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## A Comparison of the Perceived Performance of Mentoring Functions of National Board-Certified and Non-National Board-Certified Teachers with Their Protégés

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A Comparison of the Perceived Performance of Mentoring Functions of National Board-Certified and Non-National Board-Certified Teachers with Their Protégés

by

Amy Jo Smith Wilson

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
Department of Interdisciplinary Education  
College of Education  
University of South Florida

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Public Schools

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## DEDICATION

To my mother and the memory of my father . . .

One taught me to take life seriously; the other taught me to find humor in life.

They always believed in me and convinced me I could do anything.

## ACKNOWLEDGEMENTS

I extend my sincere thanks to my committee members who helped me achieve this dream. Dr. Wayne James was always supportive, available for assistance, and patient. Her knowledge of adult education and the research process is comprehensive, and her skill as a major professor is superb. She became a wonderful friend. Dr. William Benjamin, with his vast knowledge of public education, inspired me to continue learning and to enjoy the process. Dr. Carol Mullen believed in my abilities, encouraged me to grow academically, and shared numerous scholarly works. Dr. Howard Johnston motivated me to see the possibilities of research. I am grateful for the encouragement of Dr. Robert Dedrick, my outside chair, and the sharing of his expertise in educational research and for his advice. I owe special gratitude to Dr. Jeff Kromrey for his patience and for always being willing to share his statistical expertise with me.

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# A Comparison of the Perceived Performance of Mentoring Functions of National Board-Certified and Non-National Board-Certified Teachers with Their Protégés

Amy Jo Smith Wilson

## ABSTRACT

National Board-certified (NBC) teachers are recognized as accomplished teachers who have met the National Board's stringent standards. These teachers are encouraged to serve as mentors to novice teachers and veteran teachers in candidacy for National Board Certification. This study identified and compared the career and psychosocial mentoring functions that NBC teacher mentors and non-NBC teacher mentors perceived they provided to their protégés at the elementary grade levels. National Board-certified protégés' perceptions of having the functions provided were compared with those of their teacher mentors and with the protégés of non-NBC teacher mentors.

The research was conducted in a large urban school district in Florida and included 190 participants: 95 mentors and their protégés. The teacher mentors' perceptions of having provided the mentoring functions were assessed using the Mentoring Functions Scale for the Mentor, and the protégés' perceptions were measured with the Mentoring Functions Scale for the Protégé. Both instruments were adapted for this study from a previous mentoring scale for the protégé developed by Noe (1988). Results for the study indicated no statistically significant differences between the NBC teacher mentors and the non-NBC teacher mentors in their perceptions of having provided the functions. Significant differences were found between NBC teacher

mentors and their protégés on the exposure-and-visibility function, between non-NBC teacher mentors and their protégés on the challenging assignments function, and between all mentors and all protégés on the challenging assignments function.

Implications for teacher mentors, administrators, and scholars are provided.

These include developing or updating existing mentoring programs to include the career and psychosocial functions studied in this research, providing mentors and protégés with information about the functions in order to assess the existence of specific functions, expanding professional development time to address functions that may have been inadequate, and possibly limiting the number of protégés with whom teacher mentors interact and guide.

## CHAPTER 1

### INTRODUCTION

A component of providing the emotional and technical support teachers need when beginning their careers or advancing in the profession as candidates for National Board Certification is mentoring. In the mentoring process, the mentor provides the protégé with various functions in the areas of personal support, career assistance (Clawson, 1996; Jacobi, 1991; Jorissen, 2002), and role modeling (Jacobi, 1991). Kram (1983) identified and described the mentoring functions as either career or psychosocial. Within these two categories of functions, the mentor guides, counsels, coaches, teaches, and befriends the protégé (Ford & Parsons, 2000). Identifying and comparing the specific functions that National Board-certified (NBC) teacher mentors and non-National Board-certified (non-NBC) teacher mentors provide their protégés may have a positive impact on the success of a new teacher in the classroom or a veteran teacher achieving National Board Certification.

Mentoring often determines whether a teacher remains in the field, gains the necessary instructional and classroom management strategies, and receives needed emotional support (Boreen, Johnson, Niday, & Potts, 2000; Jorissen, 2002; Odell, 1996; Odell & Ferraro, 1992). Experienced teachers often benefit from serving as mentors (Freiberg, Zbikowski, & Ganser, 1997; Ganser, 1998; Jonson, 2002; Moir & Bloom,

2003; Villani, 2002), while those in candidacy for National Board Certification are provided with a mentor model of high-quality teaching (Mack-Kirschner, 2003).

Teacher quality is a critical factor in the education of children and in student achievement (Carnegie Forum, 1986; No Child Left Behind Act of 2001, 2002; Paige, 2004; Peterson, 2006). McCoy (2005) examined math scores of eighth-grade students and contended that teacher quality “has a significant effect on . . . achievement scores” (p. 134). Mentoring, of which the ultimate goal is to increase student learning, can improve the instructional performance of teachers and create a culture of learning and collaboration in a school (Lipton & Wellman, 2003). Villani (2002) acknowledged that the mentoring relationship could improve “effectiveness in promoting student learning” (p. 7).

According to Mullen (2005), mentoring is the “hot” topic in public schools and universities, assuring the “future of mentorship as an abiding change force in education” (p. 2). Portner (2001) is in accord, noting that mentoring is “*the* way to launch new teachers into their careers and to reduce the probability of their leaving prematurely” (p. ix). During the first 5 years of teaching, mentoring programs can reduce the dropout rate of teachers from 50% to 15% (Scherer, 2001).

The general public agrees that mentoring is an important tool to provide beginning teachers. According to Portner (2001), a 1999 poll conducted by the Recruiting New Teachers organization indicated that the public believed mentoring programs and mentoring to be an effective process of providing professional development for new teachers.

Teachers entering the educational profession are expected to assume the responsibility of preparing students academically to enter the workforce ready to participate in the opportunities and jobs available in this knowledge age. Frequently, teachers new to the field are assigned multiple preparations, subjects not in their field of expertise, and demanding extracurricular activities (Huling-Austin, 1992). In addition, Danielson (2002) adds that beginning teachers are often assigned “the most challenging students, and no classroom of their own” (p. ix). Portner (2000, 2001) acknowledges that many new teachers are not totally prepared to assume such demanding tasks. He defends the belief that beginning teachers will gain professional skills and remain in the field longer, if these teachers interact regularly with a mentor.

Mentors provide specific functions for their protégés. Functions “refer to what mentors are expected to do and how relationships should be structured” (Mullen, in press). In education, effective mentors provide support, create challenges, and assist in developing a professional plan (Daloz, 1999). Mentors relate to the protégé, gather and assess data about the protégé’s competency and the school culture, serve as a coach, and guide the protégé from induction to independence (Portner, 1998). According to Mullen (in press), researchers studying mentoring at the graduate school level have validated “two major functions of student-faculty developmental or informal mentoring: career-related and psychosocial” as identified by Kram (1983).

Kram’s (1983, 1985/1988) widely referenced study of informal mentoring in the business world detailed how the mentors in business helped their protégés by providing a range of developmental functions. Kram identified two categories of functions mentors provide to their protégés: the career-related functions and the psychosocial-related

functions. The career-related functions in a relationship “enhance advancement in an organization” (Kram, 1985/1988, p. 24) and “include sponsorship, exposure-and-visibility, coaching, protection, and challenging work assignments” (p. 24). These functions provide insight into “learning the ropes” (p. 22) of organizational life. The psychosocial-related functions are devoted to the enhancement of “an individual’s sense of competence, identity, and effectiveness in a professional role” (p. 32). These functions “include role modeling, acceptance-and-confirmation, counseling, and friendship” (p. 32).

In a literature review in the areas of education, management, and psychology, Jacobi (1991) supported these two categories of functions and identified career and psychological, or emotional support, as components common to mentoring relationships. Clawson (1996) agreed, indicating that mentoring goes beyond teaching and transfer of knowledge to “include technical, organizational, and career/personal life issues” (p. 9).

Mentors in education perform similar career and psychosocial functions for their protégés. One of Noe’s (1988) goals was to adapt Kram’s (1983) work on mentoring functions to education by designing an operational instrument to assess protégés’ perceptions of their mentors providing the career and psychosocial functions identified by Kram. Noe’s work involved school personnel desiring to become school administrators.

Other writers and researchers have also verified the performance of Kram’s (1983) two categories of functions in education through similar examples and language. In a study of mentor-protégé relationships in clinical psychology, Clark, Harden, and Johnson (2000) reported that mentored graduate students “endorsed both the career and psychosocial mentoring functions described by Kram (1983, 1985/1988) as present in

[the] relationships” (p. 265). Clark et al. (2000) determined that mentors, male and female, were “equally capable of addressing both the career and psychosocial needs [as referred to by Kram (1983)] of female protégés” (p. 267). In a more recent work, Johnson (2002) noted that mentors of psychology graduate students were encouraged to clarify functions and to revisit the functions as defined by Kram during the progression of the relationship. Mills, Moore, and Keane (2001) referred to the two functions as the “emotional and practical aspects of mentoring” (p. 125) that teachers serving as mentors in schools must be prepared to provide their protégés.

In educational research and writings, various components of the functions are identified and are often described using alternative vocabulary. For example, Portner (2001) described one job of the mentor as that of encouraging the protégé to expand his/her teaching repertoire and skills. Also, the mentor must wean the protégé from the dependent relationship by guiding and challenging the protégé to reflect on decision-making and by encouraging him/her to make informed decisions about teaching. Mentors engaged in effective mentoring relationships in the schools provide the career functions of coaching (Boreen et al., 2000; Portner, 1998, 2001; Zachary, 2000), exposure-and-visibility (Portner, 2002; Zachary, 2000), protection (Mullen, 1999a; Portner, 2002), and challenging work assignments (Daloz, 1986, 1999; Healan & Wilbourne, 1999; Lipton & Wellman, 2003). The psychosocial functions provided are role modeling (Gehrke & Kay, 1984; Johnson, 2002; Jonson, 2002; Pitton, 2000; Tatum & McWhorter, 1999), acceptance-and-confirmation (Johnson, 2002; Portner, 2001, 2002; Zachary, 2000), counseling (Anderson & Shannon, 1988; Pitton, 2000), and friendship (Portner, 2002; Mullen, 1999a; Tatum & McWhorter, 1999). Taken together, the



research and writings of these educators indicate that the functions indicated by Kram (1983) are provided to the protégés.

Mentoring, as a tool for educational reform, is provided by school districts as a means to induct teachers and to help them develop beyond the stressful first years of teaching. Most mentor teachers provide some support, both career and emotional, for their protégés as the protégés begin Portner's (2002) journey of learning to teach and then learning to teach better.

### Background of the Problem

Mentoring, as part of formal programs intended to improve teacher quality and retention, gained momentum in education in the early 1980s as part of the national movement to improve education (Feiman-Nemser, 1996). Today, states are incorporating mentoring as part of educational career ladder programs. Data exist that indicate teachers benefit from mentoring and the support their mentors provide (Evertson & Smithey, 2000; Martin & Trueax, 1997; Odell & Ferraro, 1992). Odell and Ferraro (1992) suggested that mentoring could reduce the early attrition of beginning teachers from the field, and it is mentoring in a teacher's first year that is the strongest factor associated with reduced turnover of first-year teachers (Ingersoll & Smith, 2004). However, with the positive experiences of mentoring documented, the literature reflects a void in just "what mentors should do, what they actually do, and what novices learn as a result" (Feiman-Nemser, 1996, p. 3).

The National Board for Professional Teaching Standards (NBPTS) (1991) has indicated that teachers with their national certification are exemplary teachers and should be encouraged to serve as mentors to other teachers. National Board Certification is an

advanced credential awarded to teachers who demonstrate competence in the standards of the National Board through an arduous process of classroom demonstration and national tests. Teachers who hold this certification are deemed among the nation's best, as they possess the knowledge and skill of the five core propositions of the National Board and, by this certification, are considered accomplished in the field (Mack-Kirschner, 2003). According to the NBPTS (1991), the National Board standards represent a consensus among educational experts of the skills accomplished teachers must know and be able to demonstrate. School districts are encouraged to utilize the expertise of these highly qualified teachers as members of learning communities who work with other educators on instructional policy, staff development, the development of the curriculum, and as mentors to other teachers. National Board Certification is seen "as a way to move up in teaching without leaving the classroom, an elusive goal thus far" (Steeves & Browne, 2000, p. 166).

A review of Steeves and Browne's (2000) guide for preparing teachers for National Board Certification revealed one entry in the index for mentoring. This entry referred to the process as "mentoring new candidates and being role models for other teachers" (p. 166). No reference was found that indicated National Board-certified teachers were assessed on mentoring ability during the candidacy process, either in the portfolio or in the assessment center situations. According to the NBPTS (2004b), teachers are granted National Board-certification based on evidence that they adhere to the standards of the National Board, and "the NBPTS Standards are the only criteria by which the performance of candidates for National Board Certification is judged" (p. 3).

In Florida, National Board Certification has been supported by the legislature since 1998 (Excellent Teaching Program, 1998a), and NBC teachers are rewarded monetarily to serve as mentors for new teachers and for teachers applying for National Board Certification. The Florida Excellent Teaching Program of 1998, extended as the Dale Hickam Excellent Teaching Program (2002), currently provides funding incentives for teachers applying for National Board and for obtaining the certification. This program allows the Florida Department of Education (FLDOE) (Excellent Teaching Program, 1998b; FLDOE, 2005) to pay 90% of the application fee for teachers who satisfy the prerequisites for National Board Certification. Teachers who achieve the certification are awarded an annual bonus of 10% of the average state teaching salary, and National Board teachers who agree to provide the equivalent of 12 workdays mentoring teachers not National Board-certified are paid an additional 10% of the prior year's average salary (Dale Hickam Excellent Teaching Program, 2006; FLDOE, 2005). These non-NBC teachers include beginning teachers, experienced teachers needing professional assistance, and experienced teachers in candidacy for National Board Certification. The bonus for achieving certification is awarded for up to 10 years as long as the NBC teacher remains in teaching. The mentoring bonus may also extend for the 10 years the certification is valid (FLDOE, 2005).

Some districts pay non-NBC teachers to serve as mentors to new teachers or to teachers needing professional assistance. Each district determines the amount paid to the mentor per protégé. The district in which this study occurred paid mentors \$400 per protégé up to five protégés. In comparison, the 10% mentoring bonus NBC teacher mentors received in 2004 was \$4,670 (FLDOE, 2005).

Several authors suggested that mentoring is more than teaching. Clawson (1996) believed that mentoring was more expansive and lasting in the lives of protégés. According to Jonson (2002), “good teachers of children are not necessarily good teachers of adults” (p. 17). Field (1994) pointed out that teachers needed training to serve as mentors as they must possess specific skills and competencies to serve and provide the functions effectively. Veteran teachers who serve in a supporting role to protégés must demonstrate excellence in teaching, excellence in working with adults, sensitivity to others’ viewpoints, competence in social interactions, and a “willingness to be an active and open learner” (Odell, 1989, p. 25).

Determining the specific functions that teacher mentors, both NBC and non-NBC, in the elementary grade levels provide their protégés should enable mentors, professional developers, and administrators to address the professional needs of the mentor, the protégé, and the organization. A knowledge base of the functions performed and the functions neglected may provide mentor teachers and educators engaged in the process with an effective component for use in designing teacher induction and mentoring programs and in aiding retention.

According to Mills et al. (2001) and Ingersoll and Smith (2004), teachers entering the field for the first time must be supported as they develop professionally and personally. Many studies have determined that mentoring supports these teachers and increases the opportunity for success for the new teacher or protégé (Evertson & Smithey, 2000; Ganser, 1995b; Ingersoll & Smith, 2004; Tauer, 1996; Thomas & Kiley, 1994; Vaughn & Coleman, 2004). Darling-Hammond (2003) indicates that young teachers

achieve competency quicker than those who learn by “trial and error” (p. 11), and the retention rates of mentored teachers are higher than those not mentored.

#### Statement of the Problem

As of November 2005, there were 7,732 National Board-certified teachers in Florida (NBPTS, 2006). Each of these NBC teachers was eligible for a yearly mentoring bonus in addition to the annual 10% bonus paid NBC teachers for achieving the certification. To receive the mentoring bonus, NBC teachers must keep a log of hours spent mentoring and submit the log to the district office for reporting to the state department of education.

The state of Florida, under authorization from the Dale Hickam Excellent Teaching Program Trust Fund (2002), spends thousands of dollars for bonuses to NBC teachers who serve as mentors without knowing whether these teachers are effective mentors or what mentoring functions are provided. The state appears to assume that these NBC teacher mentors, without having demonstrated the skills needed for the job, are more competent to serve as mentors than are non-NBC teacher mentors. The state’s policy of rewarding these NBC teachers for mentoring is uninformed by research related to mentoring and the functions. The NBC teacher mentors do not have to provide any indication of possessing these mentoring skills either in the portfolio submitted to the National Board or on the assessment exercises.

Professional experiences and observations of the researcher during her employment as a staff development coordinator made her aware of the National Board Certification process and the state of Florida’s insistence on rewarding NBC teachers for mentoring without the teachers providing proof of mentoring competence. It seemed

especially appropriate to research this topic considering the substantial expenditure of state funds for mentoring provided by NBC teachers.

This study investigated the functions provided by mentors, some of whom were paid to serve as mentors through a state program that assists teachers in attaining National Board Certification. Past studies on National Board Certification focused on the academic achievement of students whose teachers were National Board-certified (Keller, 2006; NBPTS, 2004a). Previous research had not investigated or compared the perspectives of National Board-certified teacher mentors and their protégés with those of non-certified teacher mentors and their protégés in their assessment of the mentoring functions being provided at the elementary grade levels.

#### Purpose of the Study

The purpose of this study was to identify and compare the career and psychosocial mentoring functions that National Board-certified teacher mentors and non-National Board-certified teacher mentors perceived they provided to their protégés at the elementary grade levels. The protégés' perceptions of the mentoring functions provided by their NBC teacher mentors and non-NBC teacher mentors also were identified and compared. For the purposes of this research, a teacher mentor was the primary mentor providing the career and emotional support to the protégé, who may have been a new teacher, an experienced one needing professional assistance, or an experienced teacher striving to obtain National Board Certification. The aim was to increase the understanding of the specific functions mentors provide, both to new teachers, experienced teachers, and to candidates for National Board. Such an understanding may enable those responsible for developing, maintaining, and evaluating mentoring programs

in the schools, as well as mentors not supported by formal programs or institutional assistance, with specific information of the functions that support the protégé in the mentoring process.

Noe (1988) identified the need to investigate formal mentoring relationships and the quality of protégé interaction with the mentor in education, specifically with administrators-in-training and their administrative mentors. Noe developed a comprehensive mentoring questionnaire from previous research that measured the career and psychosocial benefits mentors provided from the viewpoint of their protégés. See Appendix A for the Original Mentoring Questionnaire (Noe, 1988). The Mentoring Functions Scale, extracted from Noe's original questionnaire, did not assess the functions from the perspective of the mentor. See Appendix B for the Mentoring Functions Scale for the Protégé Extracted from Original Mentoring Questionnaire (Noe, 1988). This study investigated the career and psychosocial functions provided from the view of both the mentor and the protégé.

### Research Questions

The following research questions guided the development and the implementation of this study. Each question was addressed equally throughout the data collection process and analysis:

1. What career and psychosocial mentoring functions do National Board-certified and non-National Board-certified teacher mentors perceive they provide to their protégés?
2. How do mentor teachers and their protégés compare in their perceptions of the mentoring functions being provided?

3. How do National Board-certified teacher mentors and non-National Board-certified teacher mentors compare in their perceptions of having provided the mentoring functions?
4. How do the protégés of National Board-certified and non-National Board-certified teacher mentors compare in their perceptions of the mentoring functions being provided?

#### Significance of the Study

Tellez (1992) reported on a study of 128 beginning teachers and indicated most of these teachers sought assistance from someone other than their formally assigned mentors. Tauer (1996) examined formal mentoring programs in two school districts and noted that half of the matched dyads did not develop into mentoring relationships, while some protégés in these relationships had more professional interaction with someone other than the formal mentor. This lack of success led Tauer (1996) to question the feasibility of formal mentoring programs in developing relationships that are largely “dependent on interpersonal interactions” (p. 13). Clark et al. (2000), Scandura and Williams (2001), and Johnson (2002) reported that informal mentoring yields more benefits for the protégé than does formal mentoring, and Johnson indicated that protégés involved in informal relationships received more mentoring functions and were more satisfied with the relationship.

Even though informal programs may provide more satisfaction to the members of the dyad, many public school districts have actively developed formal programs for new teachers. The state of Florida mandated a mentoring program for alternative certification candidates (FLDOE, 2005). Trubowitz (2004) cautions schools against implementing



formal programs without examining the factors that cause mentoring relationships to begin and which provide for the needs of both members of the dyad. If experienced teachers are mentoring new teachers or other teachers requesting assistance, then preparing these mentor teachers to provide the career and psychosocial functions to their protégés, along with skills to enhance the pedagogical skills and the overall organizational socialization of their protégés, may be important to the development of the teacher.

National Board-certified teachers are recognized by many states and the National Board organization as being exemplary teachers who are encouraged to mentor other teachers either new to the profession or who are attempting Board certification. An investigation into these teachers' levels of providing the career-related and the psychosocial functions to their protégés, as well as the socialization of their protégés to education might aid in designing or in selecting more effective training for mentors in general.

