999). Additionally, the effects of good teaching are cumulative (Stronge & Hindman, 2003). The more good teachers a student is exposed to, the more powerful the results on that student's achievement. "The common denominator in school improvement and student success is the teacher." (Stronge & Hindman, 2003, p.2)

Good teaching probably matters now more than ever with high-stakes accountability. Good teaching matters because teachers are held accountable for the test scores of their students (Berg, 2003; Shakowski, 1999). In late 2001, Congress reauthorized the Elementary and Secondary Education Act (ESEA) under the leadership of President George W. Bush (Kim & Sunderman, 2003; U.S. Department of Education [USDE], 2003). This legislation became known as the *No Child Left Behind Act of 2001* and was signed into law in early 2002 (USDE, 2003). This action greatly increased accountability and implemented sanctions for schools and teachers that do not meet standards. By the end of the 2013-2014 school year, every child must perform at the passing level based on their state's performance standards (USDE, 2003). Schools and

districts that do not make progress toward this goal face sanctions that range from allowing students to choose the schools that they attend, to replacing the entire staff of a school that is not meeting expectations. The stakes for teachers are extremely high; therefore, good teaching matters.

Determining good teaching remains a somewhat elusive concept (Berg, 2003; Bohen, 2001; Stronge & Hindman, 2003). Some define teacher effectiveness based on student achievement, while others rely on comments from students, parents, and other stakeholders (Stronge, 2002). Others in the field of education argue that teaching is such a complex phenomenon that there can be no generic framework to define it (Danielson, 1996; Stronge, 2002). However, each teaching situation has powerful commonalities to other teaching situations, despite the uniqueness of each (Danielson, 1996; Shapiro, 1995; Stronge, 2002).

The National Board for Professional Teaching Standards claims to know what constitutes good teaching (Berg, 2003; Goldhaber & Anthony, 2004; Shapiro, 1995). Developed in 1986 as a result of the Carnegie task force report "A Nation Prepared," the National Board for Professional Teaching Standards was designed to address some of the concerns from the 1983 landmark report from the U.S. Department of Education, "A Nation at Risk: The Imperative for Educational Reform" (Berg, 2003; Carnegie Corporation of New York, 2003; Shapiro, 1995). At the core of the National Board for Professional Teaching Standards is the belief that the single most effective way to improve schools and student achievement is by improving teaching (Berg, 2003; Jenkins, 2000; NCTAF, 1996). By recognizing good teaching, the National Board for Professional Teaching Standards encourages improvements in student achievement.

The National Board for Professional Teaching Standards set the benchmarks for what they identify as accomplished teaching. Governed by a 63-member board consisting mostly of teachers, the National Board clearly defined the knowledge, skills, dispositions and commitments of accomplished teachers (Berg, 2003; Shapiro, 1995). The qualities of accomplished teaching are contained within the five core propositions set forth by the National Board for Professional Teaching Standards. Teachers, on a

voluntary basis, can accept the certification challenge. Through a rigorous and detailed portfolio and assessment process, teachers submit evidence of how they meet the National Board's standards.

During the certification process, teachers are subjected to the most intense and rewarding professional growth and development experience of their careers (Bohen, 2001; Browne et al., 1999; Darling-Hammond, 1999; Jenkins, 2000; NCTAF, 1996; Shakowski, 1999; Siciliano et al., 1999). Teachers must reflect on their practices during the certification process, a skill that can still be utilized once the certification process is complete. National Board certification offers solid, meaningful professional development to teachers in the location where it matters most – their classrooms (Jenkins, 2000; Shakowski, 1999).

The National Board certification process provides standards to gauge quality teaching (Jenkins, 2000; NCTAF, 1996; Siciliano et al., 1999) and by participating in the process, teachers, students, and schools reap the benefits. The process, whether or not the teacher is successful in achieving certification, can profoundly affect teaching. After the process, the teacher continues to deeply reflect on practice. Additionally, the school and community benefit through support, celebration, and by using the knowledge of these accomplished teachers.

The certification process is not something to be taken lightly and possibly not to be tackled alone. Teachers turn to other teachers, mentors, administrators, community members, college faculty members and family members to support their pursuit (Berg, 2003; Browne et al., 1999; Hamsa, 1998; Siciliano et al., 1999). Support during the certification process is important to candidates. Proficient teachers seek opportunities to improve their practices (NBPTS, 2004). Teachers know the value of and seek out the opinions of others regarding the quality of their teaching. Since these teachers naturally seek systems of support to improve their practice, support programs that help facilitate National Board certification may be important.

Administrative Support

Principals can support teachers seeking National Board certification in a variety of ways, but the key is that teachers are in need of their support (Berg, 2003; Shakowski, 1999). Principals reap benefits when their teachers grow professionally. For example, increasing the performance of a school may be as simple as increasing the quality of the teaching force (Goldhaber, Perry, & Anthony, 2003; NCTAF, 1996; Shakowski, 1999; Stronge & Hindman, 2003). Thus, principals need to understand how to support this certification process and this effort teachers make in order to help improve practice in the classroom. It would behoove principals to support candidates for certification from the National Board for Professional Teaching Standards. Support can range from release time, to use of district equipment, to financial support (Shakowski, 1999; Siciliano et al., 1999).

The need for administrator support during the certification process prompted the National Board to create a Principals Advisory Board (NBPTS, 2004). The Advisory Board is designed to increase awareness among principals of the National Board certification process. Further, the Board seeks to encourage principals to support candidates through the process and facilitate the movement of National Board Certified Teachers into leadership positions within their schools.

Support of the administration is important and can reach beyond the support of the building principal. Superintendents should be aware of the impact National Board Certified Teachers can have on a school district (Berg, 2003; Shakowski, 1999). Curriculum specialists and central office staff can provide resources to teachers participating in the certification process (Shapiro, 1995). By encouraging and supporting the certification process, superintendents and central office staff can contribute to increasing the overall effectiveness of the school district. Administrative support for National Board certification from all levels of the educational spectrum can greatly strengthen schools.

Support of the Teaching Community

The certification process is a time-consuming process that can be daunting for teachers. It is important for teachers to identify their allies and rely on their support during the certification process (Berg, 2003). One place teachers can find such support is within the teaching staff of their schools. "Participation in the board certification process transforms and unifies the teaching profession" (Hamsa, 1998, p.455). Additionally, the certification process itself encourages, basically requires, teachers to discuss their practice with their peers (Browne et al., 1999; Shapiro, 1995). The National Board identifies teachers as members of communities of learners, not isolated teachers in individual classrooms. Therefore, support from colleagues has to be intricately tied to the certification process.

According to the National Board for Professional Teaching Standards, good teachers seek assistance and guidance from others regarding their teaching practices (NBPTS, 2004). Studies show that in order for improvements to be sustained, there must be collaboration among teachers (Blase & Blase, 1998; Guskey, 2003). Schools are communities of learners. Students are learners and teachers are learners. Teachers take advantage of this situation and collaborate with other teachers in their quest to improve their teaching practice.

The benefits of collaboration do not end once teachers achieve certification from the National Board for Professional Teaching Standards. National Board Certified Teachers must give back to their own teaching community (Berg, 2003; Browne et al., 1999; Hamsa, 1998; NBPTS, 2004). In fact, the renewal process for National Board certification revolves around how much teachers have used their exemplary practices to help others in the profession. Mentoring is the most common activity that National Board Certified Teachers do to give back to the teaching profession (Berg, 2003). Since most teachers are naturally collegial and the National Board requires certified teachers to give back to their profession, it is natural for National Board Certified Teachers to support new and veteran teachers in their schools, districts, and states.

Support of Informal Programs

Some teachers seek formal support from their principals and colleagues or formally structured support groups (Berg, 2003; Guskey, 2003). However, such programs are not available to all candidates. Support during the National Board certification process can be informal in nature, but teachers need support. "Candidates who are not supported to handle this pressure in healthy ways have found themselves losing or gaining weight, restarting broken habits such as smoking or nail-biting, or even experiencing strained relationships with loved ones" (Berg, 2003, p. 50). The National Board stresses collegiality and at the same time understands that not all teachers have opportunities of formal support during the certification process. Therefore the National Board for Professional Teaching Standards has resources available on their website to help support candidates (NBPTS, 2004). Teachers can use these resources for support. Teachers can also turn to veteran or mentor teachers in their schools and districts for support (Berg, 2003; Browne et al., 1999). Teachers can talk about or reflect upon their practices. By reflecting upon what works and what did not work, teachers learn to make informed decisions about their teaching (Jenkins, 2000). This informal support benefits teachers during the certification process.

Blase and Blase (1998) noted that teachers "who work in a stimulating and supportive environment can reach higher stages of development" (p. 54). Therefore, it would befit teachers to take advantage of the collegial nature of schools, using informal supports to further their development. Further, good principals encourage their teachers to use collaborative arrangements (Blase & Blase, 1998; Glatthorn, 2000; Glickman et al., 2001).

Support of Formal Programs

All 50 states offer financial incentives to teachers who achieve certification from the National Board for Professional Teaching Standards (NBPTS, 2004). Twenty-nine states provide assistance with part or all of the certification fee and 31 states provide a salary supplement to their National Board Certified Teachers. Additionally, there are hundreds of school districts that offer financial incentives on top of what the states offer.

While financial support is available, it is not the sort of support quality teachers seek out in order to improve their practice. Additionally, with current budget crises facing states across the country, these financial incentives stand to decrease or disappear. California has already reduced incentives and Georgia is considering cuts (Sack, 2003).

Forming candidate groups is one way to support teachers who participate in the certification process from the National Board for Professional Teaching Standards (Berg, 2003, NBPTS, 2004). Support groups can be formed on many different levels in the educational community. Programs can be held at the school, district, state or even at a regional level. These programs can be facilitated by the people in K-12 education, through collaborations with colleges and universities, or even through professional development groups (Berg, 2003; Hamsa, 1998). Blase and Blase (1998) indicated that effective principals support the development and use of formal collaborative groups for teachers across all subject areas and grade levels and that this collaboration leads to greater effectiveness of teacher development.

Support programs, whether they are formal or informal, work to provide positive results for teachers (Blase & Blase, 1998). With collaboration, the teachers feel empowered and they feel like their knowledge is critical to the success of the group. This empowerment increases motivation, confidence, and lets the teachers feel that they have ownership in the decision-making process. The end result is a much more powerful growth among teachers than if they had worked the process in isolation.

The National Board for Professional Teaching Standards is not without its critics. Female candidates are more successful than male candidates and white teachers are more likely to achieve certification than Blacks/African Americans (Bond, 1998; Goldhaber et al., 2003). Additionally, Podgursky (2001) argued that teachers may be tempted to cheat since there are large pay bonuses available to National Board Certified Teachers in some states and districts. Further, critics point out that teachers who choose to participate in National Board Certification are already accomplished teachers and therefore this process simply recognizes teachers who know how to be successful in their classrooms (Archer, 2002). In addition, whether the teachers follow through with using successful teaching

practices day in and day out in their teaching is questionable. If a teacher is capable of exemplary teaching, but does not follow through with these practices in their everyday classrooms, they really should not be considered an effective teacher (Johnson, 2001). The National Board itself has little quantitative data to back up their claims (Goldhaber et al., 2003; NBPTS, 2004). Until a critical mass of teachers accumulates in one area for a number of years, quantitative data will be difficult to collect. Despite criticisms, the National Board insists that it gauges what it is intending to measure – accomplished teaching (Berg, 2003; Goldhaber, 2004).

The National Board for Professional Teaching Standards identifies effective teachers through a rigorous and valuable professional development activity. This study sought to determine if the support of principals, the teaching community, informal support programs, and/or formal support programs help candidates to be more successful in their attempt at national certification.

Statement of the Purpose of the Study and Research Questions

The teacher has proven time and again to be the most influential school-related force in student achievement (Stronge, 2002). National Board Certification is touted as a way to increase the success of the educational system in this country. The purpose of this study was to determine the types of support received during the process, the importance of the various types of support, and whether support had an impact on achievement of certification from the National Board for Professional Teaching Standards. Specifically, the following research questions were addressed:

1. What are the types of support received while pursuing certification from the National Board for Professional Teaching Standards as perceived by a select group of National Board Certified Teachers?

2. What is the importance of each of the types of support as perceived by certification candidates from the National Board for Professional Teaching Standards?

3. What is the relationship, if any, between receiving each of the types of support and achieving National Board Certification as perceived by certification candidates from the National Board for Professional Teaching Standards?

Operational Definitions

1. Types of support received – the respondents' answers on the qualitative telephone interview.

2. Receipt of National Board Certification – response of "yes" or "no" on the *Brock Survey of National Board Certification Aspirants*.

3. Importance of Support – response of "very unimportant", "unimportant", "neutral", "important", or "very important" pertaining to each of the types of support received on the *Brock Survey of National Board Certification Aspirants*.

Significance

Since the National Board for Professional Teaching Standards identifies good teaching, administrators should encourage their teachers to participate in the certification process. From National Board Certified Teachers and teachers who completed the process but did not achieve certification, information was collected regarding how to appropriately support teachers who participate in the certification process. The certification process is a valuable and rigorous professional development activity that results in teacher growth. Teacher growth transfers to increases in student achievement. This study will help administrators develop support activities and support groups within their school and/or district. Additionally, information about how to support teachers during this year-long professional development activity is a valuable tool for administrators who are routinely charged with planning and coordinating staff development activities in their schools.

This study is also valuable to faculties of educational administration programs in higher education. Faculty members in such programs are charged with training future administrators. By identifying what types of support programs help teachers achieve certification, the results of this study can be used in administrative training programs. Faculty can help prospective administrators identify and learn to develop appropriate support for their teachers.

Good teaching matters and the most effective way to increase student achievement is to increase the quality of teaching. Administrators want to staff their

schools with the most highly qualified teachers and thus improve the quality of the school. Teachers who have successfully completed the certification process from the National Board for Professional Teaching Standards are exemplary teachers. Administrators should encourage their staff to participate in the process, and they should recruit National Board Certified Teachers to hire in their schools and districts.

Growth in accountability measures for schools and school districts has occurred through the most recent re-authorization of the Elementary and Secondary Education Act (USDE, 2003). The weight of these accountability measures can be felt by principals and administrators throughout the country. Administrators are charged with reporting data regarding the success of their students. Also, the most recent rendition, *No Child Left Behind* (NCLB), requires that all teachers be highly qualified. Teachers who achieve certification from the National Board for Professional Teaching Standards automatically meet the definition of a highly qualified teacher as required by NCLB (U.S. Department of Education, 2003). Data regarding highly qualified teachers must be reported to the public and to the government. Certification from the National Board for Professional Teaching Standards is a clear-cut way to meet the highly qualified teacher requirement under NCLB, making the reporting of this information much simpler for the administration.

Along with the federal standards of *No Child Left Behind*, the federal government has tied substantial federal monies to help facilitate implementation. Principals, superintendents, and state education administrators are charged with using this funding in the most effective manner to increase student achievement. By knowing what types of support programs help facilitate the certification process, administrators will be able to budget adequate funds for such programs.

This study has political implications as well. Currently many states offer financial support to teachers who complete the process, as well as financial incentives to those who achieve certification. By knowing what types of support programs are valuable and helpful to National Board candidates, those in the field of educational administration can lobby law-making bodies to finance effective programs.

If administrators know how to support their National Board candidates, their school system, as a whole, stands to benefit. Haller and Kleine (2001) noted that too often studies in this field are about educational administra*tors* rather than educational administra*tion*. This study contributes to the field of educational administration.

Limitations

Every effort was made to avoid limitations within this study. However, the following should be noted. For the purpose of this study, the assumption was made that the National Board for Professional Teaching Standards does what it purports to do – identify quality teaching. Further, the assumption was made that the process is a valuable professional development activity for candidates, possibly the most valuable professional development activity of a teacher's career. Through this growth activity, one would assume that by completing the process, a teacher grows professionally, thus having an impact in the classroom and on students. Following these assumptions, one can further assume that principals and administrators would seek to encourage their staff to participate in the National Board process. Therefore, it is important to know what types of support administrators can provide in an effort to improve the quality of their teaching staff, thus impacting the achievement of students in their schools.

A survey instrument to address the issues involved in this study was developed by the researcher. The research did not show a strong list of specific types of support that are required to assist teachers in their quest to achieve certification. Therefore, the researcher identified these specific types of support through interviews with National Board Certified Teachers. From these data, the survey instrument was created. The readability of the survey instrument was field tested. The use of a single instrument for the second portion of this study for data collection purposes posed another limitation of this study. Internal validity may be threatened due to the attitude of the subjects in this study (Fraenkel & Wallen, 2003). This study collected perceptual data from the subjects who may be influenced unduly by the results of their attempt at National Board certification. Additionally, teachers who were not successful in certification may have

chosen not to participate in the study based on their being unsuccessful in their quest for National Board certification.

Chapter II

Introduction

"Still the question recurs 'can we do better?'" said Abraham Lincoln on December 1, 1862 as quoted by Phillips (1992, p. 137). The purpose of this chapter is to summarize the literature and research available on the issues found in this study. Since student achievement ranks first and foremost among issues in education, the researcher will explore how good teaching matters in terms of student achievement (Haycock, 1998; Stronge & Hindman, 2003). In this era of high-stakes accountability, good teaching and high student achievement matter now possibly more than ever (Berg, 2003; Shakowski, 1999). Even though it is known that good teaching is the most effective way to increase student achievement, defining the qualities of good teaching remains an elusive task (Bohen, 2001; Stronge, 2002). Yet, the National Board for Professional Teaching Standards claims to know what good teaching looks like (Berg, 2003; NBPTS, 2004). A review of the creation and the founding principles of the National Board for Professional Teaching Standards is found here. The value of the National Board certification process in regards to professional development for teachers and increases in student achievement is also included. Additionally, the researcher will explore various support structures designed to facilitate the certification process for teachers. Regardless of all the support in the teaching community, there are those who remain critical of the National Board and its practices. A section of this chapter will follow the criticisms they have to offer.

Good Teaching Matters

"In a truly rational society, the best of us would be teachers, and the rest would have to settle for something less." said Lee Iacocca as quoted in NCTAF (1996, p. 24). The experts have different ways of wording it, but after a synthesis of the literature, it becomes clear: good teaching matters (Berg, 2003; Cohen, 2003; Hamsa, 1998; Jenkins, 2000; Kaplan & Owings, 2003; Lewis, 2004; Shakowski, 1999; Siciliano, Jurs, Ashby, & Weibke, 1999; Stronge, 2002; Stronge & Hindman, 2003; The National Commission on Teaching & America's Future [NCTAF], 1996). Shakowski (1999) noted: "the quality of a school depends on the quality of the teachers" (p. 387-388). Rivers and Sanders

(2002) commented that increases in student achievement were primarily the result of the influence of schools and districts, but that the most important factor in increasing student achievement was the teacher. Jenkins (2000) called teaching a "performance art" (p. 46), while Bohen (2001) said that "with little prompting, most of us can generate a lengthy list of the attributes of a good teacher, a list that stops just short of 'walks on water'" (p. 50). Additionally, the effects of good teaching are cumulative (Darling-Hammond, 1999; Stronge & Hindman, 2003) and good teachers matter even more for poor and minority students (Haycock, 1998; NCTAF, 1996).

Teaching is not a simple task (Haycock, 1998; Stronge, 2002). Teaching is a multi-faceted job that requires an emotional, an intellectual, and a hard-working commitment. As Danielson (1996) noted, "teachers sometimes feel pulled in many different directions – at one moment, a counselor; at another, a business manager" (p. 29). Despite this, teachers must be interested in the final outcome of their efforts – student learning (Rivkin et al., 2002). The authors of *What Matters Most: Teaching for America's Future* (NCTAF, 1996) noted that fewer children begin school ready to learn than in the past. More students live in poverty and often are without health care. Student achievement and graduation rates have leveled while American students continue to perform near the bottom on international tests in math and science. Schools and students today need teachers to successfully teach students from a variety of diverse backgrounds. Teachers "must understand students and their many pathways to learning as deeply as they comprehend subjects and teaching methods." (NCTAF, 1996, p. 13) This can prove difficult with students from different cultures as well as different language backgrounds. Teachers must be able to approach teaching and student learning using a variety of teaching strategies. In addition to knowing their students, teachers must know how to teach their subjects and they must also have a great knowledge of the content that they teach (Haycock, 1998; Stronge, 2002). Content and pedagogy matter in good teaching.

There are differences among teachers (Hanushek, 2002; Stronge, 2002) and these differences are difficult to measure. As Hanushek (2002) noted, the differences among teachers are not easily measured through certifications, degrees, nor experience.

Similarly, Rivkin et al. (2002) noted that there is no evidence to indicate that having a master's degree, years of experience, or even test scores impact teacher effectiveness. Haycock (1998) concurred by noting "neither education courses completed, advanced education degrees, scores on professional knowledge sections of licensure exams nor, interestingly, years of experience seem to have a clear relationship to student achievement" (p. 8). And yet, good teaching matters.

Effects of Good Teaching are Cumulative

The quality of teaching matters for students and the results of quality (and non-quality) teaching are cumulative (Darling-Hammond, 1999; Haycock, 1998; Sanders & Rivers, 1996, Rivkin et al., 2002, Stronge & Hindman, 2003). Research on teacher quality notes that good teaching matters, often leaving the converse out of the equation. Unfortunately, when the subject of poor quality teaching is examined, the results are not good for students. Sanders and Rivers (1996) conducted a study that found while the positive effects of a good teacher were still measurable two years later, the same was true of the effects of poor teachers regardless of the quality of later teachers. They further noted that effective teachers can improve student learning with students who previously had an ineffective teacher, but the residual effects of the poor teaching show in achievement scores for years after the student has moved beyond the ineffective teacher's classroom. "Ineffective teachers cause learning consequences for students that are compounded when the frequency of ineffective teaching increases….The effect is insidious, causing underachievement each year they encounter an ineffective teacher until the cumulative effect becomes extremely visible in later grades" (Rivers & Sanders, 2002, p. 21). Stronge and Hindman (2003) said , "…the quality of the teacher has a powerful residual effect on student learning….Unfortunately if a student has an ineffective teacher, the opposite is true" (p. 2). The impact a bad teacher has on student learning and achievement may not be able to be fully remediated for up to three years (Stronge & Hindman, 2003). That is, of course, assuming that the student receives a quality teacher in subsequent years. Haycock (1998) noted that "the effects of teachers are long-lived, whether they advance student achievement or squash it…. even two years

after the fact, the performance of fifth-grade students is still affected by the quality of their third grade teacher" (p. 6).

The Importance of Good Teachers for Poor and Minority Students

The quality of teaching matters more for some students than for others. As noted by NCTAF (1996) the United States has the highest rates among industrialized nations of childhood poverty, homelessness, and mortality rates for children under the age of 25. These problems translate into many students arriving at school malnourished, without adequate medical care, abused, and scared. The late 20th and early 21st centuries have seen tremendous growth in the diversity of classrooms (Banks, 2003; Bennett, 2003; NCTAF, 1996). Today, schools take students from all racial and ethnic groups, from all socio-economic backgrounds, and from all social situations. Schools take students into gifted programs and at the opposite end of the spectrum; students are welcomed regardless of their mental capacity or behavioral issues. These students have varying learning styles, varying interests in education, and various needs to be met by the school (Berg, 2003). Still, the quality of teachers in classrooms across the United States varies dramatically. As noted by the National Commission on Teaching and America's Future (1996):

> Some children benefit from high-quality curriculum taught by able and committed teachers who understand their subjects and how to teach so that their students excel. Others trudge through uninspired texts and workbooks with little intellectual challenge, taught by teachers who know little about their subjects and even less about how children learn…. We can do better. And we must (p. 17-18).

Teachers must find a way to balance student needs within the classroom, guaranteeing that each student receives the attention they deserve. Teachers must find a way to reach all of the students in their classes as student learning is the primary mission of education (Danielson, 1996).

As Hamsa (1998) noted, "education has the potential to be the great equalizer" (p. 453). Therefore, good teaching is even more critical for poor and minority students (Haycock, 1998). In *Good Teaching Matters: How Well-Qualified Teachers Can Close*

the Gap, Haycock (1998) noted that "the critical importance of good teachers has especially profound implication for poor and minority youngsters. For no matter how quality is defined, these youngsters come up on the short end" (p. 9). According to Darling-Hammond, "African American students are nearly twice as likely to be assigned to the most ineffective teachers and half as likely to be assigned to the most effective teachers" (1999, p. 6). Danielson (1996) noted that while the U.S. education system has served many well, the system has not served all students equally. Further, she noted that the students who are likely to be treated unfairly are minority students. "And even when the inequities have not been institutionalized, as they were in segregated schools prior to 1954, they have been nearly as insidious" (Danielson, 1999, p. 34).

Poor and minority students are often assigned under-qualified teachers (Rivkin et al., 2002). Hanushek (2002) asserted that high quality teachers address deficits in the preparedness of children from disadvantaged backgrounds. Unfortunately, this gap cannot be closed if students are assigned poor or under-qualified teachers. Rivkin et al. (2002) noted that having a teacher who performs one standard deviation above the mean for five consecutive years could close the gap faced by students from low income households. Rivkin et al. (2002) observed, "Teachers and therefore schools matter importantly for student achievement" (p. 31). Unfortunately, these very students who are in such need of good teaching are not the ones who are getting it (NCTAF, 1996). According to the authors of *What matters most: Teaching for America's future* students in the poorest schools are likely to be assigned teachers who have not been adequately prepared to teach. These districts have loose hiring practices and teacher turnover is high. "It is more surprising that some of these children manage to learn than that so many fail to do so" (NCTAF, 1996, p. 16).

All students should be treated equitably, with cultural sensitivity, with high expectations, with developmental appropriateness, and with the appropriate use of technology (Bennett, 2003; Danielson, 1996). Berg (2003) said that to close the achievement gap and increase overall educational attainment in this country, teachers must make good choices. Additionally, teacher expectations have a strong impact on

student achievement (Bennett, 2003). Therefore, good teaching, good multicultural teachers, and high expectations matter.

In summary, "teacher quality is a very important determinant of achievement" (Rivkin, 2002, p. 31). Lewis (2004) said, "the basics of school improvement begin with teaching. Many studies on what makes a difference in student achievement eventually conclude that the most important school-based factor is the quality of teaching" (p. 419). Cohen (2003) noted, "The most important factor affecting student learning is the teacher" (p. 1). Good teaching matters because "today's society has little room for those who cannot read, write, and compute proficiently….Because of this, America's future depends now, as never before, on our ability to teach" (NCTAF, 1996, p. 3). Stronge and Hindman (2003) postulated, "The common denominator in school improvement and student success is the teacher" (p 2). Further, the experts agree that good teaching matters even more for at-risk and poor and minority students (Hanushek, 2002; Stronge & Hindman, 2003).

The New Era of High-Stakes Accountability

On January 8, 2002, the *No Child Left Behind Act* became law and education in America began a new era (Kucerik, 2002; Paige, 2002; U.S. Department of Education, 2003). Heralded as a landmark reform (U.S. Department of Education, 2003), the passage of *No Child Left Behind* reauthorized the *Elementary and Secondary Education Act*, the federal law originally passed in 1965 and designed to help poor and minority students in this country. The *Elementary and Secondary Education Act* is the federal law that impacts K-12 education in this country the most and this reauthorization of the act is the "single largest nationalization of education policy in the history of the United States" (Elmore, 2003, p. 6). "The 2001 reauthorization of the Elementary and Secondary Education Act, also known as *No Child Left Behind* (NCLB), carries testing and accountability requirements that will substantially increase student testing and hold all schools accountable for student performance" (Abrams & Madaus, 2003). According to the U.S. Department of Education (2003), *No Child Left Behind* is built on the following

four pillars: (a) accountability for results; (b) use of successful, scientifically researched programs; (c) expanded parental options; and (d) increased local control and flexibility.

Accountability for Results

  No Child Left Behind places accountability at all levels within the educational system (Paige, 2003). "The law requires each state to enact a strong accountability structure based on clear and high standards and a system of annual assessments to measure student progress against those standards" (Paige, 2003, p. 712). Under the provisions of *No Child Left Behind*, each state must develop standards for reading and mathematics (Kucerik, 2002). Further, the states must implement assessment programs to ensure that these standards are being met (U.S. Department of Education 2003). Such tests must be administered to all students in grades 3-8. *No Child Left Behind* requires that local school districts report school progress on these assessments on annual report cards (Kucerik, 2002; U.S. Department of Education, 2003). These report cards must be distributed annually by the district (U.S. Department of Education, 2003). Included in the report must be the performance of each school based on the state assessment program (U.S. Department of Education, 2003). Student performance must be reported by level of performance and by student groups (Paige, 2002; U.S. Department of Education, 2003). The levels of student performance are rated as basic, proficient, and advanced. The student groups are divided by race, ethnicity, sex, English as a second language, migrant status, disability, and socio-economic status (Paige, 2002). The report cards must identify schools that have not been meeting standards or as needing intervention (U.S. Department of Education, 2003). Under *No Child Left Behind*, performance by each of the student groups must meet "adequate yearly progress" which is a measurement of a fixed amount of growth based on state standards (Abrams & Madaus, 2003; Elmore, 2003). Federal law requires that school districts provide this information to the general public at the beginning of each school year by reporting the data for the previous school year (U.S. Department of Education, 2003). Schools and districts that fail to meet accountability standards are sanctioned (Abrams & Madaus, 2003; Harvey, 2003). Sanctions can include removing the principal, removing teachers, or even closure of the

school. According to Abrams and Madaus (2003), "Schools that fail to achieve AYP [adequate yearly progress] goals face demanding corrective actions, such as replacement of school staff, implementation of new curriculum, extension of the school day or academic year, parental choice options, and finally, complete reorganization" (p. 32). The sanctions for schools and districts that fail to meet the accountability standards as outlined in *No Child Left Behind* are different for Title I schools than they are for schools who do not have the Title I designation (U.S. Department of Education, 2003). According to the U.S. Department of Education (2003), Title I schools are those that receive additional federal funding that is required to be used on programs geared toward improving the achievement of students from low-income families. Approximately 55 % of schools in this country hold the Title I designation (U.S. Department of Education, 2003).

Use of Successful, Scientifically Researched Programs

No Child Left Behind requires that schools implement only those educational programs which have a strong scientific research base that proves their effectiveness (U.S. Department of Education, 2003). In addition to requiring that such programs be implemented, the federal government will target such programs by providing additional funding to support them (U.S. Department of Education, 2003). The U.S. Department of Education noted that "the key to helping all children learn is to help teachers in each and every classroom benefit from the relevant research" (2003, p. 28). Scientifically based research is defined by the U.S. Department of Education to include the following components: (a) use of rigorous, systematic and empirical methods, (b) adequacy of data to justify the general conclusions drawn, (c) reliance on methods that provide valid data across multiple measurements and observations, (d) use of control groups, (e) details allow for replication, and (f) acceptance by a peer-reviewed journal or approved by a panel of independent experts. Under *No Child Left Behind*, schools and districts are required to use programs and instructional materials that are scientifically based. Ongoing assessments are required to ensure accountability (U.S. Department of Education, 2003).

Expanded Parental Options

Under *No Child Left Behind,* parents have more control and options regarding their child's education (U.S. Department of Education, 2003). If a Title I school fails to make adequate yearly progress for two consecutive years, the students in that school must be offered the choice of transferring to a school within the district that does meet accountability requirements (Paige, 2002). Additionally, school choice is available for students who have been the victim of a violent crime on school grounds or who attend schools that have been identified as "persistently dangerous schools." The district must pay for transportation of students who choose to transfer schools under these guidelines, with priority given to students from low-income families with the lowest academic achievement. The district which houses the low-performing or persistently dangerous school(s) must notify parents of the issues at the school and of the transfer option. If the parent chooses not to have their child transferred, supplemental educational services are available. The district must provide tutoring and after-school services at Title I schools that are failing to meet standards.

Increased Local Control and Flexibility

According to the U.S. Department of Education (2003), *No Child Left Behind*, allows state and local school districts more control over their programs. According to *No Child Left Behind: A parents guide,* the amount of paperwork required to secure and track federal funding has been decreased (2003). Additionally the U.S. Department of Education indicated that this new law allows states and local districts to allocate resources to meet their local needs (as long as the programs are scientifically research-based).

Education accountability measures have increased in the United States (Abrams & Madaus, 2003). Research shows that good teaching can increase student achievement (Darling-Hammond, 1999; Haycock, 1998). Therefore, identifying good teaching is important to increasing student achievement.

<center>What is Good Teaching?</center>

Teaching is a complex phenomenon that is difficult to define in concrete terms (Danielson, 1996; Stronge, 2002). Therefore, defining good teaching can also be difficult (Berg, 2003; Bohen, 2001; Stronge & Hindman, 2003). Hanushek (2002) noted that finding a set of well-defined inputs "has been the Holy Grail of education research, and the search has been quite unsuccessful" (p. 7). While each teaching situation has powerful similarities (Danielson, 1996; Shapiro, 1995; Stronge, 2003) the teaching process itself is much too complicated to create a small list of criteria to define good teaching (Hanushek, 2002). Haycock (1998) reviewed large-scale studies that attempted to quantify qualities of good teachers and found that "neither education courses completed, advanced education degrees, scores on professional knowledge sections of licensure exams nor, interestingly, years of experience seem to have a clear relationship to student achievement" (p.8). Rivkin et al. (2002) noted that "measurable characteristics such as teacher experience, education, and even test scores by teachers explain little of the true variation in teacher effectiveness" (p. 4). However, there are qualities that are identifiable in effective teachers (Danielson, 1996, Stronge, 2002).

Danielson (1996) outlined teaching responsibilities using four broad categories: (a) planning and preparation, (b) the classroom environment, (c) instruction, and (d) professional responsibilities. In addition to the framework, Danielson (1996) noted common themes that weave throughout the four domains of teaching responsibility – equity, cultural sensitivity, high expectations, developmental appropriateness, accommodating students with special needs, and appropriate use of technology.

Planning and Preparation

Planning and preparation was defined by Danielson (1996) as "demonstrating knowledge of content and pedagogy, demonstrating knowledge of students, selecting instructional goals, demonstrating knowledge of resources, designing coherent instruction, and assessing student learning" (p. 30). Haycock (1998) noted that effective teachers need to have strong verbal and math abilities, deep content knowledge, and

knowledge of and ability to teach. Stronge (2002) identified qualities of effective teachers to include verbal skills, strong content knowledge, pedagogy, and dispositions. The National Board for Professional Teaching Standards (2003) requires that accomplished teachers know their subjects and they know how to teach their subjects to their students, thus content and pedagogy are required. "A discernable link exists between the effective teacher's vocabulary and verbal skills and student academic success" (Stronge, 2002, p. 4). And yet it was noted that general intellectual ability is not linked to increases in student achievement (Stronge, 2002). However, "strong content knowledge consistently has been identified as an essential element among those who study effective teaching. Clearly, subject matter knowledge positively affects teaching performance, however, it is not sufficient in and of itself" (Stronge, 2002, p. 8). The National Commission on Teaching and America's Future (NCTAF) concurred that strong content knowledge and the ability to teach the content, or good pedagogical knowledge, are important qualities in effective teachers (1996).

The Classroom Environment

According to Danielson (1996), the classroom environment encompasses the following: "creating an environment of respect and rapport, establishing a culture for learning, managing classroom procedures, managing student behavior, and organizing physical space" (p. 31). The National Board for Professional Teaching Standards (2003) requires accomplished teachers to be committed to their students and their learning. In addition to instructional and management processes that are needed to be an effective teacher, effective teachers also exhibit affective characteristics that contribute to their effectiveness. Stronge (2002) noted the following dispositions of effective teachers: role of caring, listening, understanding, and knowing students. Effective teachers practice fairness and respect with their students and relate to students through positive social interactions (Stronge, 2002). Additionally an effective teacher has enthusiasm for teaching, student learning, and the subject matter. Stronge (2002) noted these important components of classroom management and organization of effective teachers: applying elements of organization, managing and responding to student behavior, focusing on

instruction, maximizing instructional time, expecting students to achieve, and planning and preparation for instruction.