The results of this study can be reviewed and the results used to update or design appropriate professional development programs to include the career and psychosocial functions for teacher mentors participating in formal or informal mentoring relationships in the schools. The information gained about the functions performed and those neglected by the mentors may be utilized in designing the mentor's role in the more formal programs many districts require. Protégés may also be provided with information about the functions mentors should provide.

## Limitations of the Study

The sample for this study consisted of mentors and protégés at the elementary grade levels in one large public school district in Florida. The results from the study may not be generalized to other populations without further research.

Lack of control over several external factors may have affected the final results.

These included the following:

- Some principals with large numbers of NBC teachers at their schools did not allow the researcher to survey teacher mentors. The perceptions of these teacher mentors might have influenced the outcome of the study.
- Some mentors in the sample might have been reluctant to indicate that they did not perform all of the functions at a high level.
- Some protégés might have been reluctant to indicate that their mentors did not provide them with some of the functions.

The Mentoring Functions Scale for the Mentor and the Mentoring Functions Scale for the Protégé were self-reported survey items. See Appendix C for the Mentoring Functions Scale for the Mentor and Appendix D for the Mentoring Functions Scale for the Protégé. The validity of the responses depended on the honesty of the mentors and the protégés.

## Definition of Terms

The following terms and definitions were used in this study:

*Career Category of Functions:* The functions identified by Kram (1983) that include providing sponsorship, exposure-and-visibility, coaching, protection, and challenging assignments to the protégé.

*Elementary Grade Levels:* Grades Pre-Kindergarten, Kindergarten, and grades 1 through 5 in school. In this study, grade 6 was not included.

*Mentor:* In this study, mentor referred to a teacher with at least 3 years of experience teaching, who befriended, guided, supported, counseled, coached, accepted, encouraged, and served as a role model for another teacher (Clark, et al., 2000; Ford & Parsons, 2000; Jacobi, 1991). The mentor served as a teacher mentor within the last 2 years. For this study, the term was used to refer to all teachers who identified themselves as mentors, both National Board-certified (NBC) and non-National Board-certified (non-NBC).

*Mentoring:* The process of guiding, counseling, coaching, teaching, and befriending a less experienced person (the protégé) by one who is more experienced (the mentor) (Ford & Parsons, 2000) not only in the profession, but also in achievement and influence in the organization (Jacobi, 1991). Mentoring involves serving as a role model, supporting and directing the protégé, and providing necessary feedback (Noe, 1988). The process includes both technical career and personal support (Clawson, 1996; Jorissen, 2002). Both members of the mentoring dyad may benefit from participating in the relationship (Clawson, 1996; Jacobi, 1991; Martin & Trueax, 1997; Welch, 1993).

*National Board-certified (NBC) Teacher:* A teacher with at least 3 years of experience who had achieved the certification by passing the standards set by the National Board for Professional Teaching Standards (NBPTS).

*National Board-certified (NBC) Teacher Mentor:* A National Board-certified teacher who served as a mentor to a protégé. The National Board Certification was awarded

for passing the Board's rigorous requirements for teaching rather than for mentoring. In this study, a NBC mentor was referred to as a *NBC teacher mentor*.

*Non-National Board-certified (non-NBC) Teacher Mentor:* A teacher who did not hold National Board-certification but who served as a mentor to a protégé. In this study, a non-NBC mentor was referred to as a *non-NBC teacher mentor*.

*Pre-Kindergarten (PK):* A level of public schooling offered to children prior to the age of kindergarten. Children in PK are usually in the 3-4 years age group.

*Protégé:* A teacher who formed a mentoring relationship with another teacher or who had a mentoring relationship within the last 2 years. The definition did not limit experience to a specific number of years as a 5-year experienced National Board-certified teacher may mentor another teacher with more than 5 years' experience.

*Psychosocial Category of Functions:* The functions identified by Kram (1983) that included providing role modeling, acceptance-and-confirmation, counseling, and friendship to the protégé.

### Organization of the Study

Chapter 1 includes an introduction of the research, background of the problem, statement of the problem, purpose of the study, research questions, significance of the study, limitations, definition of terms, and the organization of the study.

The second chapter includes a review of the literature related to the study. This chapter contains research on mentoring in business and education, alternative forms of mentoring, the need for mentoring in education, mentoring definitions in business and in

education, roles of mentoring, mentoring functions, benefits of mentoring, Noe's (1988) study, formal mentoring in the schools, informal mentoring in the schools, the National Board for Professional Teaching Standards, and a summary.

Chapter 3 describes the research methods and procedures that were used to conduct the study. Included in this chapter are the research design, the population and sample, instrumentation used in the study, a detailed description of Noe's (1988) protégé version of the mentoring instrument, the instrument development, collection of data, and the data analysis used to determine the mentoring functions provided by the mentors.

Chapter 4 provides a demographic profile of the characteristics of the study participants, the origin of the mentoring relationships, and the data analysis of the functions provided by the mentors for their protégés. The data were analyzed by comparison of mentor and protégé responses by item and function.

Chapter 5 provides the study summary, conclusions, implications of the study, and recommendations. The implications include ideas for teacher mentors, school and district administrators, and scholars. Recommendations discussed improvement to the survey instruments, changes to the data collection process, and suggestions for future research.

## CHAPTER 2

### REVIEW OF THE LITERATURE

The purpose of this study was to identify and compare the career and psychosocial mentoring functions that National Board-certified teacher mentors and non-National Board-certified teacher mentors perceived they provided to their protégés at the elementary grade levels. The protégés' perceptions of the mentoring functions provided by their NBC teacher mentors and non-NBC teacher mentors also were identified and compared. Historically, a mentor in the United States public schools was a master teacher instructing the new teacher to copy the experienced teacher's techniques. Today, the mentoring role has expanded to include guiding the beginning teacher into the profession, assisting the novice in the reflective process, and coaching the new practitioner in connecting theory to practice as the novice becomes an active participant in the relationship (Boreen et al., 2000). Along with this expanding role, the definition of mentoring in education is often broad and must be clearly defined for the specific educational setting in which it is used.

This literature review examines the functions mentors provide to their protégés during the mentoring relationship, focusing mainly on the perceptions of the mentors in providing these functions and the perceptions of the protégés in receiving the functions in the public schools. The review begins with mentoring research in business and in education followed by sections on alternative forms of mentoring and the need for

mentoring in education. Mentoring definitions in business and in education are discussed followed by sections covering the roles of mentoring, mentoring functions, and the benefits of mentoring. Noe's (1988) mentoring relationship study is examined next. Formal and informal mentoring efforts in the public schools are examined. A section on the National Board for Professional Teaching Standards concludes the chapter.

### Mentoring Research in Business and in Education

According to Clawson (1996), it was common in the 1970s and the 1980s for young business students and graduates to find mentors in the field and for business organizations to formally establish mentoring programs. These Baby Boomers, who viewed the world as increasingly competitive, saw the need for a mentor to "grow one's career as fast as one could" (Clawson, 1996, p. 12). Educators, too, saw the need to assist new teachers as they grew in the field. In an effort to improve teacher retention in the schools throughout the nation, induction programs, which usually included mentoring, increased in the United States. Almost 80% of teachers reported having a mentor or participating in an induction program during the 1999-2000 school year (Smith & Ingersoll, 2004).

### *Mentoring Research in Business*

Armstrong, Allinson, and Hayes (2002) studied formally composed mentor-protégé dyads in the fields of law enforcement, health, and engineering. The purpose of the study was to examine the similarity between the cognitive styles of the mentor and the protégé and to determine if this would affect the career and psychosocial functions of the mentoring relationship. The results from the study indicated that those dyads in which the members were of comparable cognitive styles reported more career and

psychosocial functions performed, thereby confirming earlier research of Burke, McKeen, and McKeena (1994), which showed that dyad members who were more alike resulted in more functions being provided. The protégés of mentors who generated more ideas related to productivity reported receiving more career and psychosocial functions (Armstrong et al., 2002). The mentoring dyads were defined as intuitive partners who liked each other.

A study investigating the relationships between the initiation of the mentorship and the protégé's perceptions of mentoring functions with gender as a moderating effect indicated that the protégés in informal mentorships received more mentoring than those protégés in formal programs (Scandura & Williams, 2001). This was congruent with the findings of Ragins and Cotton (1999) who indicated that formal mentoring relationships did not provide the same level of mentoring functions as informal relationships and that the formal relationships were less effective than the informal ones in business. Ragins and Cotton (1999) also studied the gender variable in formal mentoring and indicated that even though protégés in formal relationships reported receiving less mentoring functions, this did not hold true for women. Women protégés in formal programs reported less mentoring functions, while having a formal mentor in this study did not translate to less mentoring functions for male protégés.

Scandura and Williams (2001) indicated that mentoring relationships that are informally initiated might result in higher levels of role modeling and vocational support while those relationships initiated by the mentor resulted in higher vocational support. Females reported receiving more psychosocial support, vocational support, and role modeling than the males when the mentor initiated the relationship. Those relationships



initiated by the protégé found males reporting more vocational support and role modeling than females; the reverse was true when both the mentor and the protégé initiated the relationship: females reported more vocational support and role modeling (Scandura & Williams, 2001).

The classic mentoring relationship is described in the literature as that of an older, wiser, more experienced person serving as the mentor who influences the “younger protégé’s intellectual and emotional growth during the important transition into adulthood” (Cohen, 1995, p. 1). This description is analogous to Levinson, Darrow, Klein, Levinson, and McKee (1978) in which the relationship becomes analogous to that of parent-child and in which the mentor is 8 to 15 years older than the protégé. Merriam (1983), in a synthesis of literature, defined the relationship as that with “characteristics of the parent-child relationship and peer support without being either” (p. 162).

Clawson (1996) presented a different view of mentoring for business in the future. Instead of providing “a greasing of the upward slope” (p. 10) for the protégé which may allow advancement more quickly, future mentors may find their roles changing as business organizations become flatter, team-based, and more interested in customer satisfaction. Clawson suspected that mentoring would “shift from personal career management towards guidance and coaching” (p. 10) and how to understand and meet the needs of the customers.

Mentoring is often described metaphorically as a journey (e.g., Daloz, 1999). Mentors, as guides, lead protégés through the life journey. The relationship is important in personal and psychosocial development, in one’s career, in academia (Merriam, 1983), and in the successful adjustment to adulthood (Levinson et al., 1978). In addition,

Levinson and colleagues (1978) indicated that the one critical function of the mentor was to support the young man in achieving the *Dream*, the vision the man has of his future life.

### *Mentoring Research in Education*

Daloz (1999) described the mentor in higher education as an individual who was charged with guiding a protégé along the transformative journey through the stages of life. He indicated that mentors must support, challenge, and provide vision for the protégés. With support, the mentor provides a “safe space” built on trust in which the protégé may grow. To support the protégé, the mentor must listen, provide structure, express positive expectations for the protégé, serve as an advocate, share oneself as a person, and make the relationship special. While leading the transformation, the mentor must challenge the protégé to move beyond the known and comfortable to embrace the new environment both are creating. To structure the challenge, the mentor sets tasks for the protégé, engages the protégé in discussion to understand different perspectives or ways of viewing a problem, encourages the protégé to give “legitimacy” to other viewpoints, constructs hypotheses that allow the protégé to move beyond what is to what might be, and sets high standards. The mentor provides “vision by modeling the person whom the protégé wants to become” (Daloz, 1999, p. 223); as the protégé changes, so must the mentor. The mentor must model curiosity, not just knowledge, and remember that the trip is the journey, not the destination, because mentors in education assist the protégés through a segment of the journey and seldom see them through the entire trip (Daloz, 1999).

Mentoring does not occur at only one point in the journey of life (Mullen & Kealy, 1999). Mullen and Kealy state that mentoring is no longer exclusively a component of college or preprofessional experience, but that mentoring can occur at all levels of development, both professional and personal, as teaching and learning continue throughout one's life. These researchers define *lifelong mentoring* as the process of always searching for and creating mentoring or comentoring relationships "through which one can become enabled, empowered, and self-actualized" (p. 189). Mullen and Kealy believe that lifelong mentoring is not common in teacher education, higher education, or the corporate world, but they avow that effective mentoring is an ongoing process and a basic component of living.

Writing in higher education, Mullen (2005) suggests that if mentoring is to become an effective, potent tool in education, it must be developed as part of the whole-school culture in which shared decision-making among the participants is supported. Mullen cautions that "mentoring that is of a strictly rhetorical nature protects the status quo . . . counteracting development or change" (p. 5) and further warns that because of the role of mentoring in the socialization process of teachers, mentors should be concerned about indoctrination and monitor themselves and the institution against engaging in such a practice. Evertson and Smithey (2000) agree that mentoring must not reinforce nor support the status quo of teaching practice. Instead, mentors should be taught to work with their protégés in more "learning-centered ways" (p. 2) thereby encouraging more innovative practice among themselves and their protégés.

Business leaders in this country are interested in America's schools and have sometimes poured large sums of money into specific districts and schools with little

effect on the national achievement of students (Symonds, 2006). Current corporate giving to education in this country is approximately \$2 billion annually, and education has begun to look at programs and systems that product results, including mentoring of teachers. The Milken Family Foundation started the Teacher Advancement Program (TAP) in 1999 to provide assistance to new teachers for an extended period of time. This program advocates promoting experienced teachers to the role of mentor for “junior colleagues” and assisting these newer teachers in improving their skills (Symonds, 2006). According to Symons, TAP schools earn higher test scores and the attrition rate for teachers is half the national average.

#### Alternative Forms of Mentoring

Concerned that traditional *technical mentoring* has been emphasized over alternative mentoring in many educational institutions, Mullen (2005) delineates the contrast between technical mentoring and alternative forms of mentoring and supports the latter. Technical mentoring involves “managerial efficiency, hierarchical authority relations and structures” (p. 29), while alternative mentoring involves “critical democratic orientation, power-sharing professional relations and structures” (p. 29). It is not the job of the mentor to only train and advise the protégé or to fix or clone the protégé into a likeness of the mentor. Technical mentoring promotes the views and concerns of management and the transmission of information. It is eternally driven, and often the accepted practice among institutions engaged in educational reform.

At the other end of the continuum is *alternative mentoring* (Mullen, 2005), a contemporary concept that is more egalitarian, democratic, and transcends the traditional one-to-one mentor/protégé combination. According to Mullen, alternative mentors

engage others in the learning process, are reciprocal learners, and become involved in the education of their protégés outside of the traditional supervisory or advisory roles.

Alternative mentors take risks for the protégés, provide appropriate feedback, request feedback from the protégés as a way to improve and as a reflective process, and serve as critical leaders involved with the concept of social justice.

One form of mentoring that departs from the traditional model is *collaborative mentoring* (Mullen, 2000a; 2000b). In an effort to redefine and modify mentoring relationships and structures that limit teachers and researchers from effectively working together as collaborators and research partners, Mullen, Kochan, and Funk (1999) described a working, mentoring relationship in which teachers at a university laboratory school engaged in productive research through *comentoring* with the sponsoring university faculty. Mullen (1999a; 2000a; 2000b) sees this collaboration as an opportunity for university faculty to learn from the laboratory school faculty and for each group to influence the practices of the other. Comentoring allowed the participants in this school-university collaborative to support each other as they researched mentoring, its structures, relationships, and various programs through action research (Mullen, 2000a). This process led to the joint publishing of a book in which each participant in the collaborative mentoring relationship contributed. This book, and the process of researching and writing it, led to an expanded definition of mentoring to “mean an empowering interaction among individuals who learn/research together for the purpose of personal and institutional change” (Mullen, 1999b, p. 13).

Beasley, Corbin, Feiman-Nemser, and Shank (1996) reported on another school-university partnership in which three teachers from a professional development school

associated with a large university engaged in mentoring each other and in reflective writing of the process over 2 years. The teachers met away from school to organize the mentoring project, which included meeting after school, journal writing, and sharing with each other and the university professor. The university member read the journal writings, wrote comments, and met with the teachers to discuss the process. Those involved in the mentoring relationship reported being the recipients of support, trust, and openness as they collaborated in their mentoring relationship.

Mullen (2005) acknowledges that the influx of women and minorities in the professions illustrate the need for alternative concepts of mentoring. She proposes constructs such as comentoring or collaborative mentoring, lifelong mentoring, sociocultural learning activities, a mentoring mosaic, learning communities, and mentoring leadership or partnership (Mullen, 1999a; 1999b; Mullen & Kealy, 1999).

According to Mullen (1999b), comentoring is complex. It fosters the creation of synergy, inspiration, equality, and empowerment for those involved in the process. Mullen (1999b) defines comentoring as that which “energizes people to develop appreciatively and critically while creating and sustaining synergistic development in concert with others” (p. 11). She indicates that comentoring is a “viable” alternative to *traditional mentoring* as it encourages reciprocal mentoring among those of diverse backgrounds and educational positions and is an effective form of mentoring for the schools.

Mullen (2005) discusses other forms of mentoring that expand the dyad beyond the traditional two members. These include support groups, study groups, *cohort mentoring*, *cross-cultural mentoring*, *telementoring*, and *arts-based mentoring*. Mullen

discusses the drawbacks of technical mentoring and acknowledges that alternative mentoring and technical mentoring can overlap, requiring the mentor and the protégé to reflect and carefully explore the content of the relationship. According to Mullen (2005), mentoring is a “holistic form of teaching and learning” (p. 106) that involves both the personal and the professional lives of both members of the relationship.

In addition to mentoring by an experienced teacher, alternative forms of mentoring such as telementoring, learning communities composed of new teachers, and peer coaching have the potential to reduce new teacher isolation and increase teachers’ skills (Heider, 2005). According to Heider, some new teachers involved in telementoring through email liked the support received from their mentors and reported feeling less isolated; others did not. The lack of meeting face-to-face with their mentors was not satisfactory for some novice teachers. In new teacher learning communities, the participants were empathetic to the concerns of other beginning teachers. This form of mentoring found large numbers of new teachers together throughout the school year sharing ideas, lesson plans, and problems. Contact was through meetings, workshops, and technology; however, scheduling meetings proved difficult in the cases reported by Heider (2005). Peer coaching allowed new teachers to observe each other’s classrooms and the classrooms of experienced teachers daily or weekly. This allowed beginning teachers the opportunity to observe lessons, share teaching strategies, and discuss problems in a non-threatening manner and reduce teacher isolation. According to Heider, peer coaching had never “caught on” in this country because of the free time needed to observe other teachers’ classrooms.

## The Need for Mentoring in Education

Mentoring entered the educational arena in earnest in the early 1980s as part of a broad and sweeping movement to improve education and the professional development of teachers, both new and experienced (Mutchler, 2001). Policy makers and educational leaders had high hopes for mentoring as one vehicle of reforming teaching and the education of teachers (Feiman-Nemser, 1996). As the push for mentoring gained momentum and formal programs were instituted in the schools, Little (1990) noted that the growth of mentoring programs was a result not of teacher interest but of “policy interests and institutional concerns” (p. 340). Writing at the same time, Odell (1992) listed the goals of formal mentoring programs as those of supporting new teachers, retaining new teachers, and assisting in the professional development of teachers.

Most of this nation’s college graduates in education enter classrooms each year with high grades in teaching methods courses, affection for helping young people succeed, and high expectations of embarking on a rewarding career (Gordon & Maxey, 2000). Despite these positive expectations and successful college experiences in coursework and student teaching, 15% of new teachers leave the profession after the first year, and as many as 33.3% (Darling-Hammond, 2003) to 50% leave within the first 5 to 6 years (Ingersoll & Smith, 2003; Thomas & Kiley, 1994).

Ingersoll and Smith (2003; 2004) indicate that even though this early vacating of the field by beginning teachers contributes to the continual teacher shortage the nation experiences, this shortage is not due to a limited number of teachers being recruited and trained for the nation’s classrooms. Rather, Ingersoll and Smith attribute the shortage to high rates of beginning teacher attrition and to teachers who leave the field several years



before retirement. In addition, a growing student population and smaller teacher-pupil ratios required by some states (Portner, 2001) contribute to this shortage. Many individuals leave because of dissatisfaction with teaching (Ingersoll, 1997), while others identify problems with student discipline and little support from teaching colleagues as concerns (Jambor & Patterson, 1997). Darling-Hammond (2003) lists four major factors that influence whether teachers leave specific schools or the teaching entirely. One of the four factors is “mentoring support in the early years” (p. 9). In 1997, the U. S. Department of Education reported that the nation’s schools lose 30% of beginning teachers in the first years due to the lack of support (Portner, 2001). With this dissatisfaction of the field by newer teachers, the retirement of experienced teachers, and class-size reductions, Villani, (2002) believes the nation will need to hire more than 2.5 million teachers by 2012. Portner (2002) claims that these new teachers will have two jobs: “(a) to teach and (b) to learn to teach better” (p. vii).

Teacher retention is an area in which the literature reveals mixed results. In a paper reviewing the results of beginning teacher induction programs at the state and local levels and summarizing previous research on the topic, Arends and Rigazio-DiGilio (2000) indicated the conflicting results with mentoring and retention. An international study of 11 Asia-Pacific Economic Cooperation (APEC) countries with similar features in their induction programs, one of which was mentoring, showed moderate support for induction as a tool for short-term retention. There was no evidence that induction improved the long-term retention rate of teachers. However, the authors’ review of an induction program in Ohio in which the new teachers were assigned a mentor provided a

different outcome. Data from the city's education association indicated that 80% of the teachers were still teaching 5 years after the induction year.

Survey results from a mentoring program in Texas revealed that teacher quality was the major reason for mentoring. Responding districts indicated the reasons for beginning mentoring programs were to improve the skills of beginning teachers and to increase student achievement. Retention of new teachers was important, but it rated less than the concerns of teacher quality (Pan, 2001).