Instruction

Instruction, according to Danielson (1996) includes the following: "communicating clearly and accurately, using questioning and discussion techniques, engaging students in learning, providing feedback to students, and demonstrating flexibility and responsiveness" (p. 32). Darling-Hammond (1999) noted that effective teachers used clarity in their lessons and discussions, varied lesson approaches, asked higher order questions and probed student comments. "Teachers who are able to use a broad repertoire of approaches [instructional strategies] skillfully are typically most successful" (Darling-Hammond, 1999, p. 14). Additionally, good teachers are responsible for managing and monitoring student learning (NBPTS, 2003). "Monitoring and assessing student development and work is a complex task" (Stronge, 2002, p. 52). Despite the difficult nature of monitoring and assessment, these are important concepts in education. According to Stronge (2002) "assessment is a central element of the teaching process (p. 55). Teachers use assessment to determine the impact of individual lessons, to ensure that students are on task, to track student progress, and to serve as a guide for future lessons and practices (Stronge, 2002). Stronge (2002) further noted that effective teachers use both formal and informal techniques to monitor student learning. Expert teachers are able to connect new concepts and ideas to the experiences of their students (NCTAF, 1996). They are able to tailor their teaching to the needs of their students, while ensuring student progress along the way. "These skills make the difference between teaching that creates learning and teaching that just marks time" (NCTAF, 1996, p. 6). In order to be able to do this, teachers must have good knowledge of pedagogy and content. As summarized by NCTAF (1996):

Needless to say, this kind of teaching requires high levels of knowledge and skill. To be effective, teachers must know their subject matter so thoroughly that they can present it in a challenging, clear, and compelling way. They must also know

how their students learn and how to make ideas accessible so that they can

construct successful 'teachable moments.' Research confirms that teacher

knowledge of subject matter, student learning, and teaching methods are all

important elements of teacher effectiveness (p.6).

Professional Responsibilities

Professional responsibilities for teachers include "reflecting on teaching,

maintaining accurate records, communicating with families, contributing to the school

and district, growing and developing professionally, and showing professionalism"

(Danielson, 1996, p. 30-33). Accomplished teachers think systematically about their

practice and learn from their experiences (NBPTS, 2003). Additionally, they are

members of learning communities. Lifelong learning is an important concept in the

teaching field (Blase & Blase, 1998). Teachers should stay abreast of current trends in

education. They should attend workshops, seminars, and conferences to facilitate this

lifelong learning. Collaboration among teachers should be encouraged. Effective

teachers reflect on their practices and mentor or coach other teachers. Involvement in the

professional community of teachers can have a positive impact on the motivation of

teachers.

Common Themes of All Components of the Teaching Framework

Equity, cultural sensitivity, high expectations, developmental appropriateness,

accommodating students with special needs, and appropriate use of technology are

themes that run throughout the framework of teaching and are included in every category

(Danielson, 1996). "A caring, competent, and qualified teacher for every child is the

most important ingredient in education reform and, we believe, the most frequently

overlooked" (NCTAF, 1996, p. 3). According to Stronge (2002), effective teachers use a

variety of instructional strategies and reach more students "because they tap into more

learning styles and student interests" (p. 43). Effective teachers have high expectations

of students and they effectively communicate these high expectations to their students

(Stronge, 2002). These teachers are capable of accommodating for difference among

students. "They adapt instruction to meet student needs, which requires careful

assessment and planning for all students in the classroom, as well as the ability to select from a range of strategies to find the optimal match to the context." (Stronge, 2002, p. 57)   Good teaching matters in terms of increasing student achievement and therefore, it is imperative to know what good teaching looks like. "What teachers know and do is the most important influence on what students learn. Competent and caring teaching should be a student right." (NCTAF, 1996, p. 6) Good teaching is a necessity. Students need good teachers who deeply understand subject matter and how to teach this subject matter in ways that their students will understand. Planning, preparation, the classroom environment, instruction and professional responsibilities make up the framework for teaching (Danielson, 1996) and good teachers need to be effective in all areas. In addition, good teachers need to be proficient in equity issues in their classrooms, be culturally sensitive, have high expectations, teach acceptably to the students in their classes, and use technology appropriately. "At a time when all students must meet higher standards for learning, access to good teaching is a necessity, not a privilege to be left to chance." (NCTAF, 1996, p. 8) "The question of how to increase student learning is a daunting national conundrum which teachers, administrators, researchers, and policy makers are working on from every angle." (Berg, 2003, p. 23) The answer is simple. "The bottom line is that there is just no way to create good schools without good teachers." (NCTAF, 1996, p. 9)

<div align="center">The National Board for Professional Teaching Standards</div>

In 1983, a report was issued by the federal government that would forever change the landscape of education in this country. *A Nation at Risk* was a scalding attack on America's education system as a whole (Carnegie Foundation, 2003). The rhetoric of the report was powerful and blunt:

> If an unfriendly power had attempted to impose on America the mediocre
> educational performance that exists today we might well have viewed it as an act
> of war. As it stands, we have allowed this to happen to ourselves. We have even
> squandered the gains in student achievement made in the wake of the Sputnik

challenge. Moreover, we have dismantled essential support systems which helped
make those gains possible. We have, in effect, been committing an act of
unthinking, unilateral disarmament (National Commission on Excellence in
Education, 1983).

Such harsh criticism captured the attention of the American public. Teachers, parents,
legislators, business executives, and the public as a whole took notice of what America's
schools were doing – or not doing if one believed the rhetoric of the report. Response
from the Carnegie Corporation of New York was swift. In 1985, the *Carnegie Forum on
Education and the Economy* brought together "the best and brightest talents in education,
public service, business and the foundation world" (Carnegie Foundation, 2003, p. 1) to
ponder ways to improve the "professions upon which all other professions rest" (p. 1). In
response to *A Nation at Risk*, the Carnegie Advisory Council recommended the creation
of the Task Force on Teaching as a Profession. The Task Force issued its own report
entitled *A Nation Prepared: Teachers for the 21st Century.* The report called for
sweeping changes in education policy in this country. If the United States was to truly
achieve excellence, "far more demanding educational standards than we have ever
attempted to reach before" (Carnegie Foundation, 2003, p. 2) would be required. The
Advisory Council acknowledged that teachers were the best hope for making this happen
and therefore the Advisory Council called for an overhaul of the teaching profession.
Perhaps the most noted legacy of the Task Force on Teaching as a Profession was the
recommendation for a national organization to award national certification to exemplary
teachers. The Task Force recommended that the teaching profession identify the
qualities of effective teachers and devise a way to evaluate teachers on a national level
and award certification to those teachers who were capable of meeting the standards.
"With support from the Carnegie Corporation, the recommendation became a reality in
1987 with the establishment of the National Board for Professional Teaching Standards"
(Carnegie Foundation, 2003, p. 2). This reform effort differed from most other reform
efforts that were born as a result of *A Nation at Risk.* Most other reform efforts left out
the most crucial element of education reform: the classroom teacher (NBPTS, 2004).

The mission of the National Board for Professional Teaching Standards is to advance the quality of teaching and learning by: maintaining high and rigorous standards for what accomplished teachers should know and be able to do; providing a national voluntary system certifying teachers who meet those standards; and advocating related education reforms to integrate National Board Certification in American education and to capitalize on the expertise of National Board Certified Teachers (NBPTS, 1999, p. 1).

The National Board announced five core propositions related to the field of teaching. Accomplished teachers routinely perform these core propositions in their classrooms. The policy position of the National Board for Professional Teaching Standards is as follows: "The National Board for Professional Teaching Standards seeks to identify and recognize teachers who effectively enhance student learning and demonstrate the high level of knowledge, skills, abilities and commitments reflected in the following five core propositions." (NBPTS, 1999, p. 6) All business of the National Board for Professional Teaching Standards revolves around the five core propositions:

(a) teachers are committed to students and their learning, (b) teachers know the subjects they teach and how to teach those subjects to students, (c) teachers are responsible for managing and monitoring student learning, (d) teachers think systematically about their practice and learn from experience, and (e) teachers are members of learning communities (NBPTS, 1999, p.6-8).

The five core propositions are further defined as the following:

1. Teachers are committed to students and their learning. Accomplished teachers are dedicated to making knowledge accessible to all students. They act on the belief that all students can learn. They treat students equitably, recognizing the individual differences that distinguish one student from another and taking account of these differences in their practice. They adjust their practice based on observation and knowledge of their students' interests, abilities, skills, knowledge, family circumstances and peer relationships. Accomplished teachers understand

how students develop and learn. They incorporate the prevailing theories of cognition and intelligence in their practice. They are aware of the influence of context and culture on behavior. They develop students' cognitive capacity and their respect for learning. Equally important, they foster students' self-esteem, motivation, character, civic responsibility and their respect for individual, cultural, religious and racial differences.

2. Teachers know the subjects they teach and how to teach those subjects to students. Accomplished teachers have a rich understanding of the subject(s) they teach and appreciate how knowledge in their subject is created, organized, linked to other disciplines and applied to real-world settings. While faithfully representing the collective wisdom of our culture and upholding the value of disciplinary knowledge, they also develop the critical and analytical capacities of their students. Accomplished teachers command specialized knowledge of how to convey and reveal subject matter to students. They are aware of the preconceptions and background knowledge that students typically bring to each subject and of strategies and instructional materials that can be of assistance. They understand where difficulties are likely to arise and modify their practice accordingly. Their instructional repertoire allows them to create multiple paths to the subjects they teach, and they are adept at teaching students how to pose and solve their own problems.

3. Teachers are responsible for managing and monitoring student learning. Accomplished teachers create, enrich, maintain and alter instructional settings to capture and sustain the interest of their students and to make the most effective use of time. They also are adept at engaging students and adults to assist their teaching and at enlisting their colleagues' knowledge and expertise to complement their own. Accomplished teachers command a range of generic instructional techniques, know when each is appropriate and can implement them as needed. They are as aware of ineffectual or damaging practice as they are devoted to elegant practice. They know how to engage groups of students to ensure a

disciplined learning environment, and how to organize instruction to allow the schools' goals for students to be met. They are adept at setting norms for social interaction among students and between students and teachers. They understand how to motivate students to learn and how to maintain their interest even in the face of temporary failure. Accomplished teachers can assess the progress of individual students as well as that of the class as a whole. They employ multiple methods for measuring student growth and understanding and can clearly explain student performance to parents.

4. Teachers think systematically about their practice and learn from experience. Accomplished teachers are models of educated persons, exemplifying the virtues they seek to inspire in students -- curiosity, tolerance, honesty, fairness, respect for diversity and appreciation of cultural differences -- and the capacities that are prerequisites for intellectual growth: the ability to reason and take multiple perspectives to be creative and take risks, and to adopt an experimental and problem-solving orientation. Accomplished teachers draw on their knowledge of human development, subject matter and instruction, and their understanding of their students to make principled judgments about sound practice. Their decisions are not only grounded in the literature, but also in their experience. They engage in lifelong learning which they seek to encourage in their students. Striving to strengthen their teaching, accomplished teachers critically examine their practice, seek to expand their repertoire, deepen their knowledge, sharpen their judgment and adapt their teaching to new findings, ideas and theories.

5. Teachers are members of learning communities. Accomplished teachers contribute to the effectiveness of the school by working collaboratively with other professionals on instructional policy, curriculum development and staff development. They can evaluate school progress and the allocation of school resources in light of their understanding of state and local educational objectives. They are knowledgeable about specialized school and community resources that can be engaged for their students' benefit, and are skilled at employing such

resources as needed. Accomplished teachers find ways to work collaboratively and creatively with parents, engaging them productively in the work of the school (NBPTS, 1999, p. 6-8).

Based on these five core propositions, the National Board for Professional Teaching Standards, a panel that consists mostly of classroom teachers, enlisted the help of other teachers to develop a rigorous, performance based assessment to identify accomplished teaching (Shapiro, 1995). Based on the broad definition of accomplished practice as outlined in the five core propositions, standards committees in each certification field developed specific requirements for judging accomplished teaching practices in each teaching field. This voluntary certification process "identifies and recognizes teachers who effectively enhance student learning and demonstrate the high level of knowledge, skills, abilities, and commitments reflected in the five core propositions" (Jenkins, 2000).

Teachers interested in seeking certification from the National Board for Professional Teaching Standard must hold a baccalaureate degree and have three years of appropriate teaching experience (NBPTS, 2004). This is a voluntary certification process for teachers. Teachers who choose to participate in the process document their teaching practices through four portfolio entries that include written documentation and videos of their performance in the classroom. Additionally, candidates sit for three hours of assessment activities that verify their competency in their content area. The certification process takes approximately one school year to complete and results are announced by the National Board for Professional Teaching Standards each November. Nationally, only about half of those who attempt certification are successful in their ventures. Berg (2003) noted the following:

National Board Certification is an assessment. Candidates follow a strictly defined protocol as they prepare a selection of evidence to provide to assessors *clear, consistent, and convincing* evidence that they are able to practice at the level of the Standards for Accomplished Teaching. Practitioners from the same certificate area who are trained to examine the evidence and evaluate it based on

scoring rubrics, assess the work and provide a score (p. 35).

Currently, the National Board is trying to increase the number of National Board Certified Teachers throughout the country (Berg, 2003). If this goal is to be accomplished, it is imperative to know how to provide support to candidates during the process.

<p align="center">National Board Certification as Valuable Professional Development</p>

Schools and districts spend millions of dollars on professional development (Berg, 2003; NCTAF, 1996). Unfortunately, the amount of money is not adequate to support quality professional development, and the money allocated is being spent on haphazard approaches to professional development. Teachers need comprehensive, ongoing, and meaningful professional development. The certification process from the National Board for Professional Teaching Standards provides teachers with valuable professional development, both during and after the process (Darling-Hammond, 1999). Since good teaching matters, and good professional development increases good teaching practice, the certification process from the National Board for Professional Teaching Standards can produce increases in student achievement.

States and districts know that teachers need professional development and they even usually require teachers to attend certain amounts of professional development activities each year. "Districts, states, and even the federal government have tried to make an impact on student learning from a systemic level by improving the practice of teaching through professional development. They pour millions of dollars into a variety of activities each year." (Berg, 2003, p. 33) Professional development activities are usually planned and paid for by the district or the state. Unfortunately, there usually is not a coherent professional development plan to work from during the planning of such activities (Berg, 2003; NCTAF, 1996). "A workshop here, a course there, some relevant, some less so…" (Berg, 2003, p. 33). So while meaningful and coherent professional development activities are needed, "district staff development is still characterized by one-shot workshops that have very little effect on practice, rather than more effective approaches that are linked to concrete problems of practice and build into teachers'

ongoing work with their colleagues" (NCTAF, 1996, p. 40-41). Much of the professional development is geared toward new teachers. Mentoring and induction programs are common throughout the country. While bolstering the newest members of the teaching force, these practices often leave out veteran teachers (NCTAF, 1996). "Estimates of professional development support range from only 1% to 3% of district operating budgets…. Even the most generous estimates, however, are paltry compared with the expenditures invested in employee development in leading corporations and in other countries' schools" (NCTAF, 1996, p. 40).

Good Professional Development

Teachers, veteran and novice, need meaningful, coherent, and ongoing professional development (Blase & Blase, 1998; Stronge, 2002). According to the literature, there are good forms of professional development available for teachers (Berg, 2003; Blase & Blase, 1998; Bohen, 2001). According to Berg (2003), good professional development "improves the quality of teaching by causing changes in teaching practice that results in increased student learning" (p. 13). Bohen (2001) indicated that all teachers need "ongoing professional experiences that continue developing, nurturing, and expanding their knowledge and skills" (p. 50). According to Blase and Blase (1998), schools must develop comprehensive staff development systems to support teaching and learning. Further, they noted that the "governance, design, and implementation" of such programs is important to their success (p. 50). Additionally, good professional development must take into account the adult learner. Blase and Blase continued with "teachers who work in a stimulating and supportive environment can reach higher stages of development" (p. 54). Furthermore, collaboration in professional development is important. As noted by Blase & Blase (1998):

> "Studies of innovation show that sustained improvements in teaching often hinges on the development of 'teachers as learners' who *collaborate* with one another to study teaching and its effects (rather than operate in isolation). This requires serious, ongoing *staff development*." (p. 61-62)

According to Berg (2003) good professional development causes changes in teaching practice that result in increased student achievement. Such professional development allows teachers to use assessment data to identify needs of their students, it is embedded in their jobs and it is continuous. It brings teachers together in a collaborative nature, it allows teachers to analyze and reflect on their practice, and it includes information on content and pedagogy. Berg (2003) further noted that these characteristics of good professional development can all be found during the process of National Board certification. "The National Board's Core Propositions for what every teacher should know and be able to do give focus to systemic coordination of professional development." (Berg, 2003, p. 33)

The certification process from the National Board for Professional Teaching Standards is valuable professional development that can improve the quality of teaching (Berg, 2003). Browne said that the National Board process "advances teachers' professional development" (1999, p. 365). Shakowski echoed the sentiment, "National Board Certification is a catalyst for professional growth" (1999, p. 388). Siciliano (1999) indicated that "a teacher's involvement in National Board Certification offers the ultimate experience in professional growth" (p. 381). According to Berg (2003) candidates expressed that the certification process itself improved their quality of teaching, regardless of whether they achieved National Board certification or not. Professional development activities accessed during the National Board certification process benefit both teachers and their students. As noted by Berg (2003):

> When teachers use the National Board Certification experience to improve the quality of their teaching practice, there are substantial benefits for the teachers and their students. Students can expect higher levels of learning as a result of their teachers' heightened ability to create powerful, effective, and appropriate learning opportunities. Teachers can become beneficiaries of both intrinsic and extrinsic benefits. They gain a sense of confidence in their teaching competence as well as an increased sense of satisfaction in their work. They also may receive

recognition, offers for new leadership roles, or financial compensation as a result

of their successful completion of National Board Certification. (p. 23)

Darling-Hammond (1999) noted the following, "teachers repeatedly say that they have learned more about teaching from their participation in the assessments [from the National Board for Professional Teaching Standards] than they have learned from other previous professional development experiences" (p. 21).

Teacher quality is not a fixed quantity; it can be improved over time through appropriate professional development (Danielson, 1996; Haycock, 1998). Haycock (1998) said this: "teacher effectiveness is not forever fixed. Through careful development, teachers can build their effectiveness over time" (p. 14). Danielson (1996) noted that professionals participate in ongoing development and that the process is never complete. "Educators committed to attaining and remaining at the top of their profession invest much energy in staying informed and increasing their skills" (Danielson, 1996, p. 115). Improving teacher quality is imperative for improving student student achievement because "improving teacher quality will help ensure that more students reach their potential because they benefited from effective teachers *every* year" (Rivers & Sanders, 2002, p. 23). Teachers may derive personal and professional satisfaction from good professional development that increases teaching practice resulting in increased student achievement (Berg, 2003). However, the most important component of good professional development is this: *"improving the quality of teaching holds the greatest promise for higher levels of student learning for all children"* (Berg, 2003, p. 11 – italics not added).