In a comprehensive review of empirical studies on 10 induction programs in existence in the United States at the time of their report, Ingersoll and Kralik (2004) discovered some empirical evidence that mentoring programs have a positive effect on teacher retention. Ingersoll and Kralik voiced a concern that all of the studies examined had serious limitations and did not provide a definite connection between mentoring programs and teachers leaving the field. The authors recommended that educational leaders and the policymakers invest time and resources into designed, controlled studies to determine the links between teacher attrition and mentoring.

Ingersoll and Smith (2003) report data from the Teacher Follow-up Survey that was administered by the National Center for Education Statistics to teachers leaving the profession. Two of the more common reasons beginning teachers gave for leaving were for a better job or career change and dissatisfaction with teaching. Ingersoll and Smith acknowledge "conventional wisdom" that places the problem of attrition outside of the schools, but they indicate that the "roots of the teacher shortage largely reside in the working conditions within schools and districts" (p. 32). Thomas and Kiley (1994) concurred and noted that concerns within the schools could overwhelm beginning

teachers. To identify the concerns and problems new teachers faced, these researchers surveyed the teachers and determined that individual differences in students, time needed for preparation and evaluation, special learning problems, and classroom management and discipline were the top concerns of the new teachers. Thomas and Kiley recommended that experienced teachers be trained as mentors to assist these new teachers in becoming effective educators. Ingersoll and Smith (2003) contend that a solution to teacher retention early in teachers' careers may include better working conditions and support for new teachers, especially in the provision of mentors who are crucial for beginning teachers.

Smith and Ingersoll (2004) studied a sample of new teachers drawn from throughout the United States to determine if new teachers who participated in induction activities such as receiving additional resources, having a mentor, or collaborating with other teachers were likely to remain in the job the next year. The empirical research revealed some activities were better than others in reducing teacher turnover for the next year. The "most salient factors were having a mentor from the same field, having common planning time with other teachers in the same subject or collaboration with other teachers on instruction, and being part of an external network of teachers" (p. 706).

Mentoring has been determined to be an effective tool not only in retaining new teachers, but also in improving the quality of beginning teachers' skills and knowledge (Lipton & Wellman, 2003; Mutchler, Pan, Glover, & Shapley, 2001) and as a major technique of professional development for beginning teachers and master teachers (Martin & Trueax, 1997). Portner (2001) cited President Clinton (1997) and his speech, *Call to Action for American Education in the 21<sup>st</sup> Century*, in which the President

encouraged districts to provide beginning teachers with mentoring and support from experienced teachers. Portner (2001) noted that departments of education at both the federal and state level soon provided money for mentoring programs, leading over half of the states to pass legislation requiring mentoring programs for new teachers. According to several writers in the field, mentoring is a major component of local or statewide induction programs (Arends & Rigazio-DiGilio, 2000; Ingersoll & Smith, 2004; Pan & Mutchler, 2001; Portner, 2001).

Glover and Mutchler (2001), in summarizing their research on mentoring programs in Texas as part of the Texas Beginning Educator Support System (TxBESS) legislation, reported that good mentoring could be beneficial to teacher retention. However, teacher retention should not be the goal of mentoring programs as retaining all teachers might compromise the quality of teaching if ineffective teachers are not encouraged to exit the field. According to Glover and Mutchler, the aims of mentoring are to develop quality teachers with effective teaching strategies.

Some forms of mentoring have been used as part of local teacher induction programs (Feiman-Nemser, Parker, & Zeichner, 1992; Mills et al., 2001; Pan & Mutchler, 2001; Scott, 2001) or as a part of statewide initiatives mandated by legislatures (Mills et al., 2001; Pan & Mutchler, 2001; Riggs & Sandlin, 2002). Ingersoll and Smith (2004) state that teacher mentoring programs have become “the dominant form of teacher induction” (p. 29) over the last 20 years and that about two-thirds of beginning teachers in 1999-2000 reported having worked closely with a mentor. Evertson and Smithey (2000) report that more than 30 states have implemented mentoring in some form to assist new teachers. These states include California (Martin & Trueax, 1997), Texas

(Pan & Mutchler, 2001), Connecticut and Oklahoma (Arends & Rigazio-DiGilio, 2000), Michigan (Mills et al., 2001), and Florida (Florida Department of Education, 2003). In addition, Florida Senate Bill 2986 (Public Postsecondary Education, 2005) requires the Department of Education to “create guidelines and identify best practices for the mentors of first-time teachers and for new teacher-support programs” (p. 7).

Florida’s Career Ladder program, known as Better Educated Students and Teachers (BEST) and proposed by the state legislature in 2003, describes four categories of teachers: associate teacher, professional teacher, lead teacher, and mentor teacher (Mullen & Slagle, 2005). In this program, a mentor teacher, as defined by the state, is a classroom teacher who serves as a mentor to other teachers, a professional development coordinator, and one who instructs low-performing students. The alternative route to teacher certification in Florida requires mentoring by a trained mentor for the alternative candidate during the two-year period of becoming certified.

The need for a mentor during the first critical year or two exists because most novice teachers assume the same workloads and responsibilities as veteran teachers juggling the needs of students with those of family and a personal life (Jonson, 2002). The myriad of tasks is endless and the isolation of the classroom does not allow immediate assistance for the teacher. There is no period of adjustment notes Jonson; the result is stress and frustration. These teachers need support and assistance as they learn to manage students and build the foundation for a successful career (Jonson, 2002). Without support and assistance, teachers often leave the field. Jonson (2002) reports that attrition is even worse in urban districts.

To prepare and provide teachers with the skills needed to instruct the nation's children and to slow the vacating of the field by new teachers, schools and districts are turning to mentor teachers and mentoring programs in an effort to guide beginning teachers through the difficult first years of teaching (Huling-Austin, 1989; Jonson, 2002; Mills et al., 2001; Odell, 1989). Mentors are needed to provide protégés with emotional support, to serve as a liaison between the protégés and the faculty and between the protégés and the district office, and to orient them to the procedures of the school and the organization (Mills et al., 2001).

#### Mentoring Definitions in Business and in Education

According to Merriam (1983), studies and literature from the 1970s indicated a bias in favor of mentoring and of the necessity of having a mentor for success. Merriam reviewed the literature in three areas: adult growth and development, the business world, and academic settings at the collegiate level. Regardless of this bias, Merriam's research determined that the data-based studies indicated neither the "enthusiasm about its value, nor the exhortations to go out and find" a mentor (p. 169) perhaps due to the finding that the mentoring concept was not clearly defined, which led to confusion over just what was being measured or what was being offered as an ingredient for success. Mentoring appeared to be a "one-dimensional phenomenon" (p. 169) in the business field whereby a senior member of the organization guided the protégé's career. Likewise, the definition of a mentor and of mentoring can be confusing in the educational field. Galbraith (2001) notes that while there is greater understanding and a conceptual knowledge base of mentoring, especially in the educational realm of community colleges due in part to Cohen's Principles of Adult Mentoring Scale (1995), there is still a lack of clarity about

the mentoring process. A widely accepted mentoring definition from education does not exist.

### *Mentoring Definitions in Business*

Based on the work of Chao, Waltz, and Gardner (1992) and that of Hegstad (1999) mentoring relationships in business were usually informally initiated by either the prospective mentor or protégé based on similar interests and were not controlled or formally recognized by the organization. These relationships were different from other relationships at work in that the mentors in the performance of the career functions “use[d] their power to promote the advancement of their protégés within and between organizations” (Ragins, 1997, p. 92). In business, the mentor could effectively assist the protégé with the career functions due to the mentor’s senior position, experience, and influence in the organization (Kram, 1985/1988).

In investigating mentoring in the corporate world, Kram discovered that the term had so many connotations that she decided against using the term in the research, preferring to use the terms developmental relationships instead. In Kram’s (1983, 1985/1988) research, the mentor was a senior manager engaged in a developmental relationship with a junior colleague or manager. Levinson et al. (1978), in a study of young adult males, also described the mentoring experience as one in which a young man found himself as an apprentice to an older, more experienced, authoritative adult who was a teacher, advisor, or sponsor. This relationship was intensely personal, informal, and lasted several years.

Thus, mentoring in business was described as coaching, sponsoring, protecting, assigning critical experiences that showcased the protégé’s competence and potential, and

designing challenging experiences that provided necessary growth opportunities (Kram, 1985/1988). The mentoring relationship was usually informally initiated, the mentor was above the protégé in the hierarchy of the organization, and the relationship was to prepare and to develop both the participant's growth and advancement (Kram, 1985/1988).

### *Mentoring Definitions in Education*

In education, the mentor traditionally serves as a guide, friend, counselor, and is usually a fellow teacher instead of a supervisor (Daloz, 1986; Ford & Parsons, 2000). Many of the accepted and usable definitions of mentoring in academic and educational settings as well as other organizational settings are examined below:

In his study of educators desiring to become school administrators, Noe (1988) examined various definitions of a mentor and summarized the model as “a senior, experienced employee who serves as a role model, provides support, direction, and feedback to the younger employee regarding career plans and interpersonal development” (p. 458). In addition, the mentor increases the visibility of the protégé to the senior decision makers who may have influence over career opportunities (Noe, 1988).

Daloz (1986) referred to mentoring as a process of growing intellectually, emotionally, and ethically and of the mentor as being the guide along the journey. Ford and Parsons (2000) acknowledge the mentor as a more experienced person who guides, counsels, coaches, teaches, and befriends the less knowledgeable person, and in the end, both the mentor and the protégé change and grow as a result of having known and worked together. The mentor extends the role of mentoring to the former protégé who, in turn, mentors another person.



A mentor is experienced and knowledgeable about educational theory and practice; one who provides the emotional and technical support necessary for developing competence and identity in the profession, who is innovative and organized (Jorissen, 2002), and who constantly reexamines his/her own teaching practices and beliefs (Brooks, 1999). According to Clawson (1996), mentoring is more than providing technical assistance and teaching; “the term implies a broader and longer interest in the lives of protégés” (p. 6). Clawson preferred to think of mentoring as one of several developmental relationships, those relationships of which the intent and the result was to help one or both parties grow. A comprehensive definition of mentoring provided by Clawson (1996) was “when both parties in a relationship recognize the importance of what one can teach the other in not just one but several aspects of life, over time” (p. 9). Mentoring includes teaching, but is more than transfer of skills and knowledge; it is the inclusion of technical, organizational, and career/personal life issues (Clawson, 1996). Mentoring, as defined by Zachary (2000), is “a process oriented relationship involving knowledge acquisition, application, and critical reflection” (p. 4).

Acknowledging that mentoring in its many complex forms occurs both inside and outside of the classroom, Mullen (2005) defines traditional mentoring as “a personal or professional relationship between two people—a knowing, experienced professional and a protégé or mentee—who commit to an advisory and nonevaluative relationship that often involves a long-term goal” (p. 2). She also describes and advocates a newer form of mentoring as an alternative process involving support groups and mentoring cohorts, as well as teams that supplement the learning of the primary mentoring dyad.

Martin and Trueax (1997), discussing mentoring in the field of early childhood education, defined mentoring as a process which builds advocates and leaders in the field and that provides support and benefits for both the mentor and the protégé. The mentor receives revitalization and renewal; the protégé receives opportunities to gain new knowledge, skills, and an increase in self-confidence and self-esteem. Mentoring and the relationships formed in the process transform the personal and the professional domains of both the mentor and the protégé.

Boreen et al. (2000) present a short history of the changes mentoring has undergone in education over the last century. Mentoring has progressed from a “pupil teacher” shadowing and copying the master teacher’s techniques to a dimension where the novice teacher is encouraged to be an active participant in the relationship while learning to think critically and to understand why particular practices work or do not work in the classroom. Mullen (2005) and Zachary (2000) describe another change in mentoring, from that of a face-to-face relationship to one expanded by technology and the chat room/email capabilities. Mullen (2005) refers to this new form of mentoring as telementoring or e-mentoring in which the mentor provides the professional services of mentoring online.

Danielson and McGreal (2000) broached the term of evaluation or assessment in mentoring. They wrote that the new teacher could benefit from a mentoring relationship with a more experienced teacher who conducted formative assessments and who provided feedback to the teacher. A contrasting view asserts that the mentoring process is no place for evaluation (Ganser, 1995b; Jonson, 2002; Portner, 1998; Smith, 1993). Portner agreed, and stated that the role of a mentor was not that of an evaluator; the

mentor role was to be collegial, confidential, and ongoing. A mentor should not evaluate but instead assist the protégé in developing self-reliance, and the mentor had to be adept at using data to help the protégé reflect on teaching.

Even though mentoring has various definitions depending on the practitioner and purpose of implementation, there are common elements among the definitions. The commonalities of these mentoring definitions follow:

1. Mentoring involves a relationship between a more experienced person and a novice, or a protégé, who is less experienced.
2. It is a developmental process of growing intellectually and emotionally by both the mentor and the protégé
3. Mentoring involves a more experienced person serving as a guide.
4. Technical, organizational, and career/personal life issues are included in the process.
5. It is a process whereby the mentor leaves the relationship after sufficient time and the now former protégé becomes a new mentor to carry on the process with a new protégé.

Most of the definitions cover the traditional definition of an experienced mentor guiding a protégé along the journey from novice to experienced teacher or employee. Along this journey, a frequently used metaphor in the mentoring process, the mentor provides advice on professional issues, challenges the protégé, shares experiences, helps the protégé become acclimated to the profession and to the culture of the school, and shares emotions with the protégé.

## Roles of Mentoring

The mentor role, historically that of guide and counsel to a younger person transitioning into adulthood, is now more diverse and complex (Head, Reiman, & Thies-Sprinthall, 1992). The range of responsibilities for the mentoring role encompasses that of teacher, sponsor, and guide in the workplace (Levinson et al., 1978) to one of providing emotional support and friendship for the protégé (Kram, 1985/1988). Jonson (2002) indicated that the mentor must develop a trusting relationship with the protégé and provide support, encouragement, and collegiality as the novice learns how to teach.

The nouns most used to define the roles mentors perform include: guide (Daloz, 1999; Galbraith & Maslin-Ostrowski, 2000; Ingersoll & Smith, 2004; Levinson et al., 1978; Pitton, 2000; Portner, 1998), supporter (Daloz, 1999; Ganser, 1995; Pitton, 2000), friend (Galbraith & Maslin-Ostrowski, 2000; Pitton, 2000), advocate (Daloz, 1999; Galbraith & Maslin-Ostrowski, 2000; Pitton, 2000), role model (Galbraith & Maslin-Ostrowski, 2000; Gehrke & Kay, 1984; Pitton, 2000), and sponsor (Galbraith & Maslin-Ostrowski, 2000; Gehrke & Kay, 1984). In addition, other terms defining the mentor's role include: "adviser, developer of skills and intellect, listener, host, coach, challenger, visionary, balancer, sharer, facilitator, and resource provider" (Galbraith & Maslin-Ostrowski, 2000, p. 145). Mills et al. (2001) list trainer, coach, model, and listener. The psychological realm of the relationship requires one who is an acceptor, confirmer, counselor, and a protector (Galbraith & Maslin-Ostrowski, 2000).

Poetter, McKamey, Ritter, and Tisdell (1999) revealed the role of researcher in a study of mentors conducting research simultaneously with preservice intern teachers. Poetter et al. concluded that mentors and protégés engaged in concurrent research gained

a “sharing of minds” (p. 121) as both individuals examine theory behind academic frameworks and demonstrate the “worth of disciplined inquiry about teaching practice” (p. 121), enhanced the professional dialogue between the two, and allowed for the professional and personal development of both as each person conducted research.

In education, the primary role of the mentor is to develop a higher level of professionalism in the protégé by building capacity and confidence in order that the protégé will learn to make informed decisions, effectively solve problems, and focus on improving teaching and learning (Lipton & Wellman, 2003; Portner, 1998). Jonson (2002) labels several goals and skills as attributes that the mentor should help the beginning teacher develop. These attributes include competence in one’s teaching skills, self-confidence in one’s decision-making ability, the self-direction needed to command one’s own development as a person and as a professional, and the professionalism needed to assume the ethical responsibilities of the teaching profession. The mentor assists the protégé in developing into the best teacher possible, while not becoming a clone of the mentor (Pitton, 2000). Portner (1998) indicated that mentors could assist the protégé in achieving this professionalism by “relating, assessing, coaching, and guiding” (p. 7).

Gehrke and Kay (1984) examined mentoring relationships in a large Western suburban district to determine what elements of the relationship might be relevant for encouraging positive mentoring in the socialization of teachers. In interviews with 41 protégés, the respondents indicated that the most frequently mentioned roles that their mentors performed were: “teacher, confident [*sic*], role model, developer of talents, and sponsor” (p. 22). Four teachers mentioned the role of door opener, and two teachers mentioned protector (Gehrke & Kay, 1984).

Head et al. (1992) acknowledged that such diversity of roles leads to “the complexity of mentoring” (p. 9). Head and colleagues listed the mentor roles as those of “a trusted colleague, developer, symbolizer of experience, coach/supervisor, and anthropologist” for the protégé (p. 9). Trust is critical to the building of a strong relationship between the mentor and the protégé. The developer encourages the protégé “to engage in self-analysis of technical, affective, and critical dimensions of teaching” (p. 10), while the symbolizer of experience assists the protégé in acquiring the language to verbalize the teaching experience. The coaching role necessitates classroom demonstration of teaching by the protégé, practice, and feedback from the mentor. In the role of anthropologist, the mentor helps the protégé understand the “complex culture of the educational setting” (p. 11).

According to Portner (1998), the mentor must not assume the role of evaluator. Portner indicated that the components of trust and confidentiality are important for mentors to provide to their protégés, and that the role of evaluator is contrary to the concept of mentoring. Jonson (2002) agrees and indicated that trust and integrity are “vital” to the relationship. Mentors should provide feedback, but protégés are uncomfortable with mentors conducting a summative evaluation (Ganser, 1995b). Furthermore, many mentors themselves feel that they should not be involved in the process (Smith, 1993). Protégés may be hesitant to share concerns, problems, or ask for help if mentors engage in summative evaluations; however, formative assessments, based on specific tasks, roles, and responsibilities for both the mentor and the protégé, may be appropriate (Pitton, 2000).

## Mentoring Functions

Kram (1983), in her detailed study of 18 mentoring relationships in a large public utility in the Northeast, identified two categories of developmental functions that mentors provide for their protégés: career functions and psychosocial functions. Career functions support the protégé in learning the organization and its hierarchy and are related to career advancement. These functions, which usually appear before psychosocial functions in business, are possible due to the mentor's position, experience, and influence in the organization. Specific career functions delineated by Kram include: "challenging work, coaching, exposure-and-visibility, protections, and/or sponsorship" (p. 616).

Challenging work was described by Kram (1985/1988) as specific assignments the mentor provides the protégé, along with the training and ongoing feedback on the performance, thereby allowing the protégé to obtain competence in the profession and feelings of accomplishment in the field. The mentor acts as a coach in suggesting strategies for succeeding at work objectives, for being recognized at work, and for achieving specific career objectives. With exposure-and-visibility, (1985/1988) indicated that the mentor provides the protégé with opportunities to demonstrate performance to senior personnel by assigning responsibilities that "require written and personal contact with other senior managers" (p. 27). Protection allows the mentor to shield the protégé from contact with senior personnel when that contact may be "untimely or potentially damaging" (p. 29). Kram found sponsorship to be the career function observed most frequently. Sponsorship involves supporting the protégé by nominating the protégé for lateral moves and promotions. Kram cautioned that relying on only one sponsor was risky and that sponsorship from more than one individual would likely result in a more

credible recommendation. Kram also indicated that an individual without sponsorship in the organization would be overlooked for promotions, regardless of competence and performance.

The psychosocial functions support the protégé by enhancing the “individual’s sense of competence, identity, and effectiveness in a professional role” (Kram, 1985/1988, p. 32) and are dependent on the quality of the interpersonal relationship between the mentor and the protégé and between the protégé and “significant others both within and outside the organization” (p. 32). Specific psychosocial functions denoted by Kram include: “role modeling, acceptance-and-confirmation, counseling, and friendship” (p. 32).

Kram (1985/1988) indicated that role modeling was the psychosocial function reported most frequently. It is a process, both conscious and unconscious, in which the mentor’s *attitudes, values, and behavior* are modeled for the protégé. The protégé will gradually assume or incorporate some of the senior mentor’s ideas and work habits, but will reject others. With acceptance-and-confirmation, the mentor provides support, trust, and encouragement as the protégé experiments with new behaviors and takes risks in the workplace. The counseling function enables the mentor to act as a sounding board for the protégé to discuss “anxieties, fears, and ambivalence that detract from productive work” (p. 36). Throughout the various career stages, the protégé may have questions regarding self, work, and/or family that can interfere with work. Kram indicated that the protégé needed a trusted mentor in whom to communicate these concerns in confidence without fear of retaliation or exposure in the organization. The function of friendship allows the



mentor and the protégé to engage in social interaction that results in mutual liking of each other and informal social contact “about work and outside work experiences” (p. 38).

The range of functions will increase as trust and rapport are developed between the mentor and the protégé (Kram, 1985/1988). Kram indicated that the relationship might need six months to a year before the sharing of career concerns through the functions of counseling and friendship could occur.

According to Kram (1985/1988), as the needs of the mentor and the protégé change, the range of the mentoring functions will change. Younger protégés may need different functions provided than do protégés further along in the organization, and senior managers may be more driven and receptive to providing certain functions than younger managers.