<div align="center">Candidate Support During National Board Certification</div>

The National Board for Professional Teaching Standards identifies teachers who exhibit exemplary practices (Jenkins, 2000; NCTAF, 1996; Siciliano et al., 1999). The process teachers complete while attempting certification can profoundly affect practice. Support for National Board candidates is very important to the process (Berg, 2003; Hopkins, 2004). This support can come in many forms. Teachers turn to administrators, other teachers, college faculty members, and family members for support (Berg, 2003;

Browne et al., 1999; Hamsa, 1998; Hopkins, 2004; Siciliano et al., 1999). While the literature suggests that support is important to teachers during the National Board process, the specific types of support are not well documented. This section serves to explore support provided from administrators, teaching peers, informal programs, and formal programs to help facilitate the certification process.

Administrative Support

Teachers who pursue certification from the National Board for Professional Teaching Standards need help through the process (Berg, 2003; Hopkins, 2004; Shakowski, 1999). All students deserve a highly-qualified teacher and all teachers deserve a highly qualified principal or administrator (NCTAF, 1996). Highly qualified principals know that by increasing the quality of their teaching force, they will increase the quality of their school (Goldhaber et al., 2003; Shakowski, 1999). Therefore principals need to support their teachers through the certification process offered by the National Board for Professional Teaching Standards. Principals can provide support to teachers seeking national certification in a variety of ways (Shakowski, 1999; Siciliano, 1999).

Visionary principals are effective at instituting and supporting change (Phillips, 1992). "One of the major factors that distinguishes leaders from mere managers: vision." (Phillips, 1992, p. 162) Good principals set about instituting change by persuading teachers to accept the change. When visions are shared, like in this case between principals and teachers, innovation, risk-taking and empowerment are increased (Phillips, 1992). "Genuine leaders are not only instruments of change, they are catalysts for change" (Phillips, 1992, p. 137). Principals and their schools stand to benefit when teachers achieve certification from the National Board for Professional Teaching Standards. Teachers grow professionally when they complete the certification process. This growth can result in improved teaching practices which can lead to increases in student achievement. Increasing the performance of a school may be as simple as increasing the quality of the teaching force (NCTAF, 1996; Stronge & Hindman, 2003). Therefore, principals need to know how to support teachers through the certification

process and thus increase the quality of their schools. "Building principals, as instructional leaders are constantly looking for meaningful ways to encourage and support professional growth" (Siciliano, 1999, p. 381).

Principals are vitally important to improvements in their schools. "Principals are key leaders and gatekeepers of reform in schools" (NCTAF, 1996, p. 110). Principals who work to change their schools must deliberately establish and maintain programs that have a positive impact on student achievement (Haller & Kleine, 2001). "Reform is not putting into place the latest policy. It means changing the cultures of the classrooms, the schools, the districts, the universities, and so on" (Fullan, 1991, p. xiii). For teachers to participate in and support change, they must understand what the change means to them; the change must be valuable to teachers (Fullan, 1991). If principals recruit teachers to participate and then support them through this process, the principals can have a major impact on the degree of success. According to Fullan (1991), principals should:

> (a) avoid "if only" statements, externalizing the blame, and other forms of wishful thinking; (b) start small, think big. Don't over-plan or over-manage; (c) focus on something concrete and important like curriculum and instruction (d) focus on something fundamental like the professional culture of the school; (e) practice fearlessness and other forms of risk-taking; (f) empower others below you; (g) build a vision in relation to both goals and change processes; (h) decide what you are *not* going to do; (i) build allies; and (j) know when to be cautious. (p. 167-168)

The National Board for Professional Teaching Standards encourages principals to become involved in the certification process with their teachers (NBPTS, 2004). In addition to recruiting teachers to complete the process, the National Board sees principals as a support mechanism for candidates. Thus, the National Board for Professional Teaching Standards created a Principals Advisory Board (2004). This board is designed to be a resource for principals of candidates or principals who want their teachers to become candidates. The National Board for Professional Teaching Standards hired a principal in residence to help provide this resource to principals.

Principal support is not the only entity of administrative support available to National Board candidates. Administrators such as superintendents, central office staff, and lead teachers can also lend support to teachers during the certification process. Support of the administration is important and can reach beyond the support of the building principal. Superintendents should be aware of the impact National Board Certified Teachers can have on a school district (Berg, 2003; Shakowski, 1999). Curriculum specialists and central office staff can provide resources to teachers participating in the certification process (Shapiro, 1995). By encouraging and supporting the certification process, superintendents and central office staff can contribute to increasing the overall effectiveness of the school district. According to Berg (2003) district administrators can provide curricular resources and instructional leadership to support certification candidates. Administrative support for National Board certification from all levels of the educational spectrum can greatly strengthen our schools.

The certification process from the National Board for Professional Teaching Standards is a very involved process (Berg, 2003; Hopkins, 2004). Berg (2003) further noted the following:

> National Board Certification is a time-consuming, energy-sapping, mind-engulfing process that may take up to 3 years to complete. Various candidates have said that it is more work than a doctoral dissertation, higher pressure than an important job interview, more physically and mentally challenging than a marathon, and parallel in many ways to giving birth (p. 50).

School administrators can provide release time for teachers pursuing certification to help alleviate time constraints (Shakowski, 1999; Siciliano, 1999). Candidates can use this release time for portfolio development, assessment preparation, or to attend professional workshops or conferences that will contribute to their performance in the certification process.

Administrators can support National Board candidates by providing access to district resources. The certification process requires documented accomplishments that are typewritten. Districts can provide use of computers and/or word processors to help

facilitate this portion of the certification process. Additionally, the certification process requires a video-taped entry. Candidates need to have access to quality video equipment and a knowledgeable support person to document the class environment on film (Hopkins, 2004). Teachers should have access to adequate classroom materials at all times, but certainly during the certification process. Administrators can ensure that teachers have these much needed supplies at their disposal during the certification process. School districts are also rich in human resources. Candidates for certification from the National Board for Professional Teaching Standards should have access to mentors, curriculum specialists, and professionals who are master's in their content area (Hopkins, 2004). "These investments in teacher and principal learning are among the most critical the nation can make. Strong teachers and principals stand in a place that matters to America's future" (NCTAF, 1996, p. 111).

The cost of National Board Certification (currently $2300 according to NBPTS, 2003) can be prohibitive for some teachers (Hamsa, 1998). School administrators allocate funds to support teachers with the financial investment of this process. If financial support for the certification fee is not available, this certification may be prohibitive for teachers who have the merit to achieve certification, but not the economic means (Hamsa, 1998).

Support of the Teaching Community

Teachers who participate in the certification process from the National Board for Professional Teaching Standards need support to complete the process. Teachers often find some of the needed support within the teaching staff of their own school. Effective teachers seek support from others to improve their teaching practice (NBPTS, 2003; Stronge, 2002). Additionally, the National Board certification process requires that teachers discuss their practice with their peers (Browne et al., 1999; Shapiro, 1995). This naturally sets up support of the teaching community for National Board candidates.

Schools are naturally communities of learners. Teachers who work in groups are able to provide alternative interpretations, challenge assumptions, support risk taking, share ideas, and provide nurturing support to one another (Berg, 2003). Studies show

that in order for improvements to be sustained, there must be collaboration among teachers (Blase & Blase, 1998; Guskey, 2003). By working in a collaborative nature, teachers are more likely to change their teaching practices in a positive way (Berg, 2003). "Effective teachers also work collaboratively with other staff members. They are willing to share their ideas and assist other teachers with difficulties" (Stronge, 2002, p. 20). Further, Stronge (2002) noted that effective teachers are not afraid to take risks and can lead other teachers toward meaningful reform. "These informal leaders are the ones administrators typically call on for opinions and help in effecting change" (Stronge, 2002, p. 20).

Effective teachers also work to mentor and support other teachers. In this way, they take on leadership roles within the school community (Stronge, 2002). Candidates for certification from the National Board for Professional Teaching Standards can seek the assistance of National Board Certified Teachers during the process (Hopkins, 2004). National Board Certified Teachers must give back to their own teaching community (Berg 2003; Browne et al., 1999; Hamsa, 1998). Mentoring is the most common activity of National Board Certified Teachers giving back to the teaching profession (Berg, 2003). "The intimate knowledge of the National Board Certification process will enable them [National Board Certified Teachers] to serve as effective mentors for future NBCT candidates" (Berg, 2003, p. 113).

Informal Support Programs

Formal support groups are not always available to National Board candidates. As mentioned above, teachers work in learning communities and benefit from collegiality. Teachers need support during the National Board process and they can find it informally in a variety of ways. Familial support can be beneficial to National Board Candidates. Teachers in the process must spend many hours completing the certification process. Family and life responsibilities often take a back seat when teachers are completing the certification process (Hopkins, 2004). Family members can support candidates during this process (Berg, 2003; Hopkins, 2004; Pershey, 2001; Sumner, 1997). Family support can include taking over duties such as cooking, baby-sitting, paying bills, running

errands, and laundry while the teachers complete the certification process. "Candidates who are not supported to handle this pressure in healthy ways have found themselves losing or gaining weight, restarting broken habits such as smoking or nail-biting, or even experiencing strained relationships with loved ones" (Berg, 2003, p. 50).

The National Board for Professional Teaching Standards links candidates to resources available on their website (Hopkins, 2004; NBPTS, 2004). Teachers need support during this certification process and can seek out informal support instead of or in addition to formally structured support programs. Teachers should take advantage of the collegial nature of schools, using informal supports there to further their professional development.

Formal Support Programs

Some candidates for certification from the National Board for Professional Teaching Standards seek support from their principals and colleagues or formally structured support groups (Berg, 2003; Guskey, 2003). Forming candidate groups is one way to support teachers who participate in the certification process from the National Board for Professional Teaching Standards (Berg, 2003; NBPTS, 2004). Formally structured support groups can be formed on many different levels. Schools can develop support groups for teachers in the building who are attempting certification. Formal programs can be structured and supported by the district for teachers from various schools in the area who are attempting certification. State departments of education can facilitate support groups for teachers in the state who are seeking National Board Certification. Collaborations can be made with institutions of higher education to develop and run support groups out of colleges of education. Support groups can be developed from professional development groups or from teachers' unions.

Criticism of the National Board for Professional Teaching Standards

The National Board for Professional Teaching Standards is not without critics. According to Berg (2003) millions of dollars have been used to support teachers during the certification process and to reward them after achieving certification. Many Americans want to know that their dollars are being spent wisely. The National Board

for Professional Teaching Standards has little quantitative data to back up their claims that they identify exemplary teachers and that completing the process results in better teachers and higher student achievement (Goldhaber et al., 2003; NBPTS, 2004). Despite criticisms, the National Board for Professional Teaching Standards insists that it gauges what it is intending to measure – accomplished teaching (2003). However, there are some issues with the data regarding teachers who are and are not successful in achieving certification. Female candidates are more likely to achieve certification than male candidates (Bond, 1998; Goldhaber et al., 2003). Teachers in districts located in wealthy communities with higher student achievement scores on standardized tests are more likely to certify than teachers in poorer communities with lower test scores (Blair, 2003). White teachers are more likely to be successful in achieving certification than African American teachers (Archer, 2002; Blair 2003; Brotherton, 2002; Viadero, 2002). According to Brotherton (2002), "white teachers experience a 62% pass rate while Black teachers experience an 18% pass rate" (p. 14). In an effort to combat the apparent bias of the assessment program, the National Board for Professional Teaching Standards partnered with Historically Black Colleges and Universities (Brotherton, 2002). The two groups are exploring ways to get more African-American teachers to apply for the certification and how to better prepare African-American teachers for the process. Still, as of 2002, minority teachers consisted of only 7% of National Board Certified Teachers, which is considerably lower than the nearly 16% of the teaching force they comprise (Viadero, 2002).

Some argue that the financial cost inhibits some quality teachers from attempting certification (Hamsa, 1998). If this is the case, then the National Board for Professional Teaching Standards is only identifying teachers who have the quality and the economic means to achieve certification. Further, critics point out that teachers who choose to participate in the certification process are already accomplished teachers and therefore this process simply recognizes these teachers (Archer, 2002). Following this criticism, the National Board process would not increase teaching effectiveness. Further criticisms include the notion that some teachers may be capable of exhibiting effective practices

during the certification process but do not practice these skills and dispositions on a daily basis (Johnson, 2001). Teachers who do not exhibit the qualities of an exemplary teacher every day in the classroom should not receive national recognition of their teaching practice. Additional criticism includes the notion that due to large salary bonuses available to National Board Certified Teachers, some teachers may be inclined to cheat during the process in order to receive financial gain (Podgursky, 2001). Additional questions include whether National Board Certified Teachers are able to turn around low-performing schools (Archer, 2002). Critics also want to know if teachers who achieve certification stay in the teaching field or leave for other parts of the profession where they may have less of an impact on student achievement (Archer, 2002). Clowes (2004) indicated that the content piece of the National Board process does not extend beyond the content of advanced high school classes. If this is the case, critics argue that teachers should not receive pay bonuses based on accomplishment of entry level standards (Thirunarayanan, 2004).

Summary

Good teaching matters in terms of student achievement (Berg, 2003; Cohen, 2003; Hamsa,1998; Jenkins, 2000; Kaplan & Owings, 2003; Lewis, 2004; NCTAF, 1996; Shakowski, 1999; Siciliano et al., 1999; Stronge, 2002; Stronge & Hindman, 2003). Most experts agree that the single most effective way to increase student achievement is to increase the quality of teaching. Since good teaching practice is vitally important, educational administrators need to have the tools necessary to improve the quality of their teaching force. The certification process from the National Board for Professional Teaching Standards, a non-profit, non-partisan group, offers a voluntary certification process for teachers (Jenkins, 2000; NCTAF, 1996; Shakowski, 1999). This certification identifies teachers who exhibit exemplary practices in their classrooms. Since National Board Certified Teachers are more effective than teachers who have not obtained the certification (Berg, 2003; Jacobson, 2004), schools and children stand to benefit from having these exemplary teachers in their classrooms. The purpose of this study was to determine supports which can help teachers attain this certification.

The National Board certification process is a valuable professional development activity for teachers (Berg, 2003; Hamsa, 1998). Indeed, this process is often the most valuable professional development activity of a teacher's career (Bohen, 2001; Browne et al., 1999; Darling-Hammond, 1999; Jenkins, 2000; Shakowski, 1999; Siciliano et al., 1999). Professional development activities must address the root of making schools successful, that is by increasing the quality of the teacher, resulting in increased student achievement. The certification process from the National Board for Professional Teaching Standards can be an overwhelming experience for teachers (Shakowski, 1999; Siciliano et al., 1999). Candidates need support during this process. Support can be provided by principals, teaching colleagues, and informal or formal support programs. Identifying the types of support necessary to make candidates successful in their quest for national certification is very important to advancing the profession.

Chapter III

Methods

The most effective way to increase student achievement is to increase the quality of the teacher (Berg, 2003; Cohen, 2003, Stronge, 2002). The National Board for Professional Teaching Standards recognizes teachers who exhibit exemplary practices (Berg, 2003; Goldhaber & Anthony, 2004; Jacobson, 2004; Vandervoort et al., 2004). Consequently, one way to increase student achievement is to increase the number of National Board Certified Teachers in classrooms.

Purpose of the Study

The purpose of this study was to identify the types of support programs that were available and important to teachers when seeking certification from the National Board for Professional Teaching Standards and whether support had an impact on achievement of certification. Specifically, this study addressed the following: (a) what are the types of support received while pursuing certification from the National Board for Professional Teaching Standards as perceived by National Board Certified Teachers; (b) what is the importance of each of the types of support as perceived by certification candidates from the National Board for Professional Teaching Standards; and (c) what is the relationship, if any, between receiving each of the types of support and achieving National Board Certification as perceived by certification candidates from the National Board for Professional Teaching Standards?

Research Design

This study used a multi-method approach to research (Johnson & Christensen, 2000). The first phase of the research was qualitative in nature. The second phase was a non-experimental study, classified as descriptive research (Fraenkel & Wallen, 2003; Johnson & Christensen, 2000). The researcher secured a letter of support for this study from the National Board for Professional Teaching Standards. This letter served to identify that the research was supported by the National Board for Professional Teaching Standards and to identify their assistance in contacting the sample.

Johnson and Christensen (2000) indicated that the primary purpose of descriptive research is to "provide an accurate description or picture of the status or characteristics of a situation or phenomenon" (p. 302). This study did not seek to determine cause-and-effect-relationships. Instead, the focus was to describe the variables and to describe the relationships that may exist among the variables (Johnson & Christensen, 2000). The second portion of this research project was conducted as a survey study and is considered non-experimental because there was no manipulation of variables (Johnson & Christensen, 2000). Survey research uses questionnaires to gather information and the end result is to describe or understand the characteristics of the population (Fraenkel & Wallen, 2003; Johnson & Christensen, 2000). Further, the survey for this study was considered a cross-sectional survey because the sample was drawn from a predetermined population and the information was collected about a single point in time (Fraenkel & Wallen, 2003). In accordance with federal guidelines, the researcher filed for and received consent for this study with the Marshall University Institutional Review Board (IRB) (Johnson & Christensen, 2000).

Population and Sample

The population of National Board Certified Teachers in the United States at the end of the 2002-2003 certification cycle was 32,138. For the qualitative portion of this study, a purposeful sample of National Board Certified Teachers was used to gather data (Fraenkel & Wallen, 2003). A purposeful sample was used in order to "locate information-rich individuals" (Johnson & Christensen, 2000, p. 180). This purposeful sample was chosen based on the researcher's prior knowledge of the population coupled with the purpose of this study (Fraenkel & Wallen, 2003). A purposeful sample of National Board Certified Teachers was necessary to meet cost, availability, and accessibility constraints (Johnson & Christensen, 2000). There was no lower or upper limit set on the sample size because the researcher continued to interview respondents until theoretical saturation was reached (Johnson & Christensen, 2000). Six National Board

Certified Teachers were interviewed for the qualitative portion of this study. The states of residence for these teachers were as follows: California, Florida, Kentucky (two), Virginia, and West Virginia. Two of the NBCTs achieved certification in 2001, one in 2002, and three achieved certification in 2003. The areas of certification for these NBCTs are as follows: Early Childhood Generalist, English/Language Arts (two), Exceptional Needs Specialist (two), and World Languages Other Than English.