In a study of mentoring relationships in clinical psychology doctoral training, Clark et al. (2000) indicated the protégés judged friendship as one of the lowest rated functions. The researchers stated that this function might not be in the traditional role of the professor, but instead more indicative of mentoring in business. The opposite was found in a study of college students of diverse backgrounds and ages (Beyene, Anglin, Sanchez, & Ballow, 2002). In this study, 94% of the protégés indicated that having a mentor as a friend was critical to the relationship.

Concerned that mentoring programs in schools were not based on a strong conceptualization of the process, Anderson and Shannon (1988) proposed a concept of mentoring for new teachers that included five mentoring functions: “teaching, sponsoring, encouraging, counseling, and befriending” (p. 40). These writers believed that mentors must be prepared to perform “any or all of the functions” (p. 40) as needed

and that mentors be required to engage in all five functions as this would make the role stronger. Anderson and Shannon described sponsorship of the teacher protégés as protecting, supporting, and promoting. Mentors may promote their protégés within the “instructional and social systems of the school” (p. 40) by recommending protégés serve on committees.

Although Crow and Matthews (1998) indicated that the career functions in school leadership were different than Kram’s (1985/1988) career functions in business due to limited positions for advancement, they alternately proposed three functions for school administrators involved in mentoring: the professional development function, the career function, and the psychosocial function. The professional development function incorporates skill and knowledge development, behaviors, and values applicable for school leadership. The career function is focused on career satisfaction, awareness, and advancement. “Personal and emotional well-being, as well as role expectation, clarification, and conflict” (p. 12) compose the psychosocial function.

Cohen (1995) also acknowledged that mentors interact with adult learners in two categories: “for the purpose of enhancing their intellectual and affective (emotional) development” (p. 4). Within these two domains, Cohen identified six behavioral functions that the “complete mentor” (p. 5) must possess: “relationship emphasis, information emphasis, facilitative focus, confrontive focus, mentor model, and mentee vision” (p. 5). Relationship emphasis requires the mentor to listen empathetically and non-judgmentally to the mentee’s concerns and feelings. (Cohen used the term mentee instead of protégé.) The mentor uses the informative function to ask the mentee for specific information that will allow the mentor to provide guidance in making decisions

that will be designed to achieve goals, both personally, in education, and in the career. With facilitative focus, the mentor encourages the mentee to engage in a detailed self-evaluation process designed to encourage the consideration of alternative options while determining career plans and personal goals.

With confrontive focus, Cohen (1995) instructs the mentor to challenge the mentee to study behaviors that are unproductive, decisions that are made or ignored, and to recognize that some behaviors need to be changed. In the mentor model function, the mentor serves as a role model and shares personal experiences and feelings with the mentee in order to encourage the mentee to take risks, make decisions necessary to advance toward goals, and to “enrich the relationship” (p. 191) between the mentor and the mentee. The function of mentee vision requires the mentor to stimulate the mentee’s critical thinking so the mentor will envision the future, both personally and professionally. Cohen stated that the purpose of this function was “to encourage mentees to function as independent adult learners, to take initiatives to manage change, and to negotiate constructive transitions through personal lifestyle and workplace events” (p. 23). Cohen indicated that the mentor must perform all six functions as a “synergistic effect” (p. 5) is created in which the mentoring relationship becomes greater than the six separate functions. It is this blend of functions that makes the mentoring meaningful for the mentee.

Although he did not delineate the functions into two specific categories, Portner’s (1998) functions also can be categorized into the two groups. He referred to the functions that mentors must provide in the mentoring role as those of “relating, assessing, coaching, and guiding” (p. 7). Relating behaviors encourage the mentor to build a trusting

relationship with the protégé, to determine needs and concerns, and to encourage the protégé to share experiences with the mentor. In the function of assessing, the mentor gathers, identifies, and diagnoses data about the protégé's teaching methods and learning style; determines the protégé's ability to handle specific situations; identifies school culture; and notes the procedures of the district, both formal and informal. With this data, the mentor can identify the professional development needs for the protégé and make decisions based on this compilation of data. Coaching behaviors encourage the mentor to act as a role model by sharing experiences and by encouraging the protégé to engage in reflection as a method for improving teaching. Using these behaviors, the mentor assists the protégé in growth of professional skills and subject content, and in acquiring resources and expanding teaching strategies. The guiding function requires the mentor to ask questions of the protégé that require critical thinking and reflection. This process encourages the developing teacher to become independent and to make teaching decisions based on reflective knowledge and experience. Like Cohen (1995), Portner (1998) indicated that these functions do not occur in isolation; they “consistently overlap and complement each other during the mentoring process” (p. 8).

#### Benefits of Mentoring

Mentoring has been shown to benefit all individuals involved in the relationship and the organization, whether mentoring is formally established for student teachers (Giebelhaus & Bowman 2000); informally developed; traditionally defined; or alternatively designed relationships. According to Little (1990), these benefits extended to the beginning teacher (protégé), the mentor, and the organization. Crow and Matthews (1998), writing about mentoring for administrators and principal interns, indicated the

benefits extend to the organization's "passengers" along the protégé's journey: the university faculty, other administrators, teachers, students, and family. Barrett-Hayes (1999), in discussing the role of the mentor in a collaborative study between educational faculty at a large university and faculty at the nearby demonstration school, reported on the benefits to the organizational parallel in education: that of the university and the school. A well-designed, focused mentoring program has a positive effect on the new teachers, their students, and the mentor (Holloway, 2001).

The National Education Association (NEA) Foundation (2001) reports that successful mentoring has benefits for all educators. It aids in recruitment and retention, and provides a transition from the campus to the classroom. For teachers, effective mentoring may mean the "difference between success and failure; and for parents and students, it means better teaching" (p. 4).

The benefits of mentoring have been extolled by researchers in the area of adult development. Erikson (1963) determined that adults pass through distinct stages with various crises that must be resolved before moving to the next stage. One stage involved helping the next generation, a need, Erikson believed, that allowed a person to experience a positive outcome in the stage. Inspired by Erikson's research, Levinson (Levinson et al., 1978) indicated there are three eras in the adult life cycle of the male; each era contains specific periods in life that alternate between stability and transition. During the early adulthood era, a young man visualizes and formulates the dream for his life and begins a relationship with a mentor. According to Levinson et al., this relationship is the most important of the young man's development, as the mentor will assist him in realizing his dream.

### *Benefits to the Mentor*

The benefits to the mentor are many and usually exceed the pitfalls (Jonson, 2002). Jonson's list of benefits includes the satisfaction of building the profession, sharing the profession with and helping another to grow, receiving new training for the role, increased visibility and prestige, an expanded career role, rejuvenation, and admiration from the protégé.

Scott (2001), in a review of the New Brunswick Beginning Teacher Induction Program, indicated that 95.3% of the mentors agreed that they benefited personally and professionally from serving as a mentor. Mentors reported an increase in motivation, friendship, their own professional development, and the personal satisfaction of providing professional and emotional support to their protégés.

Martin and Trueax (1997) stated that mentoring is “transformational in that it renews and revitalizes the seasoned practitioner by providing a new vision” (p. 8). Villani (2002) indicated that teachers learn more about their own teaching when they discuss what they know with new teachers. Other positive intrinsic benefits of mentoring for the mentor include gaining new skills through professional growth and development (Isher & Edelfelt, 1989; Martin & Trueax, 1997; Scott, 2001), renewing enthusiasm for the profession (Ford & Parsons, 2000), developing potential, and increasing job satisfaction (Pitton, 2000). Other benefits are a reduction in classroom isolation (Ford & Parson, 2000; Jambor et al., 1997; Villani, 2002), an increase in status (Martin & Trueax, 1997), recognition from others (Jonson, 2002), renewal of self and the career (Ford & Parson, 2000), and an increase in job satisfaction (Pitton, 2000).

Some mentors indicate that mentoring allows them the opportunity to become school leaders, while helping others develop professionally (Moir & Bloom, 2003). Jambor and others (1997) indicated that 40% of teacher mentors in one program decided to pursue administrative certification as a result of growing through the process of serving as a mentor. Some extrinsic benefits of mentoring may include monetary rewards (Martin & Trueax, 1997; Jonson, 2002), a reduced teaching load, and release time (Jonson, 2002).

Crow and Matthews (1998) listed the benefits of mentoring as having a renewed enthusiasm for the profession, gaining new insights, having time for individual process evaluation, being a teacher again, acquiring new ideas and chances for promotion, validating work, and making friends. Darling-Hammond (2003) noted that mentoring other teachers provided the mentors with an incentive to remain in the profession as the mentors learned and shared with their peers.

#### *Benefits to the Protégé*

Giebelhaus and Bowman (2000) examined the Praxis III/Pathwise mentoring model to determine if new teachers who were assigned mentors trained in the Pathwise framework would develop more skills than those with mentors not trained in the model. The “Educational Testing Service (ETS) developed the Praxis III/Pathwise framework for direct observation and assessment of teaching as companion pieces” (pp. 6-7). Praxis III was a summative assessment designed to identify teaching skills deemed essential by the literature and educators. Pathwise was the formative component designed to assist mentors in interacting with their beginning teachers. The purpose of this study was to see if training mentors on a specific model (Pathwise) for framing discussions “on teaching

and learning would produce growth and development of prospective teachers' pedagogical skills" (p. 8). An analysis of the data indicated that novice teachers, whose cooperating teacher mentors had been trained in this discussion framework, demonstrated "more complete and effective planning, more effective classroom instruction, and greater reflectivity on practice" (p. 13) than those beginning teachers whose mentors had been provided only an orientation to the program. According to Giebelhaus and Bowman, the Pathwise model provided "a framework for discussion, reflection, and goal setting" (p. 17) that led to more effective teaching by the beginning teachers.

Protégés report that the emotional support provided by their mentors is beneficial (Scott, 2001). Odell and Ferraro (1992) surveyed two groups of elementary teachers 4 years after their beginning year to determine how many were still teaching and to assess the mentoring support they had received the first year. Approximately 88% of the teachers were located; however, only 30% of these teachers returned the questionnaire. Of those who did, approximately 96% of the teachers were still teaching. The teachers were provided with a list of seven categories of mentoring support and asked to rate how helpful each category of support had been during their first year. The responding teachers ranked emotional support as the most important followed by support in using instructional strategies, obtaining resources for the classroom, disciplining students, working with parents, managing the school day, and functioning within the district. Ford and Parsons (2000) stated that a supporting relationship allowed the protégé to engage in creative "quests" knowing the mentor was watching and ready to protect the protégé if needed.



For the protégé, the mentoring relationship also provided validation (Martin & Trueax, 1997), assistance with the stresses of first year teaching (Little, 1990), relief from the isolation of the classroom (Pitton, 2000), and a shorter path to becoming a good teacher (Portner, 2002). Mentoring helps new teachers in handling the “emotional side of teaching” (Scherer, 2001, p. 10). Gehrke and Kay (1984) indicated mentors’ knowledge of the profession and people in the field could aid the protégé in securing a job.

For teachers leaving the classroom to pursue administration or to advance up the administrative ladder, Crow and Matthews (1998) listed several benefits of securing a mentor for guidance along the way. These benefits are listed below:

1. Mentoring exposes the protégé to different experiences and creativity in practice.
2. Protégés become more visible to key personnel who may have influence over future job opportunities.
3. Mentors may protect protégés from damaging situations that the protégés may not be able or prepared to address. The mentors watch for difficulties that arise without overly protecting the protégés from necessary growth and socialization.
4. Support is provided for the protégés as they face challenging problems and engage in risk-taking that may appear too threatening to be handled on their own. Mentors talk the protégés through these challenges.
5. Mentors assist the protégés in gaining confidence and competence.
6. Protégés learn to reflect on their practices.

### *Benefits to the Organization*

According to Little (1990), effective mentoring provides a good return on the investment of hiring teachers and assures the public of a level of quality before awarding tenure. The organization benefits as the mentoring process provides an opportunity to instruct new teachers to a higher level of teaching thereby retaining more experienced staff (Martin & Trueax, 1997). Vaughn and Coleman (2004) reported on the role that mentoring could have as an alternative form of professional development at the school level that is more effective than the traditional method of development. Mentors collaborate with colleagues, observe in protégé's classrooms, exhibit personal satisfaction and motivation, and provide friendship to new teachers (Scott, 2001), which provide a positive atmosphere in the school and district. Mentoring serves the organization by providing the protégé with information on the "daily workings of the school and the cultural norms of the school community" (Villani, 2002, p. 10) and in promoting and assisting new teachers in understanding the cultural diversity in the students and their families.

Benefits extend to other people in the organization who share in the protégé's journey. Crow and Matthews (1998) listed the benefits that administrators, teachers, students, and families of administrative protégés receive while the mentored protégés grow into school leadership. These benefits are listed below:

1. Administrative mentoring programs produce capable leaders.
2. Mentoring encourages learning communities.
3. Districts with administrative mentoring programs gain better candidates for administrative positions.

4. A mentoring program allows university faculty a link between theory and practice.
5. Teachers and students have more focused leaders. Principals who are involved in collegial and reflective mentoring are more interested in improving instruction and learning.
6. Mentoring provides the protégés with a clear description of their roles pertaining to school, family, and friends.

#### Noe's Mentoring Relationship Study

At the time of his initial study, Noe (1988) conducted his research under the auspices of the Industrial Relations Center at the University of Minnesota. In the prologue to the report of the study, Noe acknowledged the work of Kram (1983) in identifying the functions mentors provide in informal relationships in a public-sector organization and also noted that research in mentoring had failed to advance beyond Kram's work. Other studies and descriptive works that Noe acknowledged and referenced included authors Burke, Jennings, Phillips-Jones, and Roche, who described the effectiveness of a mentor; Phillips-Jones, who discussed the informality of the majority of mentoring relationships; and Klauss and Kram (1985/1988), who warned that formal assignment of the mentor to the protégé leads to a formal mentoring relationship that may not be as successful and beneficial to either member as mentoring relationships that appear to develop more informally.

Noe (1988) inventoried the literature and determined that no studies had been conducted to identify the benefits to the protégés from participating in mentoring relationships that were assigned in a formal manner. Also, at the time of the study, Noe

observed that “few empirical studies of mentoring relationships” had been conducted, probably due to the lack of “operationalizing the mentoring functions identified in previous qualitative analyses” (p. 459). Noe stated that it was important “to develop a quantitative measure of the types of functions mentors provide for protégés” (p. 459), to identify those individual and organizational factors that contribute to the success of the relationship, “to identify the influence of protégés’ personal characteristics and job and career attitudes on both the extent of interaction with mentors and the benefits gained from the relationship” (p. 460), and to investigate whether formal, assigned mentoring relationships provide similar career and psychosocial benefits. These areas led to the purpose of his study which was as follows:

to investigate the influence of protégés’ job and career attitudes, the gender composition of the mentoring dyad, the amount time spent with the mentor, and the quality of the interaction with the mentor on the psychosocial and career benefits protégés gain from participation in assigned mentoring relationship. (p. 460)

Among Noe’s identified factors influencing the development of successful assigned mentoring relationships were the protégés’ characteristics of locus of control, job involvement, career planning, interpersonal relationships at work and their importance, gender composition of the dyad, the quality of the mentoring interaction and the amount of time spent with the mentor, and the protégés’ beliefs that their mentors provided career and psychosocial functions. The above items were measured either by existing instruments or surveys. The career and psychosocial mentoring functions were measured using items Noe developed for the study. The items measuring the mentoring functions were embedded in a larger instrument, which included questions on demographics, time spent with the mentor, work environment and peer relationships, and

the mentoring functions (Appendix A). The items for the mentoring functions scale were taken from Noe's original instrument and are reproduced with the original directions and in the original format (Appendix B). This mentoring functions instrument was titled Mentoring Functions Scale for the Protégé (Noe, 1988) for this study. The numbers to the questions in the appendix are different, but the questions are in the same order as Noe's (1988) original scale.

The mentoring program studied by Noe, and for which the instrument was developed, was part of a comprehensive training and development program designed to promote the personal and professional development of educators who desired to become school administrators, such as principals and superintendents. The National Association of Secondary School Principals (NASSP) and the Carlson School of Management provided financial support for the study. As part of the developmental program, mentors were assigned to observe their protégés during simulation exercises designed to improve the potential administrators' administrative and interpersonal skills. Mentors first observed the protégés during the simulation exercises and provided feedback regarding the quality and level of the skills observed. Following the simulation exercises, the mentors were directed to provide the protégés with personal support, career information, and guidance. Each mentor was assigned from one to five protégés, was working in the protégé's school district, and was skilled in educational administrative work. In addition, each mentor held an upper-level administrative position in the district, was not responsible for supervising or evaluating the protégé, and had frequent contact with those in the district responsible for promotions and job assignments in the district. Noe selected his mentoring participants based on "their willingness to help aspiring

administrators, a past record of effective administrative work, and successful completion of a mentor training program that emphasized the mentor's role in the development of the educators" (p. 464).

Developmental programs studied by Noe were located in nine different sites across the United States. The study involved 139 protégés and 43 mentors. The protégés included 74 females and 65 males with an average age of 40 years. Eighty-seven of the protégés had master's degrees, 72 were serving as assistant principals, and 67 were teachers or counselors. The gender division among the mentors was 22 males and 21 females with a mean age of 48 years, making the mentors older on average than the protégés. Fourteen of the mentors were directors and 11 were assistant superintendents in the districts.

Noe (1988) utilized various existing measuring instruments and tools for three factors of the study: job involvement, locus of control, and career planning. For the job involvement factor, Noe applied Lodahl and Kejner's 20-item scale. Lodahl and Kejner's instrument assessed work and its relation to three variables: enthusiasm, self-worth, and importance to the individual protégé. According to Noe, locus of control was measured using Andrisani and Nestle's scale of 11 adult and work-oriented items derived from Rotter's Locus of Control Scale. For the career-planning factor, Noe used Gould's 6-item scale to determine each protégé's career plans and objectives. Specifically, this scale measured the extent to which each protégé had a career plan, how often the plans changed, and whether or not there was a specific plan for the achievement of the goals.

Protégés participating in the training program completed the job involvement, locus of control, and the career planning instruments prior to program participation. Noe

acknowledged the work of Rotter indicating that individuals with an internal locus of control were more likely to believe that job performance and work behavior were under one's personal control instead of outside forces beyond personal control, such as luck, which individuals with an external locus of control tended to believe. Referencing Spector, who contended that locus of control was a personality characteristic that could affect an individual's beliefs regarding skill improvement and, thereby, participation in developmental activities such as mentoring relationships, Noe then hypothesized that internals would spend more time with the mentors and would utilize the time better than would externals. Since the internals would likely be more motivated to engage the mentor more effectively, Noe measured the characteristic prior to the mentoring experience.

With job involvement, Noe used Lodahl and Kejner, who defined job involvement as the extent to which an individual psychologically identifies with work and the importance of work to one's self-image. Noe contended that skill development might be dependent upon how important the job is to the individual's self-image, their work enthusiasm, and the importance of the job in relation to activities not related to the job and that the extent an individual utilized the mentor may be influenced by the involvement on the job. Noe referred to an earlier work of his and Schmitt's in which they wrote that job involvement might be involved in determining the level of skill acquired in training programs. In addition, Noe asserted that the functions of mentoring might be more enticing to individuals with a higher degree of job involvement because they would equate mentoring activities as facilitating job performance and skill utilization. This led to the hypothesized statement that protégés with greater levels of job

involvement would spend more time with the mentor and would utilize the mentor more effectively. Since this characteristic could be determined prior to the training program, Noe administered Lodahl and Kejner's scale prior to program participation.

For career planning, Noe referred to Jordaan, who held that exploratory behavior was an important determinant of job success and satisfaction. The works of Mihal, Sorce, and Compte as well as Stumpf, Colarelli, and Hartman were used in defining exploratory behavior and in providing examples of the trait. The behavior refers to mental and physical activities in which one engages in self-assessment and decisions regarding adjustment to the job. Some examples cited included "career values, interests, goals, or plans" (Noe, 1988, p. 462), and gathering job information from colleagues as well as family and friends. Noe believed that individuals who engaged in career planning activities were more likely to know their strengths, weaknesses, and interests than those who did not engage in this process. Noe also acknowledged Gould as well as Super and Hall in noting that the "extent to which individuals engage in career planning, a type of exploratory behavior, has been shown to be related to the likelihood of participation in self-development activities" (Noe, 1988, p. 462).

Referring to Kram's (1983) work in which career-related activities consume much of the mentoring relationship, Noe (1988) hypothesized that individuals who engaged in career planning would spend more time with the mentors and would use the time more effectively. As with locus of control and job involvement, this trait could be measured before the training program. With all three characteristics, Noe indicated that individuals with high levels of the characteristics would spend more time with a mentor and would utilize the mentor more effectively.



The relationship importance, the quality of interaction and amount of time spent with mentors, and the mentoring functions factors were measured with items or questionnaires developed by Noe. The protégés completed questions on the relationship importance and mentoring functions, while the mentors completed questions on the amount of hours spent with the protégé and on “how effectively they were utilized by the protégé” (p. 466). For the relationship importance factor, Noe developed a 5-item measure to determine the “importance of relationships with supervisors and peers at work” (p. 465). Questioning mentors to determine the amount of time the protégés spent with their mentors assessed the factor of quality of interaction and time spent with mentors. Regarding gender composition of the dyad, Noe defined a homogeneous relationship as one in which both the mentor and the protégé were of the same gender ( $n = 58$ ) and a heterogeneous mentoring relationship as one in which the mentor and the protégé were not of the same gender ( $n = 63$ ). The study included “36 male mentor/female protégé dyads and 27 female mentor/male protégé dyads. Gender information was not provided by either mentor or protégé for 18 of the dyads” (p. 466). The mentoring functions factor was measured using a 32-item instrument developed by Noe to determine “the extent to which the protégés believed the mentors provided career and psychosocial functions” (p. 466).

In Noe’s discussion of the study, he acknowledged the study’s importance in the “development of a measure of mentoring functions based on a synthesis of previous research” (p. 472) and submitted evidence suggesting that mentors do provide career and psychosocial functions, even in assigned mentoring relationships. Noe noted that the two functions were very comparable to those identified by Kram (1983) with this study’s

exception being that the items related to the mentors' coaching behaviors had a variance more in common with the psychosocial functions than with the career functions. In regards to the mentoring function scales, Noe indicated that "the high internal consistency reliability estimates and homogeneity of item content suggest that the . . . scales may be a useful criterion measure for researchers and training practitioners concerned with understanding the effectiveness of assigned mentoring relationships" (p. 473).

Noe's (1988) study was designed to focus on protégé characteristics and the benefits obtained from the mentor/protégé relationship. Noe had hypothesized that time spent with the mentor and the extent to which the mentor was utilized would yield more career and psychosocial benefits for the protégé. Overall, the protégés did indicate receiving psychosocial benefits from their mentors, but not the expected career benefits. Also, other hypothesized effects did not prove true. The "protégés' level of job involvement, locus of control, relationship importance, and career planning were not related to effective utilization of the mentor or amount of time spent with the mentor" (p. 470). Although the protégés' levels of job involvement and their attitudes toward career planning had no effect on the amount of time spent with their mentors or on the quality of the mentoring relationship, Noe did disclose that protégés with high levels of job involvement and clearly formulated career plans reported receiving more psychosocial benefits than those "protégés with low levels of job involvement or underdeveloped career plans" (p. 474).

Even though protégés reported "feelings of acceptance-and-confirmation, a forum for exploring personal and professional dilemmas, and beneficial feedback" (p. 473) from

their assigned mentors, Noe revealed that the results from the study indicated that organizations should not expect protégés in formal, assigned mentoring relationships to receive the same benefits as protégés in “informally established, primary” (p. 473) relationships. Clawson, Kram, and Phillips-Jones were cited for defining primary mentoring relationships as those in which the complete range of career and psychosocial functions are provided to the protégé, and both the mentor and the protégé are committed to the relationship.

The lack of mentor and protégé interaction in this study indicated three problems that may restrict the interaction in an assigned program: time, different work schedules, and physical distance. Noe reminded organizations developing assigned mentoring programs to make every effort to ensure that mentors are available to their protégés, because the optimum benefits of the mentoring relationship could not be realized if the mentor did not work geographically close to the protégé.

The hypothesis that the protégés in a mixed-gender relationship would utilize the relationship less effectively than those protégés whose mentor was of the same gender was not found. In addition, female protégés utilized the relationship more effectively than the male protégés; perhaps, according to Noe, due to the fact that mentors in education were not “inhibited by stereotypes” (p. 475) from working with female protégés, and because traditionally education has accepted women advancing upward in the field.

Noe indicated several limitations of the study. The fact that the protégés completed self-rated questionnaires regarding job involvement, career attitudes, and mentoring outcomes obtained was a concern to Noe. He suggested future studies

incorporate additional sources for documenting job and career activities such as examining personnel records for evidence of hours worked per day and for documentation of planning activities. Future studies might also utilize assessments of the protégés' peers, supervisors, and mentors in determining the extent the protégés' career planning and various other activities are due to the mentoring relationship. In addition, mentors should assess how extensively they provide the career and psychosocial functions to their protégés. Noe cautioned those outside of the field of education that the study's findings might not be applicable to other occupations as educators "may have higher levels of job involvement and value work relationships more than individuals in other occupations" (p. 476). Whereas learning and personal growth are indicative of education and educators may hold high value for relationships at work, Noe reminded others that the private sector is driven by profits and productivity, likely making "personal and professional development less salient issues" (p. 477).

One final limitation Noe reported was that his study provided the extent of the mentoring functions in a short-term relationship, whereas Kram (1985/1988) indicated that 2 to 5 years were needed to achieve the maximum benefits of a mentoring relationship. Noe suggested longitudinal studies of formal mentoring programs were needed to determine if the mentors and the protégés continued the relationship "after the novelty of the relationship is reduced" (p. 477) and if the protégés could receive the career functions from shorter relationships. Finally, Noe stated that his study represented an early attempt "to investigate the antecedents and consequences of assigned mentoring relationships" (p. 477) and encouraged further study of assigned relationships to

understand the implications of a mentoring relationship not only for the individuals involved, but also for the institution.

### Formal Mentoring in the Schools

The prevailing category of mentoring research in education, unlike business, is the study of formal mentoring programs and the functions that mentor teachers provide their protégés in school programs from early childhood (Martin & Trueax, 1997) to preservice (Cornell, 2003; Poetter et al., 1999) to full induction into the field (Mills et al., 2001; Pan & Mutchler, 2001; Scott, 2001). Some studies tended to focus on specific mentoring and/or induction programs in particular schools or districts (Feiman-Nemser et al., 1992; Mills et al., 2001; Mutchler et al., 2001; Scott, 2001), making generalizability difficult (Ingersoll & Smith, 2004), while others are comprehensive statewide studies with meticulous reports on mentoring for new teachers, which is a state initiative often mandated by the legislature (Mills et al., 2001; Pan & Mutchler, 2001; Riggs & Sandlin, 2002).

Induction programs have received support not only from states and districts but also from the National Commission on Teaching and America's Future (1996) and from the No Child Left Behind Act of 2001 (2002). Mentoring is often a major component of these induction programs (Ingersoll & Smith, 2004; Pan & Mutchler, 2001). Evertson and Smithey (2000) reported that more than 30 states have implemented mentoring in some form to assist new teachers. This strategy has been devised even though those making the policy and the educators initiating it do not have a "clear and complete understanding of teachers' concerns about the profession and their schools" (Johnson & Birkeland, 2002).

### *Selecting Teacher Mentors in Formal Programs*

When selecting mentors for new and veteran teachers, The National Education Association (NEA) Foundation (2001) recommended that school personnel know the characteristics of effective mentors, select a pool of teacher mentors who meet the standards, and establish priorities for matching the mentors with the protégés. The NEA identified four categories of qualities that an effective mentor should possess: attitude and character, communication skills, professional competence and experience, and interpersonal skills. Based on experience working with mentors, Rowley (1999) presented six qualities a “good” mentor must possess. Good mentors are committed to the role of mentoring, accepting of the new teacher, skilled at providing the teacher with instructional support, effective in interpersonal contexts, able to model continuous learning, and able to communicate hope and optimism to the beginning teacher.

According to Ganser (1995b), selecting experienced teachers as mentors was crucial to the success of mentoring programs. Mentors must be selected for their competence and accomplishments in the field. However, Ganser cautioned educators against choosing only “master” teachers as mentors because this would reduce the available pool of teachers who could be effective mentors and would “lead to the divisive process of sorting teachers” (p. 307). In addition to experience, Ganser suggested that officials include information such as letters of nomination; written belief statements concerning teaching, induction, and mentoring; portfolios and videotapes of the perspective mentors; and interviews to select mentors to a mentoring pool. Qualities Ganser (1995b) identified as essential for potential mentors were teaching competence,

willingness, commitment, enthusiasm, and the ability to work with adults as teacher educators.

Once teachers are selected to serve as mentors, the mentors must be matched to the protégés. Ganser (1995b) listed three principles that were important in matching the mentor to the protégé. First, the mentors and their protégés must have comparable teaching assignments regarding content areas and grade levels. Second, mentors and their protégés should share similar ideas and values about teaching, children, and learning. Finally, mentors and their protégés must be accessible to each other in regards to location and time. Ganser stated that mentors and protégés need time to meet during the school day, and the physical distance between the classrooms needs to be minimal so that questions may be answered quickly.

#### *District Teacher Assistance Program*

The district in which this study was conducted had a teacher assistance program that included a new teacher-support program as required in Florida Senate Bill 2986 (2004). This bill requires districts to adopt guidelines and identify best practices for mentors of first-time teachers and for support programs designed for new teachers. The district's new teacher training program was developed as a collaborative effort between the teachers' organization and the district office. The program was designed to provide mentoring assistance to first-year teachers, to annual contract teachers in the second, third, or fourth years of teaching who needed additional support, and to teachers who had received an overall unsatisfactory rating on their annual evaluation. If needed and requested by the principal, mentoring assistance was provided to experienced teachers new to the district.

To qualify for the role of mentor in the teacher assistance program, a teacher must be tenured in the district, be willing to provide collegial support to other teachers, and must have successfully completed training in the Florida Performance Measurement System (FPMS) Support Team Training and Clinical Educator Training (CET). Teacher mentors are required to attend a 6-hour Support Team Training update on the FPMS formative domains every 3 years. National Board-certified teachers who want to serve as an official mentor in the teacher assistance program must have FPMS and CET training. NBC teachers do not need training to mentor teachers after hours and/or on the weekends to qualify for the stipend the state pays NBC teacher mentors for mentoring. To begin the process, the principal or a designee initiates the new teacher-training program at the school, selects the mentor, and coordinates the initial meeting between the mentor and the protégé.

The Florida Performance Measurement System (FPMS) has been used in Florida's school districts since the 1980s as the method of providing performance appraisal and feedback to teachers. In 2001, districts were required to develop their own appraisal systems and present them to the Department of Education for state approval (Ashburn, 2001). Some districts included either parts or all of the components of FPMS in their appraisal programs. This training, which usually requires five days, consists of the study of effective teaching practices, the coding of the summative instrument, conferencing skills, and the study of the domains. These domains include planning, management of student conduct, instructional organization and development, presentation of subject matter, verbal and nonverbal communication, testing, climate checklist, and effective oral communication for guidance counselors, psychologists, and social workers,



and vocational education. At the conclusion of the training, participants must pass a coding test using the FPMS instrument (Florida Performance Measurement System, Volusia, 2006).

Clinical Education Training began in 1984 as part of the Teacher Education Internship Project in Florida (Florida Department of Education [FLDOE], 2006). The training content was designed to prepare clinical educators to assume supporting roles in school improvement and to provide supervision to pre-service field experiences and internships. This training is based on two principles: “developing teachers” need support while changing and refining professional practice, and professionals at all developmental levels can learn from the activities in the “formative process model” (FLDOE, 2006). The training modules were designed to develop clinical skills in the following areas: “identification of performance standards; diagnosis of professional performance; diagnosis of student performance; feedback on performance; preparation and implementation of professional development plans; and reflection” (FLDOE, 2006, p.1). All school or district personnel in Florida who supervise interns or work with prospective teachers during field experiences must have Clinical Educator training (Public Postsecondary Education, 2005).

According to the district, the roles and responsibilities for the mentors in this district include completing the formative coaching activities and observations for the new teacher program; modeling best practices, especially in classroom management and effective instructional strategies; inducting new teachers into the culture of the school; helping teachers with the expectations of the district and the school; providing collegial support; observing new teachers in the classroom; and providing peer coaching. Schools

may use substitute teachers so mentors have the opportunities to observe new teachers, model teaching in the classroom, and provide peer coaching and mentoring.

Mentors in the district's program receive a \$400 stipend for each protégé.

Mentors may provide assistance for five teachers; however, the district recommends that one mentor provide assistance for no more than three protégés in a year. Participating protégés have only one mentor at the school but may have another educator with expertise in a special area if needed, but this mentor does not receive the stipend.

According to the district's guidelines for peer assistance, NBC teacher mentors who are identified as the mentor for a teacher at a school as part of the district program cannot use the mentoring activities as part of the NBC mentoring hours.

#### *Functions in Formal Mentoring Programs*

Research on formal mentoring programs in education includes some information related to mentors providing various levels of the career and psychosocial functions noted by Kram (1983) in the study of mentoring in business. Often the functions are not labeled as career or psychosocial but as support, both psychological and instructional-related support, and as development which builds an understanding of pedagogy (Mutchler, 2001). In a comprehensive report of the Texas statewide mentoring program and detailed case studies of three districts, Glover and Mutchler (2001) reported that mentoring teachers provide such career functions as assistance with classroom management, orientation to district and campus procedures, and help with lesson plans. Vaughn and Coleman (2004) report utilizing mentor teachers to teach other teachers an instructional practice by coaching, modeling, and providing feedback to fellow teachers as an alternative approach to staff development. Results from a study by Evertson and

Smithey (2000) indicate that teachers trained and prepared to take on the mentoring role tend to focus on those career practices that are important to new teachers such as classroom management, planning skills, and problem solving. Evertson and Smithey (2000) were involved in the development of mentoring workshop material as an effort to change the role of the mentor from that of providing primarily emotional support to that of supporting and guiding new teachers through discussion and reflection.

An earlier study by Odell and Ferraro (1992) surveyed teachers who had received mentoring four years earlier in their beginning year. Their mentors were extensively prepared for mentoring through a university program. Former protégés revealed that the emotional support that they received during the first year was the most valued. Other areas of support under the career function category are listed as the teachers ranked them: receiving instructional strategies, obtaining classroom resources, disciplining the students, working with parents, managing the day, and learning to function within the structure of the school and the district. Other studies revealed that the psychosocial functions that teachers utilized in working with protégés included master teachers modeling teaching for the protégés, providing emotional support and assurance (Glover & Mutchler, 2001), getting to know the protégé as a person, and viewing the protégé as a partner or peer (Poetter et al., 1999).

Mills et al. (2001) reported on mentoring programs in a county in Michigan and revealed the career functions provided by effective mentors as that of trainer, coach, model, provider of classroom management ideas, and those who linked their protégés to the organization and its structure. Emotional support included listening and helping the protégé build relationships with others.

### *Problems Connected to Formal Mentoring in Schools*

In reviewing a mentoring program in New Brunswick, Scott (2001) identified two problems both mentors and their protégés had with the program. One was the lack of time needed to participate in the professional activities, and the other was when a mismatch occurred between the mentor and the protégé. Mentors who participated in a collaborative field-based mentoring program for pre-service teachers with the university (Cornell, 2003) indicated several reasons for not wanting to be a mentor again. Lack of compensation for mentoring, the amount of time spent in the activity, and dissatisfaction with the university administration, especially the lack of communication, were listed as concerns with the mentoring program.

A longitudinal study of 50 new teachers (Johnson & Birkeland, 2002) designed to follow their career movements and to determine why they left teaching, stayed in the field, or changed schools found that most of the new teachers had paid, formal mentors. Johnson and Birkeland observed that the relationships were often mis-matched: the members taught different subjects, grades, or even in different schools. Additionally, the personalities of the mentor and the protégés often clashed, and their schedules seldom allowed for observing in each other's classes. These researchers suggested that schools should "rely less on one-to-one mentoring and, instead, develop school-wide structures that promote the frequent exchange of information and ideas among novice and veteran teachers" (p. 36).

Gilbert (2005) questioned new teachers on the survey results of previous beginning teachers in Georgia. These previous teachers had indicated that having an assigned mentor was one of five top strategies that helped them as new teachers. Several

of the teachers Gilbert questioned commented that their assigned mentor was not a good match, was not available, or could not offer much assistance. Other new teachers responded that their mentors, even though they could not help, introduced them to other teachers who could.

Evaluation can be a problem of formal mentoring, in which the mentor is assigned to the protégé by a third party, often by the principal. Johnson and Birkeland (2002) interviewed a teacher whose mentor was responsible for evaluation. Even though the protégé had major discipline problems, the protégé did not seek assistance from the mentor for fear of receiving a negative evaluation. Ganser (1995a) agreed that mentors must not evaluate protégés; instead they should provide informal feedback.

#### Informal Mentoring in the Schools

An informal relationship is one in which the relationship develops spontaneously without the assistance of a third party (Johnson, 2002). Informal studies referring to the mentoring functions in PK-12 education are limited. A study conducted by Tellez (1992) at the PK-12 level revealed that new teachers might not seek help from their formal mentor, even if they encountered a serious problem and liked the mentor, but would seek help instead from another teacher or another source whom they found to be more caring and friendly. Tellez (1992) suggested that perhaps new teachers should select the mentor teacher themselves. Tillman (2000) described a mentoring mosaic pattern in which the protégé may have a formal mentor but also have another informal mentor to turn to for advice and assistance, one who would encourage reflective dialogue, was knowledgeable, caring, and committed to learning. More specific mentoring functions were not described. The secondary mentor would not undermine the formal mentor but would

complement that relationship. In Tillman's (2000) paper, the external mentor was often a former university professor in the field of education.

#### National Board for Professional Teaching Standards

In 1983, the President's National Commission on Excellence in Education published a report, *A Nation at Risk*, that alerted educators, parents, business leaders, and the legislators to the state of the nation's educational system and its failure to address the pressing concerns and needs of a changing America, its growing diverse student population, and the global society of the coming century (NBPTS, 1991; Steeves & Browne, 2000). According to the NBPTS, this report indicated that the nation's leaders, both corporate and educational, realized that America's future and promise depended on world-class schools staffed with world-class teachers. In turn, world-class teachers needed world-class schools (NBPTS, 1991).

According to the NBPTS (1991), National Board Certification was established as the result of a recommendation of a report issued 3 years later: the Carnegie Forum's report, *A Nation Prepared* (Carnegie Forum on Education and the Economy, 1986). This critical report focused on the important relationship between educated citizens, the nation's economy, and the functioning of a sound democracy. In this report, the Task Force on Teaching as a Profession noted the critical role of the teacher and of the profession in preparing the nation's students for the competitive 21<sup>st</sup> century.

The focus of schooling must shift from teaching to learning, from the passive acquisition of facts and routines to the active application of ideas to problems. That transition makes the role of the teacher more important, not less. (p. 25)

In the executive summary, the Task Force stated that the schools are the engines that drive progress and productivity. In addition, the Task Force indicated two truths essential to achieving the excellence the nation needed.

[F]irst, that success depends on achieving far more demanding educational standards than we have ever attempted to reach before, and second, that the key to success lies in creating a profession equal to the task—a profession of well-educated teachers prepared to assume new powers and responsibilities to redesign schools for the future. (p. 2)

The Task Force recommended a national certification process for the nation's teachers that set standards of what accomplished "teachers should know and be able to do" (Carnegie Forum, 1986, p. 3; Mack-Kirschner, 2003, p. 2; Steeves & Browne, 2000, p. xiii) and that provided a national certification to those teachers who demonstrated competency in the standards. Based upon the recommendations of the Carnegie report, representatives of the educational community, including teachers, administrators, higher education leaders and faculty, educational association leaders, business leaders, and parents established the NBPTS in 1987 to develop this national certification process for teachers who meet the standards. Teachers voluntarily engage in the certification process; it is not mandated (NBPTS, 1991; Steeves & Browne, 2000). The NBPTS is an independent, nonprofit, nonpartisan organization governed by a 63-member board of directors, the majority of whom must be regularly engaged in teaching in the classroom (NBPTS, 2004b; 1999). Other board members are school administrators, school board leaders, governors, legislators, officials in higher education, teachers' union leaders, and community and business leaders (NBPTS, 2004b).

NBPTS receives funding from private and public sources. The organization is funded with grants from the U. S. Department of Education, the National Science Foundation, and various corporations and foundations. In 1991, the NBPTS received 41% of its revenue from the federal government while nongovernmental sources provided 59%. By 2007, the NBPTS expects to receive most of its funding from candidate certification fees (National Education Association [NEA], 1999).

The mission of the NBPTS is to advance the quality of teaching and learning in the nation's schools 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 these 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, 2004b, para. 1)

In *Toward High and Rigorous Standards for the Teaching Profession* (NBPTS, 1991), the National Board stated that it has an important role in the national dialogue on educational reform and in making teaching a profession dedicated to student learning and high professional standards for teachers in service and conduct. The National Board sees itself as a “catalyst for lasting change” (p. 5) that acts in concert with other educational initiatives to implement quality teaching in the nation's classrooms, and therefore, an increase in student learning. The NBPTS, unlike other school reforms, focuses on the teachers and their students (Mack-Kirschner, 2003).

Teachers striving for National Board certification are not the only teachers impacted by the Board's standards and the assessments. With the emphasis on this



standards-driven process, teacher preservice programs, professional development programs in the field, some colleges are designing programs for teachers around the certification standards (Tell, 2001).

In the challenge to American education, the NBPTS envisioned National Board-certified teachers sharing their expertise with others. According to the NBPTS, these NBC teachers would be regularly assigned to instruct the most disadvantaged students, be involved in developing instructional policies at the schools, deliver staff development, serve as mentors to other teachers, contribute to the knowledge base for teaching, and be recognized for the achievement of National Board Certification (NBPTS, 1991).

There are five core propositions upon which the National Board is based (NBPTS, 1991). These precepts incorporate the fusion of knowledge, skills, dispositions, and beliefs that the NBPTS believes characterizes an accomplished teacher and a National Board-certified teacher.

The first proposition is that “teachers are committed to students and their learning” (p. 17). The teacher is dedicated to making knowledge accessible to all students and is aware of student variability and this influence on learning. Individual differences are recognized among the students, and the teacher adjusts instruction and practice to accommodate these differences. Teachers understand how students learn, are familiar with the social and cognitive concepts related to teaching and learning, treat all students equitably, and are involved in helping students to develop beyond their academic capacities. Proficient teachers also consider students’ self-concepts, motivation, and character development when planning learning activities (NBPTS, 1991).