Nationwide, there were 32,138 National Board Certified Teachers (NBPTS, 2004) at the end of the 2002-03 cycle. The National Board for Professional Teaching Standards began issuing certificates after the 1993-94 school year, and the number of teachers who achieve certification has grown each year. According to the National Board (2004), approximately 50% of the teachers who complete the process actually achieve certification. Teachers have three years to retake portions of the portfolio. The 50% rate refers to teachers who achieve certification on the initial try and also includes teachers who achieve certification after retaking portions of the portfolio. Therefore, the assumption is that approximately 64,000 teachers have completed the certification process from the National Board for Professional Teaching Standards. A more accurate count was not available from the National Board. The population of this study was the approximately 64,000 teachers who completed the certification process from the National Board for Professional Teaching Standards. Data gathered from a sample of this population will be useful to supporting future candidates.

A random sample of the population of National Board candidates was taken for the second portion of the study which was quantitative in nature. Johnson and Christensen (2000) provided a table of recommended sample sizes based on a given population. According to the table (p. 178), a population of 50,000 should have a sample size of 381. A population of 75,000 should have a sample size of 382. Since the population for this study fell in the middle of these two numbers, the researcher erred on the side of caution and took the larger

sample size. The difference was only one subject for the sample. Therefore, the desired sample size for this study was 382 National Board Certified Teachers and teachers who attempted but did not achieve certification. According to Johnson and Christensen (2000) a large sample results in a lessening of sampling errors which makes it easier to generalize the findings from the sample back to the general population. Additionally Johnson and Christensen (2000) noted that random sampling is commonly used in survey research. Random sampling techniques were used in order to get a representative sample, one that has all of the characteristics of the population but is smaller in size (Fraenkel & Wallen, 2003; Johnson & Christensen, 2000). Since random sampling is based on mathematical probability, chances are that the sample chosen randomly will be representative of the population as a whole (Johnson & Christensen, 2000).

Instrumentation

According to the literature, support is an important component for teachers who achieve certification. What was not clear, however, were the types of support programs required to make candidates successful. Because of this, the researcher needed to identify specific types of necessary support as perceived by teachers who achieved certification. The researcher interviewed National Board Certified Teachers and used techniques from phenomenological qualitative research (Johnson & Christensen, 2000) to generate the list of specific means of support found beneficial. National Board Certified Teachers were asked specifically about administrative support, the support from the teaching community, informal supports, and formal support programs that they received or participated in during the certification process (see Appendix A). The researcher listed some specific types of support such as leave time, use of equipment, moral support, and structure of support programs in an effort to guide the interview regarding support. Once the respondent had answered the guide questions, the researcher asked the respondent to add any information that may be beneficial to the study, but was not in the interview process. For an outline of the interview questionnaire, see Appendix A.

The development of the survey reflects the paucity of the literature regarding candidate support during the certification process from the National Board for Professional Teaching Standards. The literature indicated that support is needed for National Board candidates (Berg, 2003; Browne et al., 1999; Siciliano et al., 1999). Research indicated that the following support mechanisms may be helpful during the certification process: financial support, time release, moral support, mentoring, reading for content, proofreading, collegiality, use of technology, library resources, instructional materials, current research on education, and family support. However, there was no list of the specific supports that actually help candidates achieve certification. Therefore, data were gathered through an interview process from teachers who were successful in achieving certification from the National Board for Professional Teaching Standards. Emergent category analysis was performed on these data to determine the specific support mechanisms the National Board Certified Teachers (NBCTs) found necessary during the certification process. The specific support mechanisms identified by the NBCTs included the following that were mentioned in the research: mentoring, financial support, reading for content, proofreading, collegiality, time release, moral support, family support and use of technology. Additionally, the NBCTs identified support mechanisms that were not abundantly clear from the research. These included use of a time line, logistical information, and workshops. These identified mechanisms were then used to develop the instrument for the second portion of the study. Using the results from the first phase of the study, the survey components were designed. The survey used in this study was designed by the researcher. The instrument for the second portion of the study sought to determine the types of support that were provided to candidates during the certification process and their importance. Respondents to the second phase of the study identified the types of support they received during the certification process and indicated the value of the support. Additionally, they noted whether or not they achieved National Board Certification.

The survey for the second portion of the study requested information related to the types of support the respondent received during the certification program. The questionnaire used a fully anchored rating scale to note what types of support the respondents felt were beneficial during the certification process from the National Board for Professional Teaching Standards (Johnson & Christensen, 2000). The rating scale for this instrument was as follows: 1 = "very unimportant", 2 = "unimportant", 3 = "neutral", 4 = "important", 5 = "very important". The rating scale was used to give respondents a continuum of choices for their response (Johnson & Christensen, 2000). Respondents were also asked if they received each type of support. Additionally, demographic data were collected on the survey. The questions on surveys must be clear, unambiguous, and well-written (Fraenkel & Wallen, 2003). Fraenkel and Wallen (2003) noted that, "Poorly worded questions can doom a survey to failure. Hence, they must be written in a manner that is easily understandable by the respondents" (p. 402). The instrument for this survey used clear directions and clear questions for the respondents to answer. To ensure this, the survey was field tested by an expert group of educators. This pre-test served to ensure that the questions were properly worded and that the survey was easily understandable (Fraenkel & Wallen, 2003).

Data Collection

This study used two types of data collection as it used both qualitative and quantitative methods of research. For the qualitative portion of the study, data were collected through interviews with National Board Certified Teachers. For the quantitative portion of the study, a self-reported questionnaire was used (Johnson & Christensen, 2000). The questionnaire (or survey) is discussed in the instrumentation section of this chapter. The National Board for Professional Teaching Standards assisted with the sampling portion of the study. The National Board for Professional Teaching Standards obtained a random sample of National Board Certified Teachers and teachers who completed the certification process but did not achieve certification. This sample was obtained from Educational

Testing Service, the corporation that is contracted to house the data from National Board candidates. The National Board for Professional Teaching Standards sent the data file from Educational Testing Service to the researcher. This file contained the names and addresses of 766 sample members. The researcher calculated the sample size by using the formula suggested by Johnson and Christensen (2000). According to their formula, the desired sample size is divided by the proportion of the sample that is likely to respond in order to get the number of people to include in the original sample. Therefore, to end with a sample size of 382, assuming a 50% plus one response rate, the survey needed to be sent to a total of 765 participants. In accordance with Dillman (1978), the response rate was calculated by taking the number of surveys returned, divided by the number in the sample minus the noneligible and nonreachable times 100.

A return rate for this study of 50% plus one was sought as suggested by Kerlinger and Lee (2000). With this return rate, the desired sample size for generalizing to the population in this study was obtained. For the quantitative portion of the study, a self-reported questionnaire was used (Johnson & Christensen, 2000). The questionnaire (or survey) is discussed in the instrumentation section of this chapter. In addition to the questionnaire, the respondents received a cover letter that briefly described the purpose of the study and the importance of their participation (Appendix B). The letter also included an assurance to the respondent that their responses would be kept anonymous (Fraenkel & Wallen, 2003; Johnson & Christensen, 2000). The simple instructions for completing the survey were also contained on the survey. The questionnaires were prepared and coupled with the cover letter and a self-addressed stamped envelope from the researcher. Upon receipt of the survey, the respondents were to complete the questionnaire, place the completed survey in the self-addressed, stamped envelope, and return the survey via US mail to the study researcher. Candidates could choose to not participate in the study.

Shortly after the packets were mailed to the sample members, a follow-up card was sent to all members of the sample. This follow-up card thanked the respondents for their participation and served as a reminder to complete the survey for those who may not have returned the instrument to the researcher. Still, some members of the sample chose not to respond to the invitation to participate in the survey.

Data Analysis

This study used multiple methods of data gathering and analysis. For the first phase of the study, the researcher conducted interviews to gather data. The researcher analyzed the data in an attempt to get to core statements that were common among the respondents (Johnson & Christensen, 2000). Through this analysis, a list of support mechanisms that were beneficial for National Board candidates was generated. The statistics used for the quantitative data analysis are described below.

Descriptive and inferential statistics were used for data analysis in this study. Descriptive statistics were used to summarize and describe the data collected (Fraenkel & Wallen, 2003; Johnson & Christensen, 2000). Inferential statistics were used make inferences about the population based on the data gathered from the sample. The data obtained from the fully anchored rating scale in this study were quantitative since they were reported in terms of scores (Fraenkel & Wallen, 2003). Further, these data were ordinal, meaning that they included a rank-order scale of measurement (Johnson & Christensen, 2000).

The following descriptive statistics were used to analyze the quantitative data: frequency distribution, graphic representations of data, measures of central tendency (including mean, median, mode, range, spread), standard deviation, and correlations (Fraenkel & Wallen, 2003; Johnson & Christensen, 2000). These descriptive statistics served to "communicate the essential characteristics of the data" (Johnson & Christensen, 2000, p. 360).

According to Johnson and Christensen (2000) in order to go beyond the immediate data, inferential statistics can be used. Use of inferential statistics was possible because of the random sample of respondents chosen for this study (Fraenkel & Wallen, 2003). "When a sample is representative, all the characteristics of the population are assumed to be present in the sample in the same degree" (Fraenkel & Wallen, 2003, p. 228). Inferential statistics used in this study include t-tests and analysis of variance (ANOVA). T-tests were used to determine whether the difference between the means of two samples was statistically significant. T-tests were used for analysis of the research questions. ANOVAs were used to determine if there was a statistically significant difference between the means of more than two groups. ANOVAs were used for analysis of demographic data that were collected. Post hoc analyses were conducted as necessary.

<div align="center">Summary</div>

The purpose of this study was to determine the types of support received by candidates during the certification process from the National Board for Professional Teaching Standards, the importance of the various types of support, and whether support had an impact on achievement of certification. The initial study in this research project used phenomenological techniques to analyze data collected from National Board Certified Teachers in order to develop a list of support components needed by teachers who participate in this process. The second portion of this study was a non-experimental survey. The population for the second part of the study included all National Board Certified Teachers and teachers who completed the process but did not achieve certification. A random sample of National Board Certified Teachers and teachers who completed the process but did not achieve certification was selected by Educational Testing Service, the data housing body for the National Board for Professional Teaching Standards. The members of the random sample received a packet of information containing a brief description of the research and its importance, directions for

completing the survey, the survey, and a return envelope. The members of the sample who chose to participate in the study completed a researcher-designed survey and returned it to the researcher. The survey included demographic questions and a fully anchored rating scale response section. Descriptive and inferential statistics were used for analysis of quantitative data.

Chapter IV

Presentation and Analysis of the Data

This study was designed to determine the types of support received by candidates during the certification process from the National Board for Professional Teaching Standards, the importance of the various types of support, and whether support had an impact on achievement of certification. Specifically, the following research questions were addressed:

1. What are the types of support received while pursuing certification from the National Board for Professional Teaching Standards as perceived by National Board Certified Teachers?

2. What is the importance of each of the types of support as perceived by certification candidates from the National Board for Professional Teaching Standards?

3. What is the relationship, if any, between receiving each of the types of support and achieving National Board Certification as perceived by certification candidates from the National Board for Professional Teaching Standards?

This study used both qualitative and quantitative data. The first phase of the study used phenomenological techniques to analyze data collected from National Board Certified Teachers (NBCTs) in order to develop a list of support components. The researcher conducted telephone interviews with each member of the purposeful sample of six NBCTs for this portion of the study. Emergent category analysis was performed on the data to determine specific mechanisms of support to be used during the second portion of this research study. The second portion of this study utilized a survey of a random sample of National Board candidates. The members of the sample who chose to participate in the study completed a researcher-designed survey which included demographic questions and a fully anchored rating scale response section. Descriptive and inferential statistics were used for analysis of quantitative data. The purpose of this chapter is to provide a description and analysis of those data.

Population and Sample

The population for this study consisted of approximately 64,000 teachers, including 32,138 National Board Certified Teachers who achieved certification by the end of the 2002-2003 certification cycle and approximately 32,000 teachers who had completed the certification process by the end of the 2002-2003 cycle but had not achieved certification. The random sample of 766 candidates was computer generated by Education Testing Service, the company that houses candidate data for the National Board for Professional Teaching Standards. The *Brock Survey of National Board Certification Aspirants* was mailed to all members of the sample population. Responses were received from 318 sample members as a result of the first mailing. The sample members were sent a post card as a reminder to complete and return the survey. The second mailing resulted in an additional 61 surveys being returned for a total of 379 returned surveys. Eleven surveys were returned from the U.S. Postal Service as undeliverable. Within the sample, there were two duplicates, a result of random sampling. The response rate was calculated by dividing the number of returned surveys by the number in the sample minus the non-eligible and non-reachable, the sum of which is multiplied by 100 (Dillman, 1978). Using this formula, the response rate for this study was 50.33%.

Demographic Data

The *Brock Survey of National Board Certification Aspirants* collected demographic data from respondents. The following demographic data were collected: years of teaching experience, sex, race, school setting (rural, suburban, urban), percentage of free and reduced lunch eligible students, highest degree earned, number of National Board Certified Teachers (NBCTs) in the same school, number of National Board Certified Teachers in same district, subject area and developmental level of National Board Certificate.

Respondents were, on average, close to the middle of their teaching career with an average 15 years experience. Overwhelmingly, they were white and female. There was a fairly even distribution of school type: rural, suburban, and urban. The average

free and reduced lunch eligible students in the schools of respondents was close to 50%. Most respondents had a master's degree. There were typically four NBCTs in their schools and 66 in their districts. The most common content area for respondents was generalist. This section provides a summary of the descriptive demographic data gathered by the survey.

Years of Teaching Experience

Respondents reported a mean of 16 years of teaching experience, with a range of 3 to 41 years. The median was 15 years of teaching experience. When sorted by achievement of certification, the mean years of experience was 15.7. For those respondents who did not achieve certification, the mean years of experience was 16.0 years.

Sex

Forty of the respondents were male and 336 of the respondents were female. The male respondents represented 10.6% of the sample and the female respondents represented 89.4% of the sample.

Race

Three hundred thirty-five of the respondents indicated their race to be white/Caucasian, representing 89.1% of the sample. Twenty-two respondents (5.9%) from the sample identified their race to be black/African-American. Hispanics represented 2.7% of the sample or 10 respondents. One (0.3%) respondent identified American Indian as the race. Four respondents identified race to be Asian and four did not identify race on the survey. Each of these two categories accounts for 1.1% of the sample.

Type of School District

Respondents were asked to identify the type of school district with which they were employed: rural, suburban, or urban. The majority of the respondents (n=150, 39.9%) indicated that their school district was suburban. One hundred forty (37.2%) respondents identified their school district as rural. The remaining 86 (22.9%) respondents indicated that their school districts were urban.

Percentage of Free and Reduced Lunch

The *Brock Survey of National Board Certification Aspirants* asked respondents to indicate the percentage of free and reduced lunch students at their school. The mean percentage of free and reduced lunch eligible students in the schools of the teachers surveyed was 48.21%.

Highest Degree Earned

Respondents were asked to note the highest educational degree they had attained. The majority of the respondents, 229 (60.9%) noted that they had earned a master's degree. Respondents with a bachelor's degree represented the next largest group, with 118 (31.4%) of the sample respondents. Sixteen (4.3%) respondents indicated that they had earned an education specialist degree. There were nine respondents (2.4%) with an earned doctorate. Four respondents (1.1%) indicated something other than the choices mentioned above.

National Board Certified Teachers in Schools and Districts

The mean number of National Board Certified Teachers (NBCTs) in the schools of the respondents was four. The mean number of NBCTs in the districts was 66. The number of NBCTs in the schools of the respondents varied from 0 (n=26, 6.9%) of the sample, to 60, (n=1, 0.3%) of the sample. The number of NBCTs in the districts of the respondents ranged from 0 to 1500.

Area of Certification

The *Brock Survey of National Board Certification Aspirants* asked those teachers who achieved certification from the National Board for Professional Teaching Standards to indicate the content area of their certificate. The results are as follows: 86 respondents (37.9%) identified generalist as the content area on their certificate, 30 respondents (13.2%) identified English language arts as the content area on their certificate, 17 respondents (7.5%) identified each exceptional needs specialist, library media, and science as the content area on their certificate, 11 respondents (4.8%) identified mathematics and music as the content area on their certificate, 10 respondents

(4.4%) identified social studies/history as the content area on their certificate, six respondents (2.6%) identified both art and world languages other than English as the content area on their certificate, five respondents (2.2%) identified physical education as the content area on their certificate, and two respondents (0.9%) identified each career and technical education and English as a new language as the content area on their certificate.

Major Findings

The major findings of this study are presented in this section and are arranged to represent each research question addressed in this study. The first research question was answered using qualitative data analyzed with emergent category analysis. The quantitative data were analyzed using SPSS 11.0. Stepwise regression, Pearson Correlations, and descriptive statistics (frequencies and crosstabs) were used in the quantitative statistical analyses for this study.

Question one: What are the types of support received while pursuing certification from the National Board for Professional Teaching Standards as perceived by National Board Certified Teachers?

The support mechanisms that were identified in research and verified to be important during the qualitative inquiry for this study were mentoring, financial support, reading for content, proofreading, collegiality, time release, moral support, family support, and use of technology. During the interviews, mentoring was mentioned 11 times by the six sample members. Financial support was identified as important 10 times. Reading for content and proofreading were both identified by the National Board Certified Teachers (NBCTs) on seven occasions. Collegiality was mentioned six times by NBCTs during the interviews. Time release, moral support and family support all received mention four times during the interviews. The use of technology was mentioned three times. Beyond the support mechanisms identified in the literature, these NBCTs identified three additional important support mechanisms. Use of a time-line and workshops

were each mentioned on five occasions as important supports for National Board candidates. Logistical information was mentioned four times by this group.

These support mechanisms were used to design the survey that addressed the second and third research questions of this study. Mechanisms of support that were mentioned by the respondents but not included in the survey included current research on education (2) , planning ahead (2), outlining standards (2), realistic picture of commitment (2), someone to be responsible to (1), working on master's degree at same time (1), and content groups (1). The number of times each support mechanism was indicated by the sample members is displayed in Appendix C.

Question Two: What is the importance of each of the types of support as perceived by candidates for certification from the National Board for Professional Teaching Standards?