The second postulation is that “teachers know the subjects they teach and how to teach those subjects to students” (NBPTS, 1991, p. 19). The National Board believes that accomplished teachers understand how knowledge in their subject area is created, organized, and linked to other subjects. This knowledge is critical to the teacher’s ability to teach students to think analytically, to think for themselves, and to look for alternative solutions to problems. Under this proposition, teachers have a command not only of the subject matter but also the knowledge of how to reveal the content to students in ways that acknowledge the complexity of students and school contexts (NBPTS, 1991).

“Teachers are responsible for managing and monitoring student learning” is the third precept (NBPTS, 1991, p. 21). Teachers are facilitators of student learning who know and understand different strategies of student instruction and how to implement those strategies to meet their goals. Accomplished teachers know how to manage student behavior and social interaction and how to vary the social and physical structure of the classroom to create a learning environment that complements the various learning styles of students. National Board-certified teachers practice motivational strategies to encourage student achievement and regularly assess student progress, often using innovative tools for evaluation.

National Board-certified “teachers think systematically about their practice and learn from experience” (NBPTS, 1991, p. 24) is the fourth proposition. Teachers recognize the complexities of the field, respect the field of teaching, and are committed to life-long professional development. These teachers make professional decisions based on the best interests of the students, basing these decisions on established theory and

reasoned judgment. Board-certified teachers seek the advice of other educators and keep current on research in the field and in their specialty area.

Finally, the National Board is based upon the belief that “teachers are members of learning communities” (NBPTS, 1991, p. 26). As members of learning communities, Board-certified teachers work in a collaborative manner with others in the analysis and improvement of the school curriculum and in the coordination of instruction. These teachers understand the technical requirements of a coordinated curriculum thus enabling them to participate in planning and decision-making as part of departments, teams, or educational groups outside the classroom. National Board-certified teachers are team players willing to share their knowledge and expertise with others, which may take the form of mentoring novices (NBPTS, 1991). Board-certified teachers work collaboratively with parents and are adept at using the community as a resource for learning by learning the character of the community and its effects on the students and the school (NBPTS, 1991).

As of 2004, certification is available in the following standards subject areas: generalist, art, career and technical education, English as a new language, English language arts, exceptional needs, library media, mathematics, music, physical education, school counseling, science, social studies-history, and world languages other than English (NBPTS, 2004b). Each certificate field has its own requirements that the teacher must complete and demonstrate competency. The specific requirements for each area depend upon the age range of the students the teacher instructs and whether the certificate is generalist or content-focused (Steeves & Browne, 2000).

The requirements of candidacy for National Board Certification necessitate that a candidate hold a baccalaureate degree, have a minimum of three years' teaching experience, and have held a valid state teaching license for those three years. Where a state teaching license is not required, "the teacher must have taught in schools recognized and approved to operate by the state—for example, private K-12 schools that meet the state criteria for a teaching license" (Steeves & Browne, 2000, p. 7). During the year of candidacy, the candidate must teach in or have continual contact with two or three classes in the certification field in which the candidate intends to become certified.

### Summary

Mentoring is one of the major forms of teacher induction and professional development in the public schools, encouraged by the local districts and many states. In addition, the National Board organization encourages teachers holding the certification to mentor others in the field. Therefore, it was important to determine the functions that the mentors perceived they provided and what their protégés perceived had been provided. This study was based on the qualitative work of Kram (1983) in determining and describing the effective mentoring functions in business and the quantitative work of Noe (1988) in education. Noe measured the functions with future school administrators and their mentors. This study determined whether the mentors in elementary schools provided the functions and if the perceptions of the mentors and the protégés related to the functions provided were similar. Also studied was how National Board-certified teacher mentors compared with non- Board-certified teacher mentors in their perceptions of providing the functions to their protégés. The perceptions of the protégés was measured and compared to the perceptions of the mentors.

To provide a background into mentoring and the functions provided by mentors, this literature review included a discussion of mentoring research in business and in education, the need for mentoring in the educational field, and the definitions of mentoring in business and in education. Since this study investigated the mentoring functions mentors provided to their protégés, the roles and functions of mentoring were reviewed. The benefits of mentoring were presented with specific benefits outlined for all participating in the relationship: mentor, protégé, and organization.

Noe's (1988) mentoring relationship study and his research encompassing not only the mentoring functions, but those of locus of control, job involvement, career planning, interpersonal relationships at work, and the dyad gender were explored in detail, as items adapted from Noe's instrument were used in this study. The mentoring program, for which Noe designed his instrument to measure the mentoring functions, was described, as were the participants in the study.

Studies of formal mentoring and informal mentoring in the schools PK-12 were investigated. Functions in formal programs were detailed as were the problems connected to formal programs in the schools. The history behind the National Board for Professional Teaching Standards, its funding, mission, assessments, and standards were highlighted in an effort to present the high standards and professionalism that the Board requires of teachers achieving the certification.

## CHAPTER 3

### METHODS

The purpose of this study was to identify and compare the career and psychosocial mentoring functions that National Board-certified teacher mentors and non-National Board-certified teacher mentors perceived they provided to their protégés at the elementary grade levels. The protégés' perceptions of the mentoring functions provided by their NBC teacher mentors and non-NBC teacher mentors also were identified and compared. This chapter presents the research methods and procedures that were used to conduct the study. Specifically, the chapter describes the research design, population and sample, instrumentation, collection of data, and analysis of data.

#### Research Design

This study employed a quantitative research design, which utilized structured pencil-and-paper instruments. These instruments provided responses about the mentoring functions that National Board-certified teacher mentors and non-National Board-certified teacher mentors perceived they provided to their protégés. An additional instrument provided responses about the mentoring functions that the protégés perceived their mentors provided for them. The following research questions were addressed:

1. What career and psychosocial mentoring functions do National Board-certified and non-National Board-certified mentor teachers perceive they provide to their protégés?

2. How do mentor teachers and their protégés compare in their perceptions of the mentoring functions being provided?
3. How do National Board-certified teacher mentors and non-National Board-certified teacher mentors compare in their perceptions of providing the mentoring functions?
4. How do the protégés of National Board-certified and non-National Board-certified teacher mentors compare in their perceptions of the mentoring functions being provided?

#### Population and Sample

This survey-based study was conducted in a large urban school district in Florida with a student population of over 100,000 students. The target population for this study involved two groups. The first included National Board-certified teachers and non-Board-certified teachers in the district who had at least 3 years of experience and who had served in a mentoring capacity within the last 2 years. The most recent protégés of these teacher mentors were the second population group. These protégés were either new teachers, teachers involved in the alternative certification program, National Board candidates, annual contract teachers identified as needing further assistance, or teachers who had established a mentoring relationship with another teacher. National Board-certified teacher mentors and non-Board-certified teacher mentors and the protégés of both groups of mentors were offered the opportunity to participate in the survey.

Data from the district indicated that there were approximately 350 National Board-certified teachers in the district during spring 2006, with approximately 170 Board-certified teachers at the elementary level. The exact number of protégés with

National Board-certified teachers as their mentors was not known, as every Board-certified teacher did not mentor. National Board-certified teacher mentors who participated in the district's new teacher training program were selected by the school's principal or a designee to mentor a first-year teacher or another teacher identified as needing professional support. These mentors were referred to as *peer assistants* by the district. Some National Board-certified teacher mentors worked on the weekends to mentor National Board candidates or teachers who had requested additional assistance. Many chose to mentor after hours as the state pays the mentor 10% of the average state teacher's salary for mentoring the equivalent of 12 days (approximately 96 hours) after school. This is in addition to the \$400 per protégé stipend the district pays NBC teacher mentors to assist protégés at the school. NBC teacher mentors cannot use peer assistance mentoring hours as part of the NBC mentoring hours for the state stipend.

The sample for the study was a convenience sample that included four groups. These four groups were 50 National Board-certified teacher mentors, their 50 protégés, 45 non-Board-certified teacher mentors, and their 45 protégés.

In an effort to balance the sample, the number of non-certified teacher mentors and their protégés closely mirrored that of the Board-certified number. All mentors had to have 3 years' experience, and most of the mentors and their protégés worked at the same school. The mentors and their protégés were matched, and responses from both were received. If the mentor's response was received, but the protégé's response could not be gathered, the mentor's response was not included in the study. Likewise, the protégé's response was not included if the mentor's completed survey was not collected.



## Instrumentation

The two instruments that were adapted for this study are reviewed and presented in this section. These are the Mentoring Functions Scale for the Mentor and the Mentoring Functions Scale for the Protégé. See Appendix C for the mentor instrument and Appendix D for the protégé instrument. These instruments were adapted from Noe's (1988) Mentoring Functions Scale for the Protégé.

Noe's (1988) permission was needed before adapting his mentoring instrument for this study. First, Noe was located through the Internet and contacted via email. After several email requests for permission to use the document in this study, Noe sent a letter giving his permission. The letter was short, and the necessary information was provided to Noe by the researcher and the major professor. See Appendix E for a copy of Noe's permission. Noe's complete instrument was requested via email, and after several tries, a copy of the complete survey instrument was sent to the researcher by email.

### *Noe's Mentoring Functions Scale for the Protégé*

Noe's (1988) version of the Mentoring Functions Scale for the Protégé (Appendix B), which was extracted from his Original Mentoring Questionnaire (Appendix A), was based on a synthesis of previous research in the field of mentoring. It was a self-assessment instrument designed for mentors working with protégés in the field of education at the administrative level. The instrument was used to assess the extent to which mentors provided their protégés with the career and psychosocial functions as perceived by the protégés. The participants were in a comprehensive, formal mentoring program for educators who aspired to administrative positions, such as principal or superintendent of schools.

The main goal of the mentoring scale was “to assess the extent to which the protégés believed the mentors provided the career and psychosocial functions” (Noe, 1988, p. 466). The instrument originally consisted of 32 items that were developed on the basis of the functions identified by previous descriptive studies and qualitative analyses of mentoring relationships from the business field. Noe reported that he consulted the studies and the findings of Burke (1984), Kram (1983, 1985/1988), Kram and Isabella (1985), Roche (1979), and Zey (1984) for the development of the scale. Protégés were asked to read each item and to respond to the extent to which the item described their mentoring relationship. Noe used a 5-point Likert-type scale with 1 (*To a very slight extent*) to 5 (*To a very large extent*). A *Don’t know* response was available, and this category was treated as a missing response in subsequent analysis.

Noe (1988) identified the underlying constructs assessed by the mentoring functions scale with a factor analysis. Instead of a confirmatory approach, Noe (1988) used the strategy of an exploratory factor analysis for the study because the study represented one of the first attempts to develop a measure of the mentoring functions and, according to the author; theoretical development of the types of functions provided by mentors was incomplete. Following the principal factor analysis, a varimax rotation was performed on 29 of the function items. Three of the original 32 items were eliminated from the analysis because more than 50% of the respondents checked the “Don’t Know” category for these items. The eliminated items were: “Mentor has taken blame or credit in controversial situations,” “Mentor has spoken highly of your skills and abilities,” and “Mentor nominated you for desirable [*sic*] lateral moves or promotions” (Noe, 1988, p. 467). The author noted “inclusion of these items would have significantly reduced the

sample size for the factor analysis, resulting in an unstable, inaccurate solution. Estimated communalities were used on the diagonal of the factor matrix” (p. 467). Noe used two decision rules to determine which items defined the rotated factors. First, an item had to have a factor loading of .30 or higher. Second, an item had to clearly load on one of the factors. Items with similar loadings across the factors were not used to form scale scores or to interpret the factors. Two factors representing 21 of the items surfaced from the data. Table 1 lists each item along with its corresponding factor.

An examination of the item loadings for Factor 1 suggests that this factor represents the psychosocial mentoring functions as the items that define this factor determine the extent to which the mentor provided coaching, acceptance-and-confirmation, counseling, and served as a role model to the protégé. Factor 2 appears to assess the career mentoring functions provided by the mentor that are related to the protégé’s career. These include protection, exposure-and-visibility, challenging assignments, and sponsorship. The two factors represented all the mentor functions with the exception of the items assessing friendship, which Noe (1988) noted did not load on either factor. An examination of the eigenvalues indicates that approximately 82% of the variance in the mentoring function items can be explained by the two factors. To determine the stability of the factor loadings, Noe (1988) reanalyzed the 21 items that defined the rotated factors. This factor-loading pattern was identical to the first analysis.

Based on the factor analysis results, Noe then calculated scale scores by computing the average of the sum of items with the highest factor loadings on each factor. He calculated the internal consistency reliability estimates to determine the homogeneity of the two scales. His reported internal consistency estimate for the

Table 1

*Noe's (1988) Mentoring Functions Scale for the Protégé*

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Factors and Related Items

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Factor 1: Psychosocial Mentoring Functions: Items assess the extent to which mentor provided coaching, acceptance-and-confirmation, counseling, and served as a role model.

1. Mentor has shared history of his/her career with you.
2. Mentor has encouraged you to prepare for advancement.
3. Mentor has encouraged me to try new ways of behaving in my job.
4. I try to imitate the work behavior of my mentor.
5. I agree with my mentor's attitudes and values regarding education.
6. I respect and admire my mentor.
7. I will try to be like my mentor when I reach a similar position in my career.
8. My mentor has demonstrated good listening skills in our conversations.
9. My mentor has discussed my questions or concerns regarding feelings of competence, commitment to advancement, relationships with peers and supervisors or work/family conflicts.
10. My mentor has shared personal experiences as an alternative perspective to my problems.
11. My mentor has encouraged me to talk openly about anxiety and fears that detract from my work.
12. My mentor has conveyed empathy for the concerns and feelings I have discussed with him/her.
13. My mentor has kept feelings and doubts I shared with him/her in strict confidence.
14. My mentor has conveyed feelings of respect for me as an individual.

Table continued on next page

Table 1 (continued)

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Factors and Related Items

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Factor 2: Career-Related Mentoring Functions: Items assess the extent to which mentor provided protection, exposure-and-visibility, sponsorship, and challenging assignments.

15. Mentor reduced unnecessary risks that could threaten the possibility of becoming a school principal or receiving a promotion.
16. Mentor helped you finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete.
17. Mentor helped you meet new colleagues.
18. Mentor gave you assignments that increased written and personal contact with school administrators.
19. Mentor assigned responsibilities to you that have increased your contact with people in the district who may judge your potential for future advancement.
20. Mentor gave you assignments or tasks in your work that prepare you for an administrative position.
21. Mentor gave you assignments that present opportunities to learn new skills.

Items not clearly loading on either factor:

22. Mentor provided you with support and feedback regarding your performance as an educator.
  23. Mentor suggested specific strategies for achieving your career goals.
  24. Mentor shared ideas with you.
  25. Mentor suggested specific strategies for accomplishing work objectives.
  26. Mentor gave you feedback regarding your performance in your present job.
  27. My mentor has invited me to join him/her for lunch.
  28. My mentor has asked me for suggestions concerning problems she/her [sic] has encountered at school.
  29. My mentor has interacted with me socially outside of work.
-

career-related functions scale (the 7 items determining the degree to which the mentor provided exposure-and-visibility, protection, sponsorship, and challenging assignments) was .89. Likewise, a high internal consistency reliability estimate was found for the psychosocial functions scale (the 14 items related to whether the mentor served as a role model, provided counseling, coaching, and acceptance-and-confirmation) ( $\alpha = .92$ ). Noe found the correlation between the two scales was .49.

Noe's instrument (1988) has been used in business to determine protégés' perceptions of mentoring functions provided by mentors both in formal and informal mentoring relationships. Chao, O'Leary-Kelly, Wolf, Klein, and Gardner (1994) used the instrument as part of a 5-year longitudinal study designed to reveal any relationship between the phases of the mentorship, the functions, and the outcomes to determine if the phases were linked to the various mentoring functions and outcomes. Chao (1997), who indicated that the respondents were alumni from a large university and a small private institution, indicated that the protégés' perceptions of the functions provided by their mentors were measured using Noe's scale. According to Chao, the "reliabilities for the psychosocial and career-related scales as measured by coefficient alpha were .85 and .79 respectively" (p. 20).

Armstrong et al. (2002) used Noe's 1988 instrument in a study of 53 mentor-protégé dyads to examine the "effects of the cognitive styles of mentors and protégés on the process of formal mentoring" (p. 1111) to determine if congruence between the mentor and the protégé or incongruence would affect the mentoring functions of the relationship. Scales from two previous studies (Lindholm, 1985; Noe, 1988) were adopted in order to assess the mentoring functions as perceived by both the mentor and

the protégé. An adaptation of Noe's scale was used to assess the extent to which mentors provided the career and psychosocial functions as perceived by the protégés. These researchers noted that, "Variables with the highest factor loadings in Noe's study were . . . used as a surrogate for each factor" (p. 1118). The internal consistency reliability estimate for the career functions using the data was .85, and the internal consistency estimate for the psychosocial functions scale was .87 (Armstrong et al., 2002).

#### *Development of Mentor and Protégé Instruments*

Noe's Mentoring Functions Scale (Appendix B) was developed in 1988 as a self-rating instrument designed for use with educators who desired to become school administrators or to advance in the administrative ranks. The items in this scale were included in Noe's original mentoring questionnaire (Appendix A) and administered to participants in the inclusive format. Noe used the instrument to assess the extent to which the protégés believed their mentors provided the career and psychosocial functions during a comprehensive training program designed to enhance the personal and professional development of the protégés. It was not designed to assess the mentors' beliefs or perceptions of the extent that they provided the functions. Noe's original 29-item instrument was the basis for this study.

In order to assess the extent to which mentors perceived that they provided the mentoring functions to their protégés, this researcher adapted Noe's Mentoring Functions Scale by for use by the mentor ( Appendix C) and by the protégé (Appendix D). A copy of Noe's permission letter, requested by the researcher, which included information necessary to comply with the University of South Florida's Institutional Research Board requirements, is provided in Appendix E. A multi-step process was used to adapt and

modify Noe's instrument for both the mentor and the protégé versions. The process for developing both versions was identical.

*Step 1:* For the mentor version, the wording of the scale was modified to make the items applicable to the mentor. For the protégé version, the wording was modified to make the items applicable to the protégé.

*Step 2:* Educational experts with experience in public school administration reviewed the cover letter, the intent of the study, and both instruments for clarity of items and directions, consistency, ease of completion, appropriateness, and administration time. The experts were also asked to make any comments and suggested word changes for each instrument that would help to validate that the adaptations were appropriate for the mentor in the mentor version and for the protégé in the protégé version. The experts were asked to rate each item on a scale from 1 to 5 (1=not appropriate, 5=very appropriate), the appropriateness of each item from the standpoint of the mentor or the protégé, depending on the version. See Appendix F for the first draft of the instruments and the directions that were provided to the experts. See Appendix G, Names of Expert Panel Members, for the names of the initial panel members with expertise in school administration who gave feedback and assistance in the adaptation of the instruments.

*Step 3:* Based on the feedback and suggestions from this initial panel of educational experts, the instruments were revised prior to being sent to the expert panel of university researchers for review and validation. Major revisions were made regarding the scoring process. The initial experts determined that the scale rating system of 1 to 5 was ambiguous and difficult to score, so the scoring was changed for both instruments so participants could score each item as appropriate, not appropriate, or no opinion. These



experts also suggested that the personal pronouns in the protégé version be parallel for each item. For example, most items read, “My mentor has shared . . .” while some read, “Mentor helped . . .” The experts advised that all items should begin with “My mentor” where applicable. In the mentor version, the pronoun, “my,” was either added to or omitted from items in order to provide consistency of reading for each item. Next, the verbs in both instruments were changed from past tense to past progressive on some items in order to provide consistency and keep the items in the same tense. The directions were clarified and provided on separate paper as well as on the instruments. The original title of the second page was changed from the intent of the study to the purpose of the study. This purpose was described and clarified, and definitions and examples of the mentor functions were added.

*Step 4:* An expert validation panel (Appendix G), composed of experienced higher education faculty members whose expertise is in the field of mentoring, either in business or education, was asked to review and evaluate the two instruments and the adaptations made to each instrument as part of the validation process. Among the panel members were Noe (1988), the author of the original instrument, and Kram (1983, 1985, 1988), the author of the original mentoring functions research in business. The panel members were active in the field, and most were well-published, current contributors to journals or author books on the subject of mentoring. Five of the members were in the School or College of Education at the university level, one was in the College of Business, and one was in the School of Management. Panel members were contacted by email to determine if they would agree to evaluate the instruments. Every expert contacted agreed to review the instruments and to provide feedback.

*Step 5:* The packets were mailed to each panel member. Included in each packet were the following: an introductory letter requesting assistance in the validation of the two instruments and an overview of the instruments, the purpose of the study, directions for completing the validation scoring sheet A, Sheet A: Mentor Validation Scoring Sheet, directions for completing the validation scoring sheet B, Sheet B: Protégé Validation Scoring Sheet, Noe's original scale, and a definition of the mentoring functions. See Appendix H for copies of the revised Sheets A and B and the materials mailed to the panel members.

*Step 6:* Based on feedback received from the expert panel members in higher education, further changes and revisions were made to the instruments. The experts in the business and management areas suggested changes in word choice and placement; one member suggested that the term advancement be changed to new teaching assignments or administrative positions, if desired. In both the mentor and the protégé validation, the experts suggested changing the wording of several items to avoid the his/her wording; the change was made to each item when possible. The panel members in the schools and colleges of education were concerned with the term of advancement in the items. Several members noted that there was little chance of advancement in school culture, and questioned if moving from teaching to counseling or administration was considered advancement. The experts suggested that the items be changed from preparing for advancement to participating in professional growth activities. The items dealing with advancement were changed to reflect the concerns of the panel members. Another suggestion was that the wording of "reaches a similar position in his/her career" be changed to "reach the same level of expertise or obtain a similar career position." The

concern was with the idea of position in teaching being different than it is in business and industry. One item, number nine on the instruments, was determined to have too many constructs. The item was divided into two items, and the words “commitment to advancement” were deleted.

*Step 7:* The concerns of the panel were addressed, and the changes made to the items. Upon reading four of the items on both instruments, it became apparent that the wording of the items did not reflect the intent of the instruments. The instrument was designed for the mentor to determine what the mentor perceives he does, but the items were worded so that the mentor was asked about what the protégé feels or does. For example, item number six as revised read, “My protégé appears to respect and admire me.” This was changed to, “I have tried to earn the respect and admiration of my protégé.” For the protégé version, which is to determine how the protégé perceives the mentor providing the functions, the same item was changed from, “I respect and admire my mentor,” to “My mentor has earned my respect and admiration.” These four items were sent to Noe (1988) via email for additional input.

*Step 8:* The demographic form was developed to gather the information necessary to obtain the variables needed for the study.

*Step 9:* The items were then compiled into the two separate instruments: one for the mentor and one for the protégé and sent to several teachers and administrators for review. The demographic information form was included in this packet. The mentor instrument was reviewed by teacher practitioners in the field who have either served as mentors or are currently serving as mentors and by active and retired administrators. Protégés, veteran teachers, and administrators reviewed the protégé instrument. The

members of this panel were instructed to critique the demographic form and each instrument for clarity of directions and items, content style, grammar, usability, word choice, and understanding of items.

*Step 10:* Based on feedback from individual teachers and administrators, more changes were made to the instruments. The term, “mentoring functions,” was defined at the top of each instrument. Other changes were minor and involved word choice or placement of prepositional phrases. The word, “challenging,” was added to an item dealing with challenging assignments. In addition, the subheadings indicating the mentoring functions were eliminated from the instruments, and the demographic information page for both the mentor and the protégé was modified to include the school designation, and the specific grade level(s) that the participant teaches.

*Step 11:* The mentoring instrument was then presented to a sample of 10 mentor teachers, and the protégé instrument was presented to a sample of 10 protégés for a pilot study. This involved participants in two counties: an elementary school in one county and a middle school in a different county. The pilot study revealed the necessity of removing the names from the demographic form to ensure confidentiality. In order to match the mentor with the protégé, a line was added on the form to record mentor and protégé number. The name of the district was eliminated as the study was conducted in only one district. One item in each instrument was clarified, as two teachers were confused about the meaning of the item. Upon checking the original research of Kram (1983), it was determined that the revised wording met the function definition.

Finally, the instruments were submitted to a panel of university faculty with expertise in mentoring (Appendix G). These researchers and professors, chosen because

of their knowledge and publications on the topic, were asked to verify that item language was appropriate for PK-12 teachers. Several of the experts suggested minor changes in wording. The changes were made, and the instruments finalized. The original function definitions of Kram (1983) and the items in Noe's (1988) instrument were again reviewed by the researcher and compared with the final instruments to assure each item reflected the definitions.

### Collection of Data

The researcher contacted the district for permission to conduct the study with the teacher mentors and protégé teachers at the elementary schools. The district required completion of an application form detailing the purpose of the study, a description of the methods, the number of participants needed, a description of how the data would be analyzed, a time schedule, and any special considerations needed to conduct the research. This completed form was submitted to the district's director of assessment and accountability before presenting the proposed study to the university's Institutional Review Board (IRB).

Upon securing the district's permission and the approval of the university's IRB, the researcher contacted the district's National Board coordinator for a list of elementary schools with NBC teachers on the faculties. Then, schools with three or more NBC teachers were identified. The district's web site listed the schools, the addresses, and their principals. A packet of information about the study was sent to the principals of the schools with three or more NBC teachers. See Appendixes C, D, and I for copies of the correspondence. Included in the packet was a letter to the principal explaining the purpose of the study, the category of teachers involved, and assurance that the time

needed was minimal. A copy of the letter providing the district's required approval and sample copies of the mentor survey and the protégé survey were also included.

After allowing approximately 2 weeks for the packet to arrive at the school, a phone call was made to the principal's secretary to inquire about the best way to contact the principal. In some instances, the principal was reached via telephone; in other cases, an email was sent indicating the purpose of the study and requesting mentor teachers and their protégés to participate. In each email, the purpose of the study was again explained, as was the category of teachers needed: NBC mentor, non-NBC mentor, and the protégés of these mentors. The brevity of time needed to complete the survey was noted. Principals who agreed to allow the study in their schools either scheduled the meeting themselves or asked a staff member to schedule the meeting and to communicate with the researcher. This other staff member was most frequently a secretary, an assistant principal, a NBC teacher, or another teacher leader. Personal contact with a principal and a retired administrator initially helped the researcher gain access to some principals.

For principals agreeing to participate, a date was selected to administer the instruments. After scheduling the school, the researcher emailed the principal or the staff member assigned to coordinate the visit to confirm the date. Two or 3 days before the scheduled visit, another email was sent to remind principals or the staff member of the category of teachers needed and the exact time and date of the meeting.

The district's classroom teacher organization scheduled mentoring sessions for National Board mentor teachers to work with their protégés in candidacy for the certification. The researcher contacted this organization and received permission to attend a Saturday mentoring session in order to explain the purpose of the study to the

mentors and their protégés and to administer the survey. Seven elementary teachers involved in mentoring relationships and their elementary protégés agreed to complete the surveys.

Prior to administering the instruments, the researcher explained the purpose of the study, a brief overview of mentoring functions, and the importance of answering honestly. Participants were assured of anonymity and confidentiality and asked to answer all items. Questions or concerns were discussed, and the teachers who agreed to participate were matched with their mentor or protégé. The survey instruments were numbered, and the mentor survey number matched that of the protégé. Each member of the pair was provided with a pencil and the survey. The participants' responses were independently collected as the teachers were asked to move away from their partners to complete the survey instruments. It was explained again that honesty and confidentiality were important. The researcher remained in the room during the completion of the surveys. At the conclusion of the meeting, each participant brought the completed, closed survey to the researcher, and refreshments were provided for the teachers who participated.

In four cases, the researcher had to return to the school or visit another school to collect the matched survey for a mentor or protégé. The missing teacher was either absent or worked at another school part of the week. Following each visit, a thank-you note was mailed to the principal and the person who coordinated the meeting, if applicable. The head of the classroom teachers' organization also received a thank you note. The collection of data began in January of 2006 and concluded in March 2006.

## Data Analysis

The items measuring the mentor teachers' perceptions of their performance of the career and psychosocial mentoring functions and the items measuring the protégés' perceptions of how their mentors performed the functions were analyzed using the statistical software SAS, version 9.1. The descriptive statistics were computed to provide a profile of the mentors and their protégés.

Question 1, determining the career and the psychosocial mentoring functions that National Board-certified and non-National Board-certified teacher mentors provided to their protégés, was assessed using the means of items and functions as reported by the mentors and their protégés.

Question 2 sought to compare the perceptions of teacher mentors with the perceptions of their protégés in the performance of the mentoring functions being provided. This was assessed using correlated *t* tests, the procedure for testing paired observations.

To determine how National Board-certified teacher mentors and non-National Board-certified teacher mentors compared in their perceptions of providing the mentoring functions (question 3), the independent means *t* test was utilized. The same test was used for question 4: How do the protégés of National Board-certified and non-National Board-certified teacher mentors compare in their perceptions of the mentoring functions being provided?

## Summary of Methods

Chapter 3 described the research methods used in the study. This included an overview of the research design, the study population, and a description of the



instrumentation to be adapted for the study. The development of Noe's (1988) original Mentoring Functions Scale Protégé Version was described as were the steps leading to this researcher's adaptation of Noe's scale into the two instruments proposed for use in this study: the Mentoring Functions Scale for the Mentor and the Mentoring Functions Scale for the Protégé. Both adapted instruments were analyzed, sent to mentoring experts in the fields of business and education, and modified to assure the validity of use in public school education. The unit analyzed in this study was the relationship between the mentor and the protégé. The data collection method was described in detail, as was the data analysis process.

## CHAPTER 4

### FINDINGS

The purpose of this study was to identify and compare the career and psychosocial mentoring functions that National Board-certified teacher mentors and non-National Board-certified teacher mentors perceived they provided to their protégés at the elementary grade levels. The protégés' perceptions of the mentoring functions provided by their NBC teacher mentors and non-NBC teacher mentors also were identified and compared. This chapter presents the demographic characteristics of the teachers, both mentors and protégés, participating in the research and the results of the statistical data analysis. The following research questions were addressed:

1. What career and psychosocial mentoring functions do National Board-certified and non-National Board-certified teacher mentors perceive they provide to their protégés?
2. How do mentor teachers and their protégés compare in their perceptions of the mentoring functions being provided?
3. How do National Board-certified teacher mentors and non-National Board-certified teacher mentors compare in their perceptions of providing the mentoring functions?

4. How do the protégés of National Board-certified and non-National Board-certified teacher mentors compare in their perceptions of the mentoring functions being provided?

#### Characteristics of Participants

There were four sample groups in this research: National Board-certified teacher mentors, the protégés of NBC teacher mentors, non-National Board-certified teacher mentors, and the protégés of teacher mentors not NBC. One hundred ninety teachers participated in the study.

#### *Sample of National Board-Certified Teacher Mentors*

The sample consisted of 50 NBC teacher mentors, of whom all were female. The majority of the teacher mentors were Caucasian ( $n = 44$ , 88%) and held master's degrees ( $n = 30$ , 60%). See Table 2 for detailed demographics. These teacher mentors had spent an average of 16 years in teaching, and 30% indicated 20 or more years in the field. Based on their mentoring history, 47 (94%) revealed having a previous mentor; an average of 8 years was spent mentoring other teachers; and an average of 10 protégés per teacher mentor were reported to have been mentored over the last 2 years. Twelve (24%) of these teacher mentors indicated mentoring 10 protégés during this time, 8 served between 11 (22%) and 15 (30%) protégés, 1 listed 17, 3 indicated 20, and 1 NBC teacher mentor noted serving 40 protégés over the last 2 years. The majority ( $n = 35$ , 70%) taught core academic courses (language arts, math, science, social studies) at the elementary level. Exceptional Student Education (ESE) teachers accounted for 3 (6%) of the NBC teacher mentors, and others listed various subjects within the core area as their subjects taught. These included math ( $n = 1$ , 2%), math and science ( $n = 3$ , 6%), reading

Table 2

*Demographic Characteristics of NBC Teacher Mentors and Their Protégés*

Characteristics	Mentor		Protégé	
	<i>n</i>	%	<i>n</i>	%
<b>Gender</b>				
Male	---	---	4	8
Female	50	100	46	92
<b>Race/Ethnicity</b>				
African American/Black	---	---	3	6
Caucasian/White	44	88	40	80
Hispanic/Latino	6	12	6	12
Native American	---	---	1	2
<b>Highest Degree</b>				
Bachelor	19	38	35	70
Master	30	60	15	30
Specialist	1	2	---	---
<b>Number of Years Teaching</b>				
1 or less	---	---	11	22
2-5	1	2	18	36
6-10	9	18	7	14
11-19	25	50	7	14
20+	15	30	7	14

*Note.* *n* = 50 pairs

and language arts ( $n = 2, 4\%$ ), language arts and math ( $n = 1, 2\%$ ), and math, science, and social studies ( $n = 1, 2\%$ ). There were a limited number of non-core subjects listed by NBC teacher mentors. These included music ( $n = 2, 4\%$ ), media ( $n = 1, 2\%$ ), and physical education ( $n = 1, 2\%$ ).

#### *Sample of Protégés of National Board-Certified Teacher Mentors*

The protégé sample was comprised of 50 protégés of whom 46 (92%) were female and 4 (8%) male (Table 2). A clear majority identified themselves as Caucasian ( $n = 40, 80\%$ ). Six (12%) considered themselves Hispanic, 3 (6%) African American, and 1 (2%) chose Native American (Table 2). Thirty-five (70%) of these protégés held bachelor's degree, while 15 (30 %) had a master's. The average number of years teaching by these protégés was 7.8, while 17 had taught from less than 1 year to 2 years. Fourteen protégés of NBC teacher mentors reported more than 10 years in the classroom. A majority ( $n = 30, 60\%$ ) indicated they taught the core academic subjects of language arts, math, science, and social studies. Other areas of the core subjects taught included reading and language arts ( $n = 5, 10\%$ ), math and science ( $n = 2, 4\%$ ), and language arts and social studies ( $n = 1, 2\%$ ). Other subjects listed by the NBC protégés included speech therapy ( $n = 1, 2\%$ ) and English for Speakers of Other Languages (ESOL) ( $n = 1, 2\%$ ). Seventeen (34%) were candidates for National Board, while 33 (66%) were not pursuing the certification.

#### *Sample of Non-NBC Teacher Mentors*

The non-NBC teacher mentors numbered 45, of whom 42 (93%) were female and 3 (7%) were male. Caucasians composed 91% ( $n = 41$ ) of the participants while 2 (4%) identified themselves as Hispanic. One participant (2%) selected African American, and

1 (2%) checked Native American for race/ethnicity. See Table 3 for complete demographics of the non-NBC teacher mentors and their protégés. The average number of years teaching was 16, while 36% ( $n = 16$ ) had taught 20 or more years. The highest degree held by these non-NBC teacher mentors was the master's degree ( $n = 23$ , 51%), while 22 (49%) held a bachelor's degree. Their mentoring history indicated that 20 (44%) reported having a previous mentor, but 25 (56%) reported no mentors in their careers as teachers. The average number of years spent mentoring other teachers was 7.8, and the average number of protégés mentored during the past 2 years was 3. However, 9 non-NBC teacher mentors indicated just 1 protégé over the last 2 years. Only 1 (2%) of the protégés was a candidate for National Board. The majority ( $n = 23$ , 51%) taught core academic courses, while 4 (9%) reported teaching only reading and language arts, Exceptional Student Education, or math, science, and social studies.

#### *Sample of Protégés of Non-NBC Teacher Mentors*

This sample consisted of 45 protégés, the majority of whom were female ( $n = 42$ , 93%) and Caucasian ( $n = 40$ , 89%). The remaining protégés identified themselves as Hispanic ( $n = 3$ , 7%) or African American ( $n = 2$ , 4%) (Table 3). A majority of the protégés held a bachelor's degree ( $n = 38$ , 84%) and taught the core academic subjects of language arts, math, science, and social studies ( $n = 30$ , 67%). Most of these teachers were in their first year of teaching ( $n = 36$ , 80%), and only 1 (2%) was a candidate for National Board Certification.

#### *Origin of Mentoring Relationships for Both NBC and Non-NBC Pairs*

The origin of the mentoring relationship varied according to whether the mentor was National Board-certified and whether the protégé was a candidate for National

Table 3

*Demographic Characteristics of Non-NBC Teacher Mentors and Their Protégés*

Characteristics	Mentor		Protégé	
	<i>n</i>	%	<i>n</i>	%
<b>Gender</b>				
Male	3	7	3	7
Female	42	93	42	93
<b>Race/Ethnicity</b>				
African American/Black	1	2	2	4
Caucasian/White	41	91	40	89
Hispanic/Latino	2	4	3	7
Native American	1	2	---	---
<b>Highest Degree</b>				
Bachelor	22	49	38	84
Master	23	51	7	16
<b>Number of Years Teaching</b>				
1 or less	---	---	36	80
2-5	1	2	2	4
6-10	12	26	4	9
11-19	16	36	3	7
20+	16	36	---	---

*Note.* *n* = 45 pairs

Board. Most mentors who held National Board Certification indicated they were either asked by an administrator to mentor the protégé ( $n = 22, 42\%$ ) or asked by the protégé to serve as their mentor ( $n = 16, 31\%$ ). See Table 4 for details on the formation of the relationships for both NBC and non-NBC pairs. Four (8%) of the NBC teacher mentors noted that the decision was a mutual one made by both the teacher mentor and the protégé, while 3 (6%) of the NBC teacher mentors replied that both members met at a district meeting held for NBC candidates. The protégés of the NBC teacher mentors were closely divided on how the relationship began. Twenty-one (42%) of these protégés indicated that they asked a teacher to serve as their mentor while 20 (40%) responded that the administration had assigned the mentor. Five (10%) selected mutual decision as the means through which the relationships formed.

Most non-NBC teacher mentors ( $n = 42, 93\%$ ) specified that the administration asked them to serve as the mentor for the protégé. Only 2 (4%) indicated that their protégé asked them to mentor. Likewise, most of the protégés of these non-NBC teacher mentors ( $n = 42, 93\%$ ) replied that the administration had asked their mentors to serve in that capacity.

#### Assessment of Measures

Cronbach alphas were calculated to measure the reliability of the scores for each of the career and psychosocial subscales and the 9-item subscales in the mentoring questionnaires: the *Mentoring Functions Scale for the Mentor* and the *Mentoring Functions for the Protégé*. This Cronbach alpha, designed to examine the internal consistency of each subscale, was computed for all mentors, all protégés, NBC teacher mentors and their protégés, and Non-NBC teacher mentors and their protégés. Generally,



Table 4

*Origin of Relationships as Identified by Mentors and Protégés for Both NBC and Non-NBC Pairs*

Reason for choice	NBC Teachers		Protégés of NBC		Non-NBC Teachers		Protégés of Non-NBC	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Protégé asked	16	31	21	42	2	4	1	2
Administration asked	22	42	20	40	42	93	42	93
Mentor asked	4	7	1	2	---	---	---	---
Other								
Assigned	---	---	1	2	1	2	2	4
Mentor volunteered	1	2	---	---	---	---	---	---
Met at district meeting	3	6	---	---	---	---	---	---
Mutual decision	4	8	5	10	---	---	---	---
Proximity	---	---	1	2	---	---	---	---
Previous intern	1	2	1	2	---	---	---	---
Worked together	1	2	---	---	---	---	---	---

*Note.* NBC pairs = 50; non-NBC pairs = 45.

the internal consistency for the subscales was good, with an exception for subscales with a small number of items. See Table 5 for each alpha coefficient.

An examination of the data in Table 5 revealed scores ranging from .01 to .91. The score of .91 indicates a high degree of reliability for the career category for all protégés, NBC protégés, and non-NBC protégés. The low score of .01 for the protection subscale (containing 2 items) for NBC mentors revealed a nearly non-existent level of reliability. One possible explanation for the low alpha maybe due to limited variability on the items. Excellent internal consistency was recorded for coaching ( $\alpha = .88$  for non-NBC protégés) and counseling ( $\alpha = .88$  for NBC mentors;  $\alpha = .88$  for non-NBC protégés). Reliabilities ranged from .74 to .88 for all groups of mentors and protégés for the subscale of coaching and from .82 to .88 for all groups for the subscale of counseling. A review of the alpha coefficients revealed high levels of reliability for the career subscale for all groups (.84 to .91) and for the psychosocial subscale (.85 to .89). A score close to one indicates that the scores from each subscale are highly related and internally consistent.

Skewness coefficients, describing the asymmetry of the distribution for the subscale scores, are reported in Table 6. The coefficient scores are reported for all mentors, all protégés, NBC teacher mentors and their protégés, and non-NBC teacher mentors and their protégés. Most subscale distributions were negatively skewed. The counseling subscale for NBC mentors had the highest negative skewness coefficient of  $-2.18$ ; the coaching subscale for the NBC mentors had a skewness of  $-1.99$ . All of the coaching, acceptance-and-confirmation, counseling, and friendship subscales for all

Table 5

*Cronbach Alpha Estimates of Reliability for the Mentoring Functions by Group*

Category/Subscale	Number of Items	All Mentors $\alpha$	All Protégés $\alpha$	NBC Mentors $\alpha$	NBC Protégés $\alpha$	Non-NBC Mentors $\alpha$	Non-NBC Protégés $\alpha$
Career	14	.85	.91	.84	.91	.88	.91
Coaching	6	.83	.85	.87	.84	.74	.88
Protection	2	.43	.62	.01	.71	.78	.42
Exposure-and Visibility	3	.76	.77	.78	.82	.75	.68
Sponsorship	1	---	---	---	---	---	---
Challenging Assignments	2	.34	.60	.14	.66	.58	.51
Psychosocial	16	.88	.90	.89	.89	.85	.89
Acceptance-and Confirmation	3	.53	.57	.56	.54	.48	.60
Role Modeling	4	.68	.74	.65	.76	.72	.72
Counseling	7	.86	.86	.88	.83	.82	.88
Friendship	2	.58	.78	.67	.78	.38	.76

Table 6

*Skewness and Kurtosis for the Mentoring Functions by Group*

Category/Subscale	Items <i>n</i>	All		All		NBC		NBC		Non-NBC		Non-NBC	
		Mentors Sk <sup>a</sup>	K <sup>b</sup>	Protégés Sk <sup>a</sup>	K <sup>b</sup>	Mentors Sk <sup>a</sup>	K <sup>b</sup>	Protégés Sk <sup>a</sup>	K <sup>b</sup>	Mentors Sk <sup>a</sup>	K <sup>b</sup>	Protégés Sk <sup>a</sup>	K <sup>b</sup>
Career	14												
Coaching	6	-1.65	6.54	-1.11	1.07	-1.99	7.23	-1.36	2.01	-0.33	-0.53	-0.84	0.01
Protection	2	0.00	-0.30	-0.44	0.52	0.02	-0.22	-0.67	0.28	0.08	-0.38	0.43	-0.47
Exposure-and Visibility	3	-0.17	0.14	0.17	-0.25	-0.36	0.10	0.11	-0.80	0.37	-0.43	0.08	0.89
Sponsorship	1	0.03	-0.59	-0.24	-0.59	-0.04	-0.57	-0.27	-0.53	0.20	-0.75	-0.22	-0.59
Challenging Assignments	2	0.10	-0.17	-0.78	-0.43	-0.19	-0.05	0.83	0.41	0.41	0.02	-0.69	0.47
Psychosocial	16												
Acceptance- and- Confirmation	3	-0.73	0.59	-0.78	0.51	-0.93	0.86	-0.87	0.65	-0.27	-0.54	-0.72	0.61
Role Modeling	4	-0.48	0.76	-0.95	1.31	-0.78	1.70	-1.11	1.94	0.02	-0.98	-0.72	0.26
Counseling	7	-1.85	7.82	-0.93	0.15	-2.18	8.42	-0.86	-0.04	-0.31	-1.09	-1.00	0.33
Friendship	2	-0.46	-0.34	-0.35	-0.86	-0.28	-0.72	-0.20	-0.96	-0.43	-0.10	-0.50	-0.65

Note. <sup>a</sup> = Skewness; <sup>b</sup> = Kurtosis

groups indicated negative skewness coefficients. The protection subscale for all mentors was a perfectly symmetric distribution with a skewness coefficient of 0.00. Other protection scores that had skewness values close to zero were 0.02 for the NBC teacher mentors and 0.08 for the protégés of non-NBC teacher mentors.