Respondents were asked on the *Brock Survey of National Board Certification Aspirants* to report the importance of each of the support mechanisms identified in research question one using a five point rating scale. The support mechanisms were identified as the following: mentoring, financial support, having someone read for content, proofreading, collegiality, time release, moral support, family support, the use of technology, having a time line with progress deadlines, logistical information, and workshops. The rating scale for this instrument was as follows: 1 = "very unimportant", 2 = "unimportant", 3 = "neutral", 4 = "important", 5 = "very important". The data were analyzed to determine the importance of each support mechanism to the entire group, to respondents who achieved certification from the National Board for Professional Teaching Standards and to the respondents who did not achieve certification. Comparisons of each support mechanism to the importance to the total group, the importance to National Board Certified Teachers, and to non-certified teachers are indicated in Table 1.

Table 1

Importance of Support Mechanisms

Support Mechanism	Total Sample		Respondents Who Achieved Certification		Respondents Who Did Not Achieve Certification	
	Very Important	Rank Order	Very Important	Rank Order	Very Important	Rank Order
Financial Support	69.9%	1	74.0%	1	62.4%	3
Reading for Content	65.4%	2	66.5%	2	63.8%	1
Mentoring	62.0%	3	61.7%	4	62.4%	2
Family Support	61.2%	4	63.9%	3	57.0%	4
Proofreading	54.5%	5	55.1%	5	53.7%	6
Use of Technology	54.0%	6	54.6%	6	53.0%	7
Moral Support	53.7%	7	53.7%	7	53.7%	5
Having a Time Line	51.3%	8	52.9%	8	49.0%	8
Time Release	42.3%	9	39.6%	10	46.3%	9
Collegiality	39.9%	10	43.6%	9	34.2%	11
Logistical Information	36.7%	11	36.1%	11	37.6%	10
Workshops	31.4%	12	30.4%	12	32.9%	12

Mentoring. Sixty-two percent of respondents felt that mentoring was "very important" to the certification process. Twenty-five percent of respondents felt that mentoring was "important" during the certification process. Therefore, 86.5% of respondents felt that mentoring was either "very important" or "important" to the process. The remaining choices on the scale ("neutral", "unimportant", and "very unimportant") each received less than 7% of the responses. The mean for mentoring by the whole sample was 4.4. Sixty-two percent of the respondents who achieved certification felt that mentoring was "very important" during the certification process. Sixty-two percent of respondents who did not achieve certification noted that mentoring was "very important" during the certification process. Table 2 shows the comparison of the importance of mentoring for total respondents to the importance reported by NBCTs and to the importance reported by those who did not achieve certification.

Table 2

Importance of Mentoring

	Very Unimportant		Unimportant		Neutral		Important		Very Important	
	n=	%	n=	%	n=	%	n=	%	n=	%
All Respondents	19	5.1	6	1.6	25	6.6	92	24.5	233	62.0
NBCTs	8	3.5	3	1.3	16	7.0	59	26.0	140	61.7
Non-achievers	11	7.4	3	2.0	9	6.0	33	22.1	93	62.4

Financial support. According to 70% of the sample respondents, financial support was "very important" with a mean of 4.4. Seventy-four percent of respondents who achieved certification felt that financial support was "very important" during the certification process. Sixty-two percent of respondents who did not achieve certification indicated that financial support was "very important" during the certification process. Table 3 shows the comparison of the importance of financial support for total respondents to the importance reported by NBCTs and to the importance reported by those who did not achieve certification.

Table 3

Importance of Financial Support

	Very Unimportant		Unimportant		Neutral		Important		Very Important	
	n=	%	n=	%	n=	%	n=	%	n=	%
All Respondents	23	6.1	6	1.6	19	5.1	65	17.	26	69.9
NBCTs	8	3.5	4	1.8	14	6.2	33	14.	16	74.0
Non-achievers	15	10.1	2	1.3	5	3.4	32	21.	95	63.8

Having someone read for content. Sixty-five percent of the sample respondents felt that having someone read entries for content was "very important". Having someone read for content was reported as "important" by 21% of the respondents. The mean for this support mechanism was 4.4. National Board Certified Teachers (NBCTs) in this study felt that having someone read for content was "very important" 67% of the time. Sixty-four percent of respondents who did not achieve certification indicated that having someone read for content was "very important" during the certification process. Table 4 shows the comparison of the importance of having someone read for content for total respondents to the importance reported by NBCTs and to the importance reported by those who did not achieve certification.

Table 4

Importance of Having Someone Read for Content

	Very Unimportant		Unimportant		Neutral		Important		Very Important	
	n=	%	n=	%	n=	%	n=	%	n=	%
All Respondents	25	6.6	9	2.4	16	4.3	77	20.	246	65.
NBCTs	10	4.4	5	2.2	9	4.0	52	22.	151	66.
Non-achievers	15	10.1	4	2.7	7	4.7	25	16.	95	63.

Proofreading. Proofreading, the process of checking work for grammatical as opposed to content errors, was noted as a "very important" support mechanism 55% of all respondents in this study. Twenty-six percent of the respondents felt it "important". The mean for proofreading for the whole sample was 4.2. Fifty-five percent of National Board Certified Teachers (NBCTs) felt that proofreading was "very important" during the certification process. Fifty-four percent of respondents who did not achieve certification indicated that proofreading was "very important" during the certification process. Table 5 displays a comparison of the importance of proofreading for total respondents to the importance reported by NBCTs and to the importance reported by those who did not achieve certification.

Table 5

Importance of Proofreading

	Very Unimportant		Unimportant		Neutral		Important		Very Important	
	n=	%	n=	%	n=	%	n=	%	n=	%
All Respondents	24	6.4	16	4.3	30	8.0	99	26.	20	54.5
NBCTs	11	4.8	7	3.1	20	8.8	64	28.	12	55.1
Non-achievers	13	8.7	9	6.0	10	6.7	35	23.	80	53.7

Collegiality. On the *Brock Survey of National Board Certification Aspirants*, 40% of the respondents felt that collegiality was "very important" during the certification process. Thirty-seven percent felt it "important". The mean score of the total sample for the importance of collegiality as a support mechanism was 4.0. Collegiality was reported as "very important" by 44% of respondents who achieved certification. Thirty-four percent of respondents who did not achieve certification indicated that collegiality was "very important" during the certification process. Table 6 shows the comparison of the importance of collegiality for total respondents to the importance reported by NBCTs and to the importance reported by those who did not achieve certification.

Table 6

Importance of Collegiality

	Very Unimportant		Unimportant		Neutral		Important		Very Important	
	n=	%	n=	%	n=	%	n=	%	n=	%
All Respondents	19	5.1	13	3.5	51	13.6	13	36.	150	39.
NBCTs	7	3.1	8	3.5	33	14.5	78	34.	99	43.
Non-achievers	12	8.1	5	3.4	18	12.1	60	40.	51	34.

Time release. Forty-two percent of the sample respondents felt that having time release from their classroom was "very important" during the certification process. Time release was reported as "important" by 35% of the respondents. The mean for this support mechanism was 4.0. National Board Certified Teachers (NBCTs) in this study reported that time release was "very important" 39.6% of the time. Forty-six percent of respondents who did not achieve certification indicated that time release was a "very important" support mechanism during the certification process. Table 7 shows the comparison of the importance of time release for total respondents to the importance reported by NBCTs and to the importance reported by those who did not achieve certification.

Table 7

Importance of Time Release

	Very Unimportant		Unimportant		Neutral		Important		Very Important	
	n=	%	n=	%	n=	%	n=	%	n=	%
All Respondents	19	5.1	23	6.1	44	11.7	13	34.	15	42.
NBCTs	7	3.1	14	6.2	30	13.2	85	37.	90	39.
Non-achievers	12	8.1	9	6.0	14	9.4	45	30.	69	46.

Moral support. Moral support was noted as a "very important" support mechanism by 54% of the respondents in this study. Thirty-four percent of the respondents felt it "important". The mean for the importance of moral support as a support mechanism was 4.3. Fifty-four percent of National Board Certified Teachers (NBCTs) in this study indicated that moral support was "very important" during the certification process. Fifty-four percent of respondents who did not achieve certification indicated that moral support was a "very important" support mechanism during the certification process. Table 8 shows the comparison of the importance of moral support for total respondents to the importance reported by NBCTs and to the importance reported by those who did not achieve certification.

Table 8

Importance of Moral Support

	Very Unimportant		Unimportant		Neutral		Important		Very Important	
	n=	%	n=	%	n=	%	n=	%	n=	%
All Respondents	16	4.3	6	1.6	25	6.6	12	33.	20	53.
NBCTs	5	2.2	4	1.8	13	5.7	83	36.	12	53.
Non-achievers	11	7.4	2	1.3	12	8.1	44	29.	80	53.

Family support. Sixty-one percent of respondents indicated that family support was "very important" during the certification process. Family support was reported as "important" by 26% of the respondents. The mean for family support was 4.4. Sixty-four percent of respondents who achieved certification indicated that family support was "very important" during the certification process. Fifty-seven percent of respondents who did not achieve certification indicated that family support was a "very important" support mechanism during the certification process. Table 9 notes the importance of family support for total respondents compared to the importance reported by NBCTs and to the importance reported by those who did not achieve certification.

Table 9

Importance of Family Support

	Very Unimportant		Unimportant		Neutral		Important		Very Important	
	n=	%	n=	%	n=	%	n=	%	n=	%
All Respondents	17	4.5	6	1.6	25	6.6	97	25.8	230	61.2
NBCTs	5	2.2	5	2.2	19	8.4	53	23.3	145	63.9
Non-achievers	12	8.1	1	0.7	6	4.0	44	29.5	85	57.0

The use of technology. The use of technology, including computers, the internet, video equipment, etc., by candidates was reported as "very important" by 54% of the respondents. Thirty-four percent felt it "important". The mean for this support mechanism was 4.3. National Board Certified Teachers (NBCTs) in this study indicated that the use of technology was a "very important" support mechanism during the certification process in 54.6% of the cases. Fifty-three percent of respondents who did not achieve certification indicated that the use of technology was a "very important" support mechanism during the certification process. Table 10 shows the comparison of the use of technology for total respondents to the importance reported by NBCTs and to the importance reported by those who did not achieve certification.

Table 10

Importance of the Use of Technology

	Very Unimportant		Unimportant		Neutral		Important		Very Important	
	n=	%	n=	%	n=	%	n=	%	n=	%
All Respondents	18	4.8	2	0.5	22	5.9	12	34.	203	54.
NBCTs	7	3.1	1	0.4	14	6.2	79	34.	124	54.
Non-achievers	11	7.4	1	0.7	8	5.4	49	32.	79	53.

Having a time line with progress deadlines. Fifty-one percent of respondents to the survey felt having a time line with progress deadlines was a "very important" support mechanism during the certification process. Having a time line with deadlines was "important" to 30% of the respondents. Having a time line with progress deadlines had a mean value of 4.2. Fifty-three percent of the National Board Certified Teachers (NBCTs) in this study indicated that having a time line was a "very important" support mechanism. Forty-nine percent of respondents who did not achieve certification indicated that having a time line with progress deadlines was a "very important" support mechanism during the certification process. Table 11 shows the comparison of the importance of having a time

line with progress deadlines for total respondents to the importance reported by NBCTs
and to the importance reported by those who did not achieve certification.

Table 11

Importance of Having a Time Line with Progress Deadlines

	Very Unimportant		Unimportant		Neutral		Important		Very Important	
	n=	%	n=	%	n=	%	n=	%	n=	%
All Respondents	15	4.0	13	3.5	44	11.7	11	29.	19	51.
NBCTs	3	1.3	9	4.0	24	10.6	71	31.	12	52.
Non-achievers	12	8.1	4	2.7	20	13.4	40	26.	73	49.

Logistical information. Logistical information, the knowledge of the management
details of the National Board process, was "very important" to 37% of the respondents.
Forty-four percent felt it an "important" support mechanism during the certification
process. The mean value for logistical information as a support mechanism was 4.1.
Thirty-six percent of National Board Certified Teachers (NBCTs) in this study indicated
that logistical information was a "very important" support mechanism during the
certification process. Thirty-eight percent of respondents who did not achieve
certification indicated that logistical information was a "very important" support
mechanism during the certification process. Table 12 shows the comparison of the
importance of logistical information for total respondents to the importance reported by
NBCTs and to the importance reported by those who did not achieve certification.

Table 12

Importance of Logistical Information

	Very Unimportant		Unimportant		Neutral		Important		Very Important	
	n=	%	n=	%	n=	%	n=	%	n=	%
All Respondents	14	3.7	3	0.8	50	13.3	16	43.	13	36.
NBCTs	3	1.3	2	0.9	30	13.2	10	46.	82	36.
Non-achievers	11	7.4	1	0.7	20	13.4	59	39.	46	37.

Workshops. Thirty-one percent of the respondents felt that workshops were a "very important" support mechanism during the certification process. Workshops were identified as an "important" by forty percent of the respondents. The mean score for workshops as a support mechanism was 3.9. National Board Certified Teachers (NBCTs) indicated that workshops were "very important" support mechanisms in 30% of the cases. Thirty-three percent of respondents who did not achieve certification indicated that workshops were "very important" during the certification process. Table 13 shows the comparison of the importance of workshops for total respondents to the importance reported by NBCTs and to the importance reported by those who did not achieve certification.

Table 13

Importance of Workshops

	Very Unimportant		Unimportant		Neutral		Important		Very Important	
	n=	%	n=	%	n=	%	n=	%	n=	%
All Respondents	16	4.3	19	5.1	71	18.9	150	39.	11	31.
NBCTs	6	2.6	13	5.7	49	21.6	89	39.	69	30.
Non-achievers	10	6.7	6	4.0	22	14.8	61	40.	49	32.

Question Three: What is the relationship, if any, between receiving each of the types of support and achieving National Board Certification as perceived by candidates for certification from the National Board for Professional Teaching Standards?

For the third research question, each support mechanism was correlated with achievement of certification to determine if there was a relationship between receipt of the support and achievement of certification. Respondents were asked to answer yes or no as to whether they received each of the support mechanisms during the certification process. The Pearson Product-Moment Coefficient of correlation was used to analyze the data. Significance at the .01 level was found for achievement of certification and received reading for content. Significance at the .05 level was found for achievement of certification and receipt of collegial support. These were positive correlations. No significance was found for the support mechanisms of mentoring, financial support, proofreading, time release, family support, use of technology, use of a time line, logistical information, and workshops. Table 14 displays the correlations between achievement of certification and the mechanisms of support in this study.

Table 14

Correlations Between Achievement of Certification and Type of Support

Type of Support	Significance (2-tailed)
Mentoring	.255
Financial Support	.518
Reading for Content	.008*
Proofreading	.073
Collegiality	.011**
Time Release	.157
Family Support	.931
Use of Technology	.932
Having a Time Line	.268
Logistical Information	.755
Workshops	.796

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

Ancillary Findings

When the data were analyzed using The Pearson Product-Moment Coefficient of correlation including only respondents who achieved certification, an additional mechanism of support showed significance. Here, mentoring showed significance at the .05 level. Again, receipt of reading for content and collegial support showed significance. When analyzed using only achievers, both of these mechanisms of support showed significance at the .01 level. Specifically,

reading for content showed significance (2-tailed) at .007 and collegial support showed significance (2-tailed) at .004. Table 15 displays these correlations.

Table 15

Correlations Using Achievers and Type of Support

Type of Support	Significance (2-tailed)
Mentoring	.020*
Reading for Content	.007**
Collegiality	.004**

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

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

Ancillary Findings Using Demographic Data

     Years of experience. When the data were analyzed using the Pearson Product-Moment Coefficient of correlation and sorting respondents with less than ten years of teaching experience, receipt of collegial support showed significance (.039) at the .05 level (2-tailed). Use of a time line showed 2-tailed significance (.033) for respondents with more than twenty years of teaching experience. Table 16 displays the correlations between achievement of certification and mechanisms of support by years of experience of the respondents.

Table 16

Correlations – Achievement of Certification and Mechanism of Support by Years of

 Experience

Years of Experience	Mechanism of Support	Significance
3-6	--	--
3-10	Receipt of collegial support	.039*
3-15	--	--
20+	Use of time line	.033*
25+	--	--

*Correlation is significant at the .05 level (2-tailed).

Sex. The data were analyzed using the Pearson Product-Moment Coefficient of correlation and sorting for sex. For males, receipt of mentoring showed significance (.033) at the .05 level (2-tailed). Mentoring did not show significance for females. Receipt of reading for content (.019) and receipt of collegial support (.026) both showed significance (2-tailed) at the .05 level for females. Neither showed significance for males. Table 17 displays the correlations between achievement of certification and mechanisms of support by sex of the respondents.

Table 17

Correlations – Achievement of Certification and Mechanism of Support by Sex

Sex	Mechanism of Support	Significance
Males	Receipt of mentoring	.033*
Females	Receipt of reading for content	.019*
	Receipt of collegial support	.026*

*Correlation is significant at the .05 level (2-tailed).

Race. When the data were analyzed using the Pearson Product-Moment Coefficient of correlation and sorting respondents by race, 2-tailed significance was found for receipt of reading for content (.005), receipt of proofreading (.049), and receipt of collegial support (.028) among Whites/Caucasians. When the data were sorted by Black/African-American, American Indian, and Hispanics, no significance was found for any of the support mechanisms.

Significance was found using the Pearson Product-Moment Coefficient of correlation for race and achievement of certification (.028). The correlation was significant at the .05 level (2-tailed). When the data were further analyzed using crosstabs, respondents who indicated they were white/Caucasian achieved certification in 62.4% of the cases. Hispanics achieved certification in 70.0% of the cases. Blacks/African Americans achieved certification in 40.9% of the cases. Asians achieved certification in 25% of the cases and the one American Indian achieved certification. Table 18 shows the relationship between certification rates and race.

Table 18

Percentage Rate of Certification by Race

Race	# achieved certification	% achieved	# did not achieve	% not achieved
White/Caucasian	209	62.4	126	37.6
Black/African-American	9	40.9	13	59.1
Asian	1	25.0	3	75.0
Hispanic	7	70.0	3	30.0
American Indian	1	100.0	--	--

Rural, Suburban, or Urban. When the data were analyzed using the Pearson Product-Moment Coefficient of correlation and sorting respondents by the type of school district, there was no significance found among the support mechanisms and teachers in

rural school districts. Receipt of reading for content (.019), receipt of proofreading (.009) and use of technology (.026) showed significance among respondents from suburban school districts. Receipt of collegial support showed significance at .006 for respondents from urban school districts.

      Percentage of Free and Reduced Lunch. When the data were analyzed using the Pearson Product-Moment Coefficient of correlation and sorting respondents by percentages of free and reduced lunch eligible students in their schools, receipt of collegial support (.001), receipt of time release (.020), use of technology (.006), and use of workshops (.025) showed significance among respondents with less than 25% free and reduced lunch students. Receipt of reading for content (.006), receipt of proofreading (.046) and receipt of collegial support (.008) showed significance among respondents with less than 50% free and reduced lunch students. Collegial support showed significance for respondents with 75% or greater free and reduced lunch students (.012) and for respondents with 90% or greater free and reduced lunch students (.001). There was no significance found among respondents with greater than 50% but less than 75% free and reduced lunch students. Table 19 displays the correlations between achievement of certification and mechanisms of support by percentage of free and reduced lunch students in the schools of the respondents.

Table 19

Correlations – Achievement of Certification and Mechanism of Support by Free and
Reduced Lunch Eligible Students

% of Free and Reduced Lunches	Mechanism of Support	Significance
Less than 25%	Receipt of collegial support	.001*
	Receipt of time release	.020**
	Use of technology	.006*
	Use of workshops	.025**
Less than 50%	Receipt of reading for content	.006*
	Receipt of proofreading	.046**
	Receipt of collegial support	.008*
Between 50% and 75%	No significance found	---
Greater than 75%	Receipt of collegial support	.012**
Greater than 90%	Receipt of collegial support	.001*

*Correlation is significant at the .01 level (2-tailed).

**Correlation is significant at the .05 level (2-tailed).

Significance was found using the Pearson Product-Moment Coefficient of
correlation for percentage of free and reduced lunch students and achievement of
certification (.003). The correlation was significant at the .01 level.

When the data were further analyzed using crosstabs, achievement of certification
and percentage of free and reduced lunch students in schools were inversely related. The
percentage of respondents who achieved certification decreased as the percentage of free
and reduced lunch students in their schools increased. Table 20 shows the relationship
between certification rates and percentage of free and reduced lunch students.

Table 20

Percentage Rate of Certification by Free and Reduced Lunch Eligible Students

Percentage of Free and Reduced Lunch Students	Percentage of Respondents in Free/Reduced Range Who Achieved Certification
0-25	69.4
26-50	65.2
51-75	55.7
76-100	50.0

Highest Degree Earned. When the data were analyzed using the Pearson Product-Moment Coefficient of correlation and sorting respondents by highest degree earned, receipt of reading for content (.013) showed 2-tailed significance for respondents with a master's degree. There was no significance among support mechanisms and receipt of certification for respondents with bachelor's, education specialist, or doctoral degrees.

Summary

This study used both qualitative and quantitative methods of gathering data. Six National Board Certified Teachers were purposefully chosen and interviewed by telephone for the qualitative portion of the study. Emergent category analysis was performed on these data to determine the support mechanisms that are important to candidates during the certification process from the National Board for Professional Teaching Standards. Once these support mechanisms (mentoring, financial support, reading for content, proofreading, collegiality, time release, moral support, family support, use of technology, use of a time line, logistical information, and workshops) were identified, they were used to create the *Brock Survey of National Board Certification Aspirants.* Three hundred seventy-nine respondents participated in the survey portion of this study. The survey instrument collected information about the

importance of each support mechanism, receipt of support mechanisms, achievement of certification, and demographic data. The response rate was 50.33% for this study.

For importance of the support mechanisms, respondents noted importance of support on a fully anchored, five point rating scale with 5 indicating that the support mechanism was very important and 4 indicating that the support mechanism was important. The highest indications of support received were reported in the categories of financial support, family support, mentoring, and reading for content. Each had a mean score for importance above 4.35 on the five point rating scale. All mechanisms of support had a mean score near 4.0, indicating that each is important during the certification process.

To determine the relationship, if any, between receiving each type of support and achieving National Board Certification as perceived by certification candidates from the National Board for Professional Teaching Standards, correlation statistics were used to compare attainment of certification to whether or not the respondents achieved the type of support. There was a significant relationship between achievement of certification and reading for content and collegial support. No significance was found for receipt of mentoring, financial support, proofreading, time release, family support, use of technology, time line, logistical information, and workshops. Correlations were noted between the achievement of certification and the mechanisms of reading for content and collegiality.

Ancillary findings of this study indicate that the type of support necessary varies depending on the demographics of the candidates. There was a difference in significant types of support when comparing males and females and when comparing whites/Caucasians and other races. Significance of support also varied based on the years of experience of the respondent, the type (rural, suburban, or urban) of school district, as well as the percentage of eligible free and reduced lunch students.

Chapter V

Summary, Conclusions and Recommendations

      The classroom teacher is the most influential school-related force in increasing student achievement (Stronge, 2002). The National Board for Professional Teaching Standards gauges quality teaching and is touted as a way to increase the success of the educational system in this country. The purpose of this study was to determine the types of support teachers received during the process, the importance of the various types of support, and whether support had an impact on achievement of certification from the National Board for Professional Teaching Standards. Specifically, the following research questions were addressed:

1. What are the types of support received while pursuing certification from the National Board for Professional Teaching Standards as perceived by National Board Certified Teachers?

2. What is the importance of each of the types of support as perceived by certification candidates from the National Board for Professional Teaching Standards?

3. What is the relationship, if any, between receiving each of the types of support and achieving National Board Certification as perceived by certification candidates from the National Board for Professional Teaching Standards?

Summary of Procedures

      This study was performed using a mixed methods (qualitative and quantitative) approach to research (Johnson & Christensen, 2000). The first phase of the research was qualitative in nature and included interviewing a purposeful sample of National Board Certified Teachers. Six National Board Certified Teachers were interviewed by telephone for this portion of the study. The researcher used techniques from phenomenological qualitative research to generate the list of specific types of support found beneficial. National Board Certified Teachers were asked about administrative support, support from the teaching community, informal supports, and formal support programs that they received or participated in during the certification process. The mechanisms of

support that were determined by this purposeful sample were used to develop the instrument for the second portion of the study.

The second phase was a non-experimental study, classified as descriptive research (Fraenkel & Wallen, 2003; Johnson & Christensen, 2000). This portion of the research project was conducted as a survey study and was considered non-experimental because there was no manipulation of variables. The survey for this study was considered a cross-sectional survey because the sample was drawn from a predetermined population and the information was collected about a single point in time. The population for the second portion of this study was the approximately 64,000 teachers who have completed the certification process from the National Board for Professional Teaching Standards. The National Board for Professional Teaching Standards provided a random sample of National Board Certified Teachers and teachers who completed the certification process but did not achieve certification. Surveys, a cover letter, and a self-addressed, stamped envelope were sent to 766 randomly selected candidates from the National Board for Professional Teaching Standards. A follow-up postcard was sent to the candidates as a reminder to complete the survey. The desired return rate of 50% plus one was obtained, making the results of this study generalizable to the population.

The *Brock Survey of National Board Certification Aspirants* used in this study was designed by the researcher. The instrument for the second portion of the study sought to determine the types of support that were provided to candidates during the certification process and their importance. Respondents to the second phase of the study identified the types of support they received during the certification process and indicated the value of the support. Additionally, the respondents noted whether or not they achieved National Board Certification. The survey used a fully anchored rating scale to note what types of support the respondents felt were beneficial during the certification process from the National Board for Professional Teaching Standards (Johnson & Christensen, 2000). The

rating scale for this instrument was as follows: 1 = "very unimportant", 2 = "unimportant", 3 = "neutral", 4 = "important", 5 = "very important". The survey was field tested by an expert group of educators. There were no changes made to the survey as a result of the field test.

Descriptive and inferential statistics were used for data analysis in the second portion of the study. The following descriptive statistics were used to analyze the quantitative data: frequency distribution, measures of central tendency (including mean, median, mode, range, spread), and correlations (Fraenkel & Wallen, 2003; Johnson & Christensen, 2000).

<div align="center">Descriptive Data</div>

The *Brock Survey of National Board Certification Aspirants* was used to collect demographic data from respondents. Respondents reported a mean of 16 years of teaching experience, with a range of 3 to 41 years. The median was 15 years of teaching experience. Male respondents represented 10.6% of the sample and female respondents represented 89.4% of the sample. The respondents identified race as follows: white/Caucasian, 89.1%; black/African-American, 5.9%; Hispanic, 2.7%, American Indian, 0.3%; Asian, 1.1%. The majority of the respondents, 39.9%, indicated that their school districts were suburban. Rural was identified by 37.2% of the respondents and 22.9% indicated that their school districts were urban. The mean percentage of free and reduced lunch eligible students in the schools served by respondents for this sample was 48%. The majority of the respondents, 60.9% noted that they had earned a master's degree. The mean number of National Board Certified Teachers (NBCTs) in the schools of the respondents was four. The mean number of NBCTs in the respondents'districts was 66.

<div align="center">Summary of Findings and Conclusions</div>

Question One: What are the types of support received while pursuing certification from the National Board for Professional Teaching Standards as perceived by National Board Certified Teachers?

The following support mechanisms were identified as "important" during the qualitative inquiry for this study: mentoring, financial support, reading for content, proofreading, collegiality, time release, moral support, family support, and use of technology. The National Board Certified Teachers (NBCTs) interviewed for this portion of the study verified what the research indicated: the above mentioned support mechanisms are important to candidates during the certification process from the National Board for Professional Teaching Standards (Berg, 2003; Hopkins, 2004). Beyond the support mechanisms identified in the literature, the NBCTs interviewed identified three additional important support mechanisms: use of a time-line, workshops, and logistical information. This portion of the study was designed to identify the support mechanisms that are "important" during the certification process because while the research indicated that support was important, the specific types of support needed were not clear. This qualitative study verified supports found in the literature and identified three new support mechanisms. Two of the newly identified mechanisms (logistical information and a time-line) help candidates with the process of National Board Certification. Direct assistance to the teacher, attention to the product and logistical or process information were all shown to be important to respondents in this study. Additionally, the availability of workshops is possibly tied to several other mechanisms of support. For example, one can receive reading for content, proofreading, collegiality, moral support and help with technology during a workshop. It is possible that there is some overlap in these support mechanisms.

Question Two: What is the importance of each of the types of support as perceived by candidates for certification from the National Board for Professional Teaching Standards?

The respondents on the whole, and as grouped by respondents who achieved certification and those who did not achieve certification, reported that each support mechanism was important during the certification process. All respondents indicated the

importance of the support mechanisms with mean scores from 3.9 for workshops to 4.4 for financial support with 4 being important and 5 being very important on the rating scale. When analyzed based on respondents who achieved certification and those who did not achieve certification, the results were similar. Respondents who achieved certification ranked the importance of the support mechanisms with mean scores of 3.9 for workshops to 4.5 for financial support, again based on the same ranking scale. Respondents who did not achieve certification ranked the importance of the support mechanisms with mean scores of 3.9 for workshops to 4.3 for mentoring.

Sixty-two percent of respondents felt that mentoring was very important to the certification process. Nearly 25% of respondents felt that mentoring was important during the certification process. Therefore, 86.5% of respondents felt that mentoring was very important or important to the process. Shakowski (1999) described a support program in Colorado that recruited and then mentored teachers through the process. Mentoring support can range from providing personal support to the candidate to providing training opportunities to communicating the importance of the process to stakeholders in education. Berg (2003) and Harman (2002) also noted the importance of mentoring. When teachers feel supported, they take on increased responsibility and independence. Pershey (2001) identified mentors as "coaches" and recommended that candidates spend 10 hours with their coaches.

According to 70% of the sample respondents, financial support was very important. The literature also indicates that financial support is important during the certification process (Siciliano, 1999). Such support can range from financial support for the certification fee to additional teacher compensation in the form of bonuses or additional salaries for teachers who achieve certification. In North Carolina, Goldhaber et al. (2003) found that teachers in districts with financial incentives were 50% more likely to apply for National Board Certification than teachers in districts with no financial support. Further, Goldhaber et al. (2003) suggested a relationship between financial support and achievement of certification that was not found in the North Carolina study.

Sixty-five percent of respondents to the *Brock Survey of National Board Certification Aspirants* felt that having someone read entries for content was very important. Proofreading was noted as a very important support mechanism by 55% of all respondents in this study. Editing, both reading for content and the process of proofreading, are important to candidates during the certification process. Berg (2003) noted that the National Board Certification process challenges the candidates to put their practice into words and that it is helpful to have readers to determine if the content is complete and that there are no grammatical errors in the writing.   According to the results of a candidate survey by Pershey (2001), respondents indicated that their greatest area of need for support was with writing the portfolio entries. By providing feedback on candidate writing, support is provided to the candidate.

Nearly 40% of the respondents felt that collegiality was very important during the certification process. Collegiality is a well-documented support mechanism for successful teachers. Hopkins (2004) noted that possibly the strongest support group for National Board certification is the group of teachers with whom the candidate works every day. Jenkins (2004) encouraged teachers to complete the certification process in a "community of peers". The National Board for Professional Teaching Standards noted (2004) the importance of collegiality in the fifth of five Core Propositions by noting that accomplished teachers work with others in a collegial manner and thus contribute to the effectiveness of their schools. Berg (2003) noted that the certification process stands to have a much more positive impact when teachers share the process with one another.

Forty-two percent of respondents to the *Brock Survey of National Board Certification Aspirants* felt that having time release from their classroom was very important during the certification process. Shakowski (1999) and Siciliano (1999) both indicated that time release from the classroom was an important and beneficial way to support candidates during the certification process. Time release can give candidates the opportunity for collegiality, time for portfolio preparation, and opportunities to addend workshops or visit the classrooms of mentor teachers.

Moral support was noted as a very important support mechanism by 54% of the respondents to the Brock survey. Sixty-one percent of respondents indicated that family support was very important during the certification process. Often, it is difficult to separate moral support from family support in the literature. However, it is clear that support of family, friends, colleagues, and superiors is important to candidates. Berg (2003) noted that an individual should not start a major project without first discussing it with family. This way, the candidate can help family understand the magnitude of the certification process and seek their moral support. Pershey (2001) noted that candidates should not take on the certification process if the time is not right in their lives. This is because of the time-consuming nature of the certification process and the fact that moral support and family support are so important during the process.

The use of technology by candidates was reported as very important by 54% of respondents to the *Brock Survey of National Board Certification Aspirants*, which follows what the research indicates. As noted by Shakowski (1999), access to technology is important, but knowledge of proper use of technology also needs to be part of technologic support. Pershey (2001) noted that candidates need access to and knowledge of use of technology equipment needed during the certification process.

Fifty-one percent of respondents to the Brock survey felt having a time line with progress deadlines was a very important support mechanism during the certification process. Logistical information was very important to 37% of the respondents. Thirty-one percent of the respondents felt that workshops were a very important support mechanism during the certification process. These final three support mechanisms were not apparent from a search of the literature. However, they were indicated to be important through the mechanisms of answering question one for this study. This represents a disconnection between what was indicated in the literature and what was found in this study.

The great majority of respondents to the *Brock Survey of National Board Certification Aspirants* indicated that all of the support mechanisms were very important or important to the certification process. The results from the

descriptive statistics used to analyze the data from question two indicate that respondents to the survey felt strongly that all of the support mechanisms identified by this purposeful sample group are important during the certification process. This serves to validate the research findings for question one.

More than 70% of all respondents ranked each support mechanism as very important or important. Further, eight out of ten respondents ranked the majority (eight of the twelve) of support mechanisms as important or very important. These include the following: financial support (82%), reading for content (86%), proofreading (81%), moral support (87%), family support (87%), use of technology (88%), use of a time line (80%), and logistical information (80%). This verifies what the research indicates about the importance of mentoring, financial support, editing to include proofreading and reading for content, collegiality, time release, moral and family support, and use of technology (Berg, 2003; Blase & Blase, 1998; Browne et al., 1999; NBPTS, 2004; Pershey, 2001; Shakowski, 1999; Siciliano, 1999; Sumner, 1997).

Question Three: What is the relationship, if any, between receiving each of the types of support and achieving National Board Certification as perceived by candidates for certification from the National Board for Professional Teaching Standards?

Statistical significance at the .01 level was found for achievement of certification and receipt of reading for content in this study. The research indicates that editing, including reading for content is an important support mechanism for candidates during the certification process (Hopkins, 2004).

Significance at the .05 level was found for achievement of certification and receipt of collegial support. Again, this validates what is indicated in the research: collegiality is important for National Board Candidates (Berg, 2003).

Conversely, there were seven other mechanisms of support that are indicated by the literature to be important to candidates from the National Board for Professional Teaching Standards and three that were identified by the purposeful sample group in this study. Respondents indicated that all mechanisms of support are important to candidates.

However, when achievement of certification was compared to receipt of the various support mechanisms, only two of the mechanisms have a significant correlation – reading for content and collegiality. This contrasts the literature. According to research, reading for content and collegiality are important, but also important to candidates are the following support mechanisms: mentoring (Berg, 2003), financial support (Siciliano, 1999), time release (Shakowski, 1999), moral and family support (Hopkins, 2004), and use of technology (Pershey, 2001).

There is a disconnection between support mechanisms identified in the literature and those rated as important by National Board candidates on the Brock survey and support mechanisms that are related to achievement of certification. The identification of mechanisms of support as important is not a surprising finding. When one researches National Board Certification, nearly every article discusses the length and depth of the certification process and indicates that support is needed. Additionally, each of these candidates spent hundreds of hours on the certification process. It would be difficult to say that such a task did not require some sort of support. When respondents indicated that the supports were important, they may not have rated specific support mechanisms as important based on the impact of that support on achievement of certification.

Further, it is possible that teachers who have completed the process want to encourage future teachers to complete the process. The support mechanisms found in this study would be good for anyone undertaking a major project. Again, it would be difficult to say that the supports identified here were not important. The difference is that the supports are important, but they are not related to achievement of certification.

Ancillary Findings

Mentoring showed significance at the .05 level when the data were analyzed excluding respondents who did not achieve certification. This finding indicates that mentoring is correlated with achievement of certification. By using crosstabs, the researcher was able to determine that with receipt of mentoring support, respondents achieved certification more quickly (more on the first attempt than on the second and third attempt at certification). This finding is not surprising given the close relationship

between mentoring, collegiality, and reading for content. A mentor can provide collegial support to teachers and can also read entries for content. Therefore, distinguishing between the three may actually be difficult.

When the data were analyzed by excluding respondents who did not achieve certification, reading for content and collegial support showed significance as they had with the overall group, but when non-achievers were excluded, the significance was stronger (.01 level). Specifically, reading for content showed significance at .007 and collegial support showed significance at .004. According to the literature, mentoring (Hopkins, 2004), reading for content (Pershey, 2001) and collegiality (Berg, 2003) are all important support mechanisms during the certification process. As mentioned above, the findings of this study are in agreement with the literature which indicates that these three support mechanisms are important to candidates. However, this study did not find that financial support (Sumner, 1997), time release (Shakowski, 1999), moral and family support (Berg, 2003), and use of technology (Pershey, 2001) are important to candidates.

When the data were analyzed using the Pearson Product-Moment Coefficient of correlation and sorting respondents with less than ten years of teaching experience, receipt of collegial support showed significance at the .05 level. Use of a time line showed significance for respondents with more than twenty years of teaching experience. For males, receipt of mentoring showed significance at the .05 level. For females, receipt of reading for content and receipt of collegial support both showed significance at the .05 level. The researcher was unable to locate literature to either support or refute these findings.

There was no significance found between sex and achievement of certification. This contradicts the research which indicates that females are more likely to achieve certification than males (Goldhaber, 2003). The sample in the Goldhaber study consisted of teachers in the state of North Carolina and therefore the findings are limited. The findings from this study resulted from a random sampling of all National Board candidates and therefore can be generalized to the population.

When the data were analyzed sorting respondents by race, significance was found for receipt of reading for content, receipt of proofreading, and receipt of collegial support among Whites/Caucasians. When the data were sorted by race no significance was found for any of the support mechanisms for Black/African-American, American Indian, and Hispanics. Significance was found, however, between race and achievement of certification. The correlation was significant at the .05 level. This coincides with the research which indicates that whites/Caucasians are more likely to achieve certification than blacks/African-Americans (Archer 2002). This finding is especially interesting considering that none of the support mechanisms in this study showed significance for blacks/African-Americans and achievement of certification. The National Board for Professional Teaching Standards has already identified this difference and is looking at ways to address the disparity among races (Wayne, Chang-Ross, Daniels, Knowles, Mitchell, & Price, 2004).

Significance was also found for percentage of free and reduced lunch eligible students in the schools of respondents and achievement of certification. The correlation was significant at the .01 level. When the data were further analyzed using crosstabs, the percentage of respondents who achieved certification decreased as the percentage of free and reduced lunch students in their schools increased. This follows with Blair (2003) who indicated that teachers from wealthier communities with higher student achievement on standardized tests were more likely to achieve certification than their counterparts from less wealthy districts. Students in schools with high percentages of free and reduced lunch eligible students are more likely have teachers with little teaching experience and do not hold full certification in the area for which they are assigned. Teachers who are not state certified cannot participate in the certification process from the National Board for Professional Teaching Standards. Therefore, it is possible that there are fewer eligible teachers in those schools. Further, schools with high rates of students who are eligible for free and

reduced lunch see high teacher turnover rates. This could make the creation of a collegial atmosphere difficult in the school. Results of this study indicate that collegiality is related to achievement of certification. Therefore, schools with high percentages of free and reduced lunch eligible students are not likely to develop the collegial atmosphere that is supportive to National Board candidates.

When the data were analyzed using the Pearson Product-Moment Coefficient of correlation and sorting respondents by highest degree earned, receipt of reading for content showed significance for respondents with a master's degree. Vandervoort et al. (2004) noted that National Board Certified Teachers are more likely to have a master's degree. This could also be related to the demographics of the sample which indicate that these teachers are in the middle of their teaching career.

<div align="center">Implications</div>

Growth in accountability measures for schools and school districts has occurred through the most recent re-authorization of the Elementary and Secondary Education Act (USDE, 2003). The weight of these accountability measures can be felt by principals and administrators throughout the country. Administrators are charged with reporting data regarding the success of their students. Also, the most recent rendition, *No Child Left Behind* (NCLB), requires that all teachers be highly qualified. Teachers who achieve certification from the National Board for Professional Teaching Standards automatically meet the definition of a highly qualified teacher as required by NCLB (U.S. Department of Education, 2003). Data regarding highly qualified teachers must be reported to the public and to the government. Certification from the National Board for Professional Teaching Standards is a clear-cut way to meet the highly qualified teacher requirement under NCLB, making the reporting of this information much simpler for the administration.

Along with the federal standards of *No Child Left Behind*, the federal government has tied substantial federal monies to help facilitate implementation. Principals, superintendents, and state education administrators are charged with using this funding in

the most effective manner to increase student achievement. By knowing what types of support programs help facilitate the certification process, administrators will be able to budget adequate funds for such programs.

This study has political implications as well. Currently many states offer financial support to teachers who complete the process, as well as financial incentives to those who achieve certification. There is no correlation between financial support and achievement of certification. Administrators can take this knowledge and use financial resources to better serve candidates by supporting them in ways that do make a difference, such as providing mentoring support, readers for content, and/or formation of collegial groups among teachers. National Board Certified Teachers in the first part of the study indicated that all twelve mechanisms of support are important for candidates. Candidates for certification, both those who achieved certification and those who did not, also indicated through survey research that the twelve mechanisms of support are important for candidates. Administrators should focus support programs on the following support mechanisms: mentoring, financial support, reading for content, proofreading, collegiality, time release, moral support, financial support, use of technology, time lines, logistical information, and workshops. Further, administrators can plan, organize, develop and coordinate support programs for National Board candidates with the understanding that reading for content and collegiality are statistically correlated to achievement of certification. Additionally, receipt of mentoring support is correlated with receipt of certification on the first attempt. Administrators who are developing support programs should provide all mechanisms of support as all are thought to be important, but the concentration should be on mentoring, reading for content, and collegiality.

The findings of this study indicate that different groups of candidates need support from different mechanisms. Years of teaching experience, sex, race, type of school district, percentage of free and reduced lunch students, and highest degree earned all make a difference in the types of support that are beneficial to National Board candidates. As a result of knowing this from this study, administrators can tailor their

support programs to fit the needs of their candidates, thereby providing valuable professional development to their teachers. For example, teachers with less than ten years of teaching experience appear to benefit from collegial support whereas teachers with more than 20 years of teaching experience appear to benefit from the use of a time line. If an administrator has a staff with less teaching experience, the focus of support should be on collegiality. Conversely, with a teaching staff with greater experience, administrators should focus on developing time lines with deadlines for their candidates. This way, the administrators are appropriately serving the needs of their population. While males and females showed differences among support mechanisms (mentoring for males, reading for content and collegiality for females), the three mechanisms that showed significance when compared by sex were the top three support mechanisms in the study. Therefore, a support group that focuses on the findings here would be adequately prepared to support the differences among males and females in terms of support during the certification process. As the percentage of free and reduced lunch students increased, the significance of collegial support strengthened for achievement of certification. Therefore, administrators with high percentages of free and reduced lunch students need to ensure the collegial nature of their support group. This study can help administrators tailor a support program to meet the needs of the candidate group.

<div style="text-align:center">Recommendations for Further Research</div>

Based on the findings of this study, the following recommendations are made for future research:

1. There appears to be a disconnection between the importance of support mechanisms to candidates and the actual significance of the correlations the support mechanisms have on achievement of certification. Future research could delve deeper into the perceptions of support, instead of grouping support mechanisms into broad categories of support as was the case in this study.

2. Only two of the support mechanisms showed significance among all respondents: reading for content and collegiality. These support mechanism could be explored in greater detail to determine the specific components of each. This would help

    support programs create specific guidelines for reading for content so that this support is helpful to candidates.

3. Support programs, schools, school districts, professional development groups, etc. could also improve collegial support if the specific components of collegiality that make it important and beneficial to candidates were known.

4. Years of experience, sex, race, type of school district, percentage of free and reduced lunch students in schools, and level of education showed significance in different types of support mechanisms and achievement of certification. All areas could be explored further in future research. The implication is that different groups of candidates need different types of support. If more were known about the types of support that were most significant for various groups of candidates, support groups could tailor their programs to their specific group of candidates.

5. Blacks/African Americans and Asians had much lower percentages of respondents who had achieved certification than whites/Caucasians. This study did not identify a support mechanism that showed significance for black/African-American candidates. Further research could further explore this phenomenon.

6. Asians respondents showed significance for the use of workshops, the support mechanism that consistently scored the lowest in terms of importance in this study. Future research could examine how to appropriately support these candidates.

7. The percentage of respondents who achieved certification declined with the increase of the number of free and reduced lunch students in the schools. Future research could take an in-depth look at the schools with high percentages of free and reduced lunch students to determine if teacher attrition, lack of enough years of experience, lack of appropriate teacher certification, etc. cause teachers in such schools to attempt certification less often. Further research could address reasons teachers in such schools are not achieving certification at the same rates as their counterparts in schools with lower free and reduced rates.

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Appendix A

Perceptions of Support Survey Questions

This serves as a guide to the survey of National Board Teachers regarding the types of support mechanisms they found beneficial or felt would be beneficial during the certification process of the National Board for Professional Teaching Standards.

Script:
As a National Board Certified Teacher, you have been purposefully selected to participate in this research study. The purpose of this study is to identify what types of support programs are necessary and beneficial to teachers when seeking National Board certification. Knowing how to provide appropriate support to candidates is an extremely important concept in education. I would appreciate your assistance with this project. With your permission, we'll continue with the questions.

1. What support mechanisms do you feel were important to you while you were completing the certification process from the National Board for Professional Teaching Standards?

financial support	time release
moral support	mentoring
reading for content	proofreading
collegiality	use of technology (specify kind)
library resources	instructional materials
current research on education	family support

Additional comments:

2. What support mechanisms that you did not receive do you feel may have been helpful to you while completing the certification process from the National Board for Professional Teaching Standards?

> Financial support   time release
> moral support   mentoring
> reading for content   proofreading
> collegiality   use of technology (specify kind)
> library resources   instructional materials
> current research on education   family support

Additional comments:

3.   What support mechanisms do you think would help new candidates during the certification process of the National Board for Professional Teaching Standards?

> Financial support   time release
> moral support   mentoring
> reading for content   proofreading
> collegiality   use of technology (specify kind)
> library resources   instructional materials
> current research on education   family support

Additional comments:

4. What other areas or mechanisms of support do you feel are important to candidates during the National Board certification process?

Please provide the following information:

State of residence:
National Board certificate area:
Year achieved National Board certification:

Appendix B

Dear Teacher:

You have been selected to participate in this doctoral research study as part of a random sample of teachers who have completed the certification process from the National Board for Professional Teaching Standards. The purpose of this study is to identify what types of support programs are beneficial to teachers when seeking National Board certification. Knowing how to provide appropriate support to candidates is an extremely important concept for the field of education.

The enclosed survey will take approximately 5-7 minutes of your time. The information will be kept confidential and the data will be stored securely. There will be no reference made in oral or written reports to link you with this study. I would appreciate your assistance with this research project. Participation is entirely voluntary and your responses will be anonymous. To ensure anonymity, please do not write your name on the survey. Completing and returning the questionnaire constitutes your consent to participate.

Please answer the questions as honestly and accurately as you can. Please return the completed questionnaire in the self-addressed, postage paid envelope by *October 1, 2004*. Results will be available by request.

Please keep this letter for your records. If you have any questions regarding the research, contact Emily H. Brock at (304) 746-1909 or e.brock@marshall.edu. If you have questions about your rights as a research subject, please contact the Office of Research Integrity at Marshall University at (304) 696-7320.

Sincerely,

Emily H. Brock

Brock Survey of National Board Certification Aspirants

Please circle the most appropriate response.

	Very Unimportant	Unimportant	Neutral	Important	Very Important
1. How important is the support of mentoring to candidates during the National Board certification process?	1	2	3	4	5
2. How important is financial support to candidates during the National Board certification process?	1	2	3	4	5
3. How important is having someone read for content to candidates during the National Board certification process?	1	2	3	4	5
4. How important is proofreading to candidates during the National Board certification process?	1	2	3	4	5
5. How important is collegiality to candidates during the National Board certification process?	1	2	3	4	5
6. How important is time release from the classroom for candidates during the National Board certification process?	1	2	3	4	5
7. How important is moral support to candidates during the National Board certification process?	1	2	3	4	5
8. How important is family support to candidates during the National Board certification process?	1	2	3	4	5
9. How important is technology to candidates during the National Board certification process?	1	2	3	4	5
10. How important is having a time line indicating progress deadlines for candidates during the National Board certification process?	1	2	3	4	5
11. How important is logistical information to candidates during the National Board certification process?	1	2	3	4	5
12. How important are workshops to candidates during the National Board certification process?	1	2	3	4	5

Please circle the appropriate response.

1. Did you receive the support of mentoring during the National Board certification process? **YES**   **NO**

2. Did you receive financial support during the National Board certification process?   **YES**   **NO**

3. Did you have someone to read for content during the National Board certification process? **YES**   **NO**

4. Did you have a proofreader during the National Board certification process?   **YES**   **NO**

5. Did you receive collegial support during the National Board certification process?   **YES**   **NO**

6. Did you receive time release from the classroom during the National Board certification process?   **YES**   **NO**

7. Did you receive moral support during the National Board certification process?   **YES**   **NO**

8. Did you receive family support during the National Board certification process?   **YES**   **NO**

9. Did you use technology during the National Board certification process?   **YES**   **NO**

10. Did you have a timeline for progress during the National Board certification process?   **YES**   **NO**

11. Did you receive logistical information during the National Board certification process?   **YES**   **NO**

12. Did you have access to workshops during the National Board certification process?   **YES**   **NO**

Please tell me about yourself.

- How many years have you been a teacher? _____

- Male or Female? _____

- Race? _____

- Is your school rural, suburban, or urban? _____

- What is the percentage of free and reduced lunch students at your school? _____

- What is your highest degree earned? _____

- Did you achieve certification on your first, second, third try, or not achieve certification? Circle one.

- How many National Board Certified Teachers are in your school? _____

- How many National Board Certified Teachers are in your district? _____

- What is the developmental level on your National Board Certificate?

    _____Early Childhood   _____Early Adolescence

    _____Middle Childhood   _____Adolescence/Young

        Adult

- What is the subject area on your National Board Certificate?

    _____

Appendix C

Identification of Support Mechanisms

Table 1

Identification of Support Mechanisms

Support Mechanism	Number of times identified by sample
Mentoring	11
Financial Support	10
Reading for Content	7
Proofreading	7
Collegiality	6
Use of a Time Line	5
Workshops	5
Time Release	4
Moral Support	4
Family Support	4
Logistical Information	4
Use of Technology	3

Appendix D

MARSHALL UNIVERSITY
w w w . m a r s h a l l . e d u

Office of Research Integrity
Institutional Review Board

Wednesday, May 26, 2004

Teresa R. Eagle, Ed.D
Leadership Studies
MUGC/Leadership Studies
100 Angus E. Peyton Dr.
S. Charleston, WV. 25303

RE: IRB Study # 4048   At: Marshall IRB 2

Dear Dr. Eagle:

Protocol Title:
Support Mechanisms as Influences of Success in the Certification Process of the National Board for Professional Teaching Standards

Expiration Date:	5/25/2005	
Our Internal #:	681	
Type of Change:	(Other)	Expedited Approval
Expedited ?:	☐	
Date of Change:	5/26/2004	
Date Received:	5/26/2004	
On Meeting Date:		
Description:	In accordance with 45 CFR 46.110, I am granting expedited approval to the above minimal risk study for the period of 1 year. A progress report will be due prior to 05/25/05 or upon completion of the study if prior to 05/25/05. The purpose of the study is to identify what types of support programs are necessary and beneficial to teachers when seeking National Board certification.	

Respectfully yours,

Stephen Cooper, Ph.D.
Marshall IRB #2 Chair

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EMILY B. HUNDLEY

PROFESSIONAL EXPERIENCES

2002 - Present   Marshall University Graduate College
                        Assistant to the Dean of the Graduate School of
                        Education and Professional Development

2001-Present   Marshall University Graduate College
                        Adjunct Faculty Member

1999-2002   West Virginia Department of Education
                        Certification Coordinator

1995-1999   Kanawha County Schools
                        Elementary Education Teacher

EDUCATION

May 2005   Marshall University Graduate College
                        Ed.D., Administration

December 2003   Marshall University Graduate College
                        Ed.S., Superintendency

August 1999   Marshall University Graduate College
                        M.A., Leadership Studies

December 1993   West Virginia University
                        B.S., Elementary Education

CERTIFICATION/LICENSURE

Professional Administrative Certificate, Principal K-12.

Professional Administrative Certificate, Superintendent Pre-K through Adult.

Permanent Teaching Certificate, Multi-Subjects K-8.

Permanent Teaching Certificate, Mentally Impaired/Mild-Moderate K-12.

PROFESSIONAL ACTIVITIES

Targeted High-Needs Initiative Project Site Coordinators Meeting (September 2004). Atlanta, GA.

Hundley, E. (September 2004). Presenter - What Is Leadership? A meeting for West Virginia National Board Certified Teachers. Charleston, WV.

Hundley, E. & Pauley, R. (June 2004). Presenter - The 76th Annual NASDTEC Conference. Pittsburgh, PA.

Hundley, E. (January 2004). Invited guest and presenter - Southern Illinois Regional Support for NBPTS candidates.

Targeted High-Needs Initiative Project Site Coordinators Meeting (September 2003). Arlington, VA.

Hundley, E., Pauley, R. & Childress, R. (February 2003). "The Appalachian Accomplished Teaching Project - An Overview" Presented at the WVACTE/WVATE Spring 2003 meeting. North Bend State Park, WV.

NBPTS Appalachian Region focus meeting (July 2002). Roanoke, VA.

Hundley, E. (April 2002). Presenter - WV Association for Middle Level Education, 21st Annual Conference. Snowshoe, WV.

NBPTS Conference (August 2001). Baltimore, MD.

Hundley, E. (May 2001). Overview of National Board Certification presented at the Jackson County Board of Education meeting. Ripley, WV.

National Board Institute Combination Program Scoring Institute (August 2000). Orlando, FL.

Hundley, E. (May 2000). Incentives for National Board Certification, ASBO Spring meeting, Charleston, WV.