The kurtosis indexes varied from 0.01 for coaching recorded for the non-NBC protégés to 8.42 for counseling for the NBC teacher mentors. Overall, 27 of the kurtosis indexes revealed platykurtic distributions, and 27 distributions were positive in kurtosis and may be described as leptokurtic. Four of the positive scores were extreme. Kurtosis indexes close to zero were recorded for the non-NBC protégés for the coaching subscale with a kurtosis of 0.01 and for the non-NBC teacher mentors for an index of 0.02 for challenging assignments. The NBC teacher mentors had kurtosis values of 0.10 for exposure-and-visibility and -0.05 for challenging assignments. The protégés of NBC teacher mentors had a kurtosis value of -0.04 for the counseling subscale.

Pearson correlation coefficients to indicate the relationship between functions are presented in Table 7 for all mentors. For this study, coefficients greater or equal to  $r = .70$  are considered high. Three subscales had high positive correlations with coefficients above .70. Positive correlations were found between coaching and acceptance-and-confirmation ( $r = .72$ ), coaching and role modeling ( $r = .72$ ), and between coaching and counseling ( $r = .78$ ). The lowest correlation was between friendship and sponsorship ( $r = .12$ ).

Correlation coefficients for all protégés are reported in Table 8. Two subscales had high positive correlations above .70. The correlation between the career function of

Table 7

*Pearson Correlation Coefficients for Mentoring Functions Scale for All Mentors*

Mentoring Functions Subscale	1	2	3	4	5	6	7	8	9
Career									
1 Coaching	1.00								
2 Protection	.45	1.00							
3 Exposure-and Visibility	.37	.40	1.00						
4 Sponsorship	.22	.30	.54	1.00					
5 Challenging Assignments	.46	.47	.43	.63	1.00				
Psychosocial									
6 Acceptance-and Confirmation	.72	.45	.39	.14	.30	1.00			
7 Role Modeling	.72	.43	.44	.28	.35	.62	1.00		
8 Counseling	.78	.44	.33	.16	.33	.62	.68	1.00	
9 Friendship	.35	.20	.43	.12	.20	.47	.30	.32	1.00

*Note.*  $n = 95$  mentors

Table 8

*Pearson Correlation Coefficients for Mentoring Functions Scale for All Protégés*

Mentoring Functions Subscale		1	2	3	4	5	6	7	8	9
Career										
1	Coaching	1.00								
2	Protection	.48	1.00							
3	Exposure-and Visibility	.62	.43	1.00						
4	Sponsorship	.47	.42	.69	1.00					
5	Challenging Assignments	.66	.57	.68	.63	1.00				
Psychosocial										
6	Acceptance-and Confirmation	.77	.59	.60	.52	.64	1.00			
7	Role Modeling	.76	.46	.69	.52	.62	.75	1.00		
8	Counseling	.67	.51	.53	.46	.57	.63	.69	1.00	
9	Friendship	.43	.48	.45	.42	.41	.52	.49	.43	1.00

*Note.*  $n = 95$  protégés

coaching and the psychosocial function of acceptance-and-confirmation was .77, and the correlation between role modeling and acceptance-and-confirmation (both psychosocial functions) was .75. The lowest correlation ( $r = .41$ ) was between the psychosocial function of friendship and the career function of challenging assignments.

Correlation coefficients for each function for the NBC teacher mentors are reported in Table 9. High positive correlations of above .70 were recorded for four subscales. Positive correlations were found between the functions of coaching and acceptance-and-confirmation ( $r = .77$ ), coaching and role modeling ( $r = .76$ ), coaching and counseling ( $r = .83$ ), and counseling and role modeling ( $r = .73$ ). The lowest correlation score of .04 was recorded between counseling and sponsorship. The correlation between acceptance-and-confirmation and sponsorship revealed a low correlation of .06.

The Pearson correlation coefficients for the protégés of NBC teacher mentors are presented in Table 10. Five subscales had high positive correlations with coefficients above .70. Positive correlations were found between challenging assignments and exposure-and-visibility ( $r = .74$ ), acceptance-and-confirmation and coaching ( $r = .76$ ), role modeling and coaching ( $r = .76$ ), role modeling and exposure-and-visibility ( $r = .71$ ), and role modeling and acceptance-and-confirmation ( $r = .78$ ). The correlation between exposure-and-visibility and protection was .35, revealing a low correlation.

A computation of the correlation coefficients for non-NBC teacher mentors revealed one high positive coefficient of .80 between challenging assignments and sponsorship. See Table 11 for the correlation coefficients for the mentoring functions for non-NBC teacher mentors. Low correlations were recorded between the psychosocial



Table 9

*Pearson Correlation Coefficients for Mentoring Functions Scale for NBC Teacher Mentors*

Mentoring Functions Subscale	1	2	3	4	5	6	7	8	9
<b>Career</b>									
1 Coaching	1.00								
2 Protection	.50	1.00							
3 Exposure-and Visibility	.32	.30	1.00						
4 Sponsorship	.09	.16	.49	1.00					
5 Challenging Assignments	.42	.37	.30	.52	1.00				
<b>Psychosocial</b>									
6 Acceptance-and Confirmation	.77	.45	.39	.06	.25	1.00			
7 Role Modeling	.76	.53	.35	.27	.38	.65	1.00		
8 Counseling	.83	.42	.29	.04	.29	.66	.73	1.00	
9 Friendship	.42	.24	.51	.11	.25	.47	.33	.38	1.00

*Note.*  $n = 50$  mentors

Table 10

*Pearson Correlation Coefficients for Mentoring Functions Scale for Protégés of NBC Teacher Mentors*

Mentoring Functions Subscale	1	2	3	4	5	6	7	8	9
<b>Career</b>									
1 Coaching	1.00								
2 Protection	.46	1.00							
3 Exposure-and Visibility	.61	.35	1.00						
4 Sponsorship	.47	.38	.69	1.00					
5 Challenging Assignments	.65	.56	.74	.64	1.00				
<b>Psychosocial</b>									
6 Acceptance-and Confirmation	.76	.61	.62	.52	.65	1.00			
7 Role Modeling	.76	.39	.71	.54	.64	.78	1.00		
8 Counseling	.60	.51	.51	.44	.50	.67	.62	1.00	
9 Friendship	.48	.56	.51	.51	.44	.60	.58	.51	1.00

*Note.*  $n = 50$  protégés

Table 11

*Pearson Correlation Coefficients for Mentoring Functions Scale for Non-NBC Teacher Mentors*

Mentoring Functions Subscale	1	2	3	4	5	6	7	8	9
<b>Career</b>									
1 Coaching	1.00								
2 Protection	.42	1.00							
3 Exposure-and Visibility	.47	.57	1.00						
4 Sponsorship	.45	.50	.61	1.00					
5 Challenging Assignments	.54	.56	.63	.80	1.00				
<b>Psychosocial</b>									
6 Acceptance-and Confirmation	.65	.48	.39	.24	.39	1.00			
7 Role Modeling	.67	.34	.56	.29	.33	.59	1.00		
8 Counseling	.67	.52	.39	.36	.42	.54	.59	1.00	
9 Friendship	.23	.22	.24	.09	.19	.48	.24	.18	1.00

*Note.*  $n = 45$  mentors

functions of friendship and sponsorship ( $r = .09$ ) and between friendship and counseling ( $r = .18$ ).

Pearson correlation coefficients to indicate the relationship between each of the nine functions for the protégés of non-NBC teacher mentors are presented in Table 12. Five subscales had high positive correlations with coefficients above .70. Positive correlations were found between sponsorship and exposure-and-visibility ( $r = .70$ ), coaching and acceptance-and-confirmation ( $r = .78$ ), coaching and role modeling ( $r = .76$ ), coaching and counseling ( $r = .76$ ), and counseling and role modeling ( $r = .77$ ). The lowest correlation was between friendship and sponsorship ( $r = .32$ ).

#### Findings and Results from the Survey Items and Functions

The functions of mentoring were divided into two categories: career and psychosocial by Kram (1985/1988). The career category includes coaching, protection, exposure-and-visibility, sponsorship, and challenging assignments. The psychosocial category includes the functions of acceptance-and-confirmation, role modeling, counseling, and friendship (Kram, 1985/1988). This section addresses the mean scores for each item and the means and standard deviations of each function of the categories. The same scale levels used in the discussion of each item mean were used in the discussion of the function means; a more comprehensive explanation of both means is provided below.

#### *Results by Item*

Participants were asked to rate each of the 30 items on the survey that represented their perceptions of either providing the functions to their protégés or of having the functions provided by their mentors. A 5-point Likert-type scale was used for each item

Table 12

*Pearson Correlation Coefficients for Mentoring Functions Scale for Protégés of Non-NBC Teacher Mentors*

Mentoring Functions Subscale	1	2	3	4	5	6	7	8	9
<b>Career</b>									
1 Coaching	1.00								
2 Protection	.54	1.00							
3 Exposure-and Visibility	.65	.60	1.00						
4 Sponsorship	.47	.50	.70	1.00					
5 Challenging Assignments	.68	.60	.57	.62	1.00				
<b>Psychosocial</b>									
6 Acceptance-and Confirmation	.78	.56	.58	.52	.62	1.00			
7 Role Modeling	.76	.61	.66	.49	.58	.71	1.00		
8 Counseling	.76	.54	.58	.48	.66	.58	.77	1.00	
9 Friendship	.40	.35	.40	.32	.36	.44	.37	.36	1.00

*Note.*  $n = 45$  protégés

with 1 (*Strongly disagree*), 2 (*Disagree*), 3 (*Neither agree nor disagree*), 4 (*Agree*), and 5 (*Strongly Agree*). For the purposes of this discussion on the results of the means, scores between 2.51-3.50 are referenced as falling in the mid-level response of *neither agreeing nor disagreeing*. Mean scores of 3.51-4.50 are referred to as *agreeing* the item had been performed, while those falling between 4.51-5.0 are noted as the top level of *strongly agreeing*. Few items had overall mean scores of the exact values of the Likert scale; no items had ratings in the two lowest levels: 1-1.50 (*strongly disagree*) or 1.51-2.50 (*disagree*).

Overall, the mean scores for all 95 pairs and for each group indicated that the mentors and their protégés agreed that the career functions of coaching, protection, exposure-and-visibility, sponsorship, and challenging assignments were all provided at the mid-level (neither agreeing nor disagreeing) or greater. See Table 13 for a complete listing of the means and standard deviations for each item on the survey. The mean scores ranged from a high of 4.82 to a low of 2.88. The high mean of 4.82 ( $SD = .39$ ) was for item 8 of NBC protégés, indicating that the protégés of NBC teacher mentors strongly agreed that their mentors had conveyed feelings of respect for them as individuals and as professionals. The low mean score of 2.88 ( $SD = 1.04$ ) for item 25 was recorded for the NBC teacher mentors and revealed that the mentors identified with the mid-level of neither agreeing nor disagreeing that they had encouraged their protégés to assume responsibilities that increased personal contact with district personnel in a position to influence future career development. Their protégés responded with a mean score of 3.42 ( $SD = 1.00$ ) for this item, indicating the mid-level response of neither

Table 13

*Means and Standard Deviations for Survey Items Grouped by Function for Each Group of Mentors/Protégés*

Function/Item Number/Descriptor	NBC		Non-NBC		NBC		Non-NBC	
	Mentors		Mentors		Protégés		Protégés	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
	<i>n</i> = 50		<i>n</i> = 45		<i>n</i> = 50		<i>n</i> = 45	
Coaching (Career)								
Item 1/Shared history	4.06	.91	4.00	.88	4.18	1.02	4.09	.79
Item 2/ Professional growth	4.22	.99	4.31	.67	4.42	.78	4.13	.92
Item 3/Career goals	4.16	.84	3.93	.81	4.30	1.07	4.11	.91
Item 4/ Shared ideas	4.50	.71	4.47	.63	4.58	.84	4.51	.55
Item 5/Teaching objectives	4.46	.79	4.44	.50	4.32	1.00	4.49	.69
Item 6/Performance feedback	4.36	.75	4.60	.62	4.48	.71	4.47	.69
Acceptance/Confirmation (Psy.)								
Item 7/New methods	3.96	1.12	4.20	.76	4.16	1.09	4.18	.91
Item 8/Respect	4.66	.69	4.60	.54	4.82	.39	4.64	.71
Item 9/Suggestions	3.32	1.96	3.22	1.11	3.46	1.27	3.40	1.05
Role Model (Psychosocial)								
Item 10/Imitate style	3.06	1.25	3.49	1.14	3.20	1.20	3.20	1.12
Item 11/Modeled values	4.26	.88	4.22	.70	4.10	1.05	4.18	.72
Item 12/Respect	4.50	.79	4.47	.63	4.70	.51	4.71	.63
Item 13/Expertise	4.10	1.02	4.02	.84	4.36	.96	4.29	.94
Counseling (Psychosocial)								
Item 14/Listening	4.54	.71	4.69	.47	4.76	.52	4.64	.65
Item 15/Competence concerns	4.48	.76	4.49	.63	4.70	.58	4.53	.84
Item 16/Conflicts	3.38	1.28	4.07	.86	4.08	1.08	4.20	1.01
Item 17/Experiences	4.18	1.02	4.09	.85	4.14	1.11	4.02	.92
Item 18/Verbalize fears	4.04	1.03	4.24	.80	3.86	1.21	4.00	1.17

Table continued on next page

Table 13 (continued)

Function/Item Number/Descriptor	NBC Mentors		Non-NBC Mentors		NBC Protégés		Non-NBC Protégés	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
	<i>n</i> = 50		<i>n</i> = 45		<i>n</i> = 50		<i>n</i> = 45	
Counseling (Psy) continued								
Item 19/Empathy	4.58	.70	4.58	.50	4.54	.54	4.53	.67
Item 20/Kept confidence	4.60	.86	4.51	.76	4.62	.64	4.51	.76
Protection (Career)								
Item 21/Help with problems	3.66	1.02	3.49	.82	3.50	1.16	3.31	.85
Item 22/Complete deadlines	3.84	1.02	3.60	.99	3.98	1.15	4.11	.86
Exposure/Visibility (Career)								
Item 23/Meet colleagues	3.58	1.16	3.76	.88	3.82	1.16	3.91	.97
Item 24/Written contact	3.00	.97	3.00	.93	3.26	1.21	3.02	1.01
Item 25/District contact	2.88	1.04	3.27	.89	3.42	1.11	3.09	.95
Sponsorship (Career)								
Item 26/Tasks for growth	3.14	1.01	3.38	.94	3.44	1.15	3.36	1.09
Challenging Assignments (Career)								
Item 27/New skills	3.32	1.06	3.38	.96	3.66	1.12	3.64	1.09
Item 28/Critical feedback	4.30	.81	4.04	.67	4.34	.94	4.40	.78
Friendship (Psychosocial)								
Item 29/At work	3.44	1.37	3.96	1.13	3.62	1.28	3.93	1.16
Item 30/Outside work	3.22	1.37	3.42	1.10	3.32	1.45	3.58	1.29



agreeing nor disagreeing that their NBC teacher mentors had encouraged them to assume responsibilities designed to increase their exposure to people at the district level.

The greatest difference in mean scores occurred between NBC teacher mentors and their protégés on item 16: the issue of having addressed the protégés' concerns regarding relationships with peers, supervisors, and/or work/family conflicts. The NBC teacher mentors' mean score for this item was 3.38 ( $SD = 1.28$ ), indicating their response to the mid-level response of neither agreeing nor disagreeing with having provided the psychosocial function of counseling. Their protégés, with a score of 4.08 ( $SD = 1.08$ ), agreed that their mentors supplied this function.

With a mean score of 3.20 ( $SD = 1.20$  for NBC protégés;  $SD = 1.12$  for non-NBC protégés) on item 10, there was no difference reported between NBC protégés and non-NBC protégés related to whether their mentors had modeled their teaching style for the protégés. Both groups of protégés responded in the mid-level of neither agreeing nor disagreeing that this psychosocial function of role modeling was provided. No difference in mean scores was also reported for item 19 among the NBC teacher mentors and the non-NBC teacher mentors. Both groups' mean scores of 4.58 ( $SD = .70$  for NBC;  $SD = .50$  for non-NBC) indicated strong agreement that they conveyed empathy for their protégés' concerns and feelings during their discussions. The NBC protégés also strongly agreed with a mean score of 4.54 ( $SD = .54$ ), and the protégés of non-NBC agreed with a score of 4.53 ( $SD = .67$ ). A mean score of 4.51 for both non-NBC teacher mentors ( $SD = .76$ ) and their protégés ( $SD = .76$ ) for item 20, a psychosocial counseling function, indicated that both members of the dyads agreed with the top-level response

that the mentors kept feelings and doubts shared with them in strict confidence. Both groups of teacher mentors, NBC and non-NBC, had a mean score of 3.0 for item 24 ( $SD = .97$  for NBC;  $SD = .93$  for non-NBC), which was the career function of exposure-and-visibility, indicating that they neither agreed nor disagreed with having provided this function for their protégés. The NBC protégés' mean score was 3.26 ( $SD = 1.21$ ), and the non-NBC protégés' mean score was 3.02 ( $SD = 1.01$ ), also falling in the mid-level of neither agreeing nor disagreeing that the function was provided.

Close mean scores with differences of 0.01 were reported for both groups of protégés for item 6. According to the mean scores of 4.48 ( $SD = .71$ ) for NBC protégés and 4.47 ( $SD = .69$ ) for non-NBC protégés, this career category coaching function was provided, and the protégés agreed that their mentors had given feedback regarding their performances in their present position.

#### *Career Category of Functions by Items*

*Coaching.* For the career function of coaching, all individual means for all survey items for all groups were reported at the 4.0 or better level (agree), except for the 3.93 ( $SD = .81$ ) recorded for item 3 by the non-NBC teacher mentors. With mean scores of 4.00 or higher for all other coaching items, NBC teacher mentors, their protégés, non-NBC teacher mentors, and their protégés agreed that the career function of coaching was performed. The mean scores of the coaching items (items 1, 2, 4-6) revealed that the protégés agreed that their mentors had shared their history, encouraged their protégés to participate in professional development, shared professional ideas with the protégés, suggested specific strategies for teaching, and provided feedback regarding their protégés' performances in their present positions. The mean score of 3.93 ( $SD = .81$ ) for

item 3 indicated that non-NBC teacher mentors agreed with having provided their protégés with specific strategies for achieving the protégés' career goals; with a mean score of 4.11 ( $SD = .91$ ), their protégés also agreed that the function was supplied.

*Protection.* Items 21 and 22 measured the function of protection. According to the means of non-NBC-teacher mentors and those of both groups of protégés for item 21, which fell in the mid-level range, these mentors and their protégés neither agreed or disagreed that help was provided with problems that could threaten the protégés' obtaining other positions/assignments. The NBC teacher mentors' mean of 3.66 ( $SD = 1.02$ ) for item 21 indicated that they agreed with having provided the function to their protégés. The mean score for item 22 of 3.84 ( $SD = 1.02$ ) for NBC teacher mentors and a score of 3.60 ( $SD = .99$ ) for the non-NBC teacher mentors implied agreement that they helped their protégés complete projects or meet deadlines. The protégés mean scores, 3.98 ( $SD = 1.15$ ) for the protégés of NBC teacher mentors and 4.11 ( $SD = .86$ ) for the protégés of non-NBC teacher mentors, suggested that they, too, agreed that their teacher mentors helped them meet deadlines.

*Exposure-and-Visibility.* The career function of exposure-and-visibility was measured with items 23, 24, and 25. With mean scores on item 23 from 3.58 ( $SD = 1.16$ ) for NBC teacher mentors and a mean score of 3.91 ( $SD = .97$ ) for non-NBC protégés, both groups of mentors and protégés agreed that the mentors helped the protégés meet new colleagues. Even mean scores of 3.0 for both the NBC teacher mentors ( $SD = .97$ ) and the non-NBC teacher mentors ( $SD = .93$ ) on item 24 revealed that both groups of mentors were not certain that they had provided assignments to their protégés that increased written and personal contact with colleagues. The means of their protégés for

this exposure-and-visibility function were in close agreement with their mentors, with mean scores of 3.26 ( $SD = 1.21$ ) for NBC protégés and 3.02 ( $SD = 1.01$ ) for non-NBC protégés. However, the exposure-and-visibility item (item 25) that asked about encouraging the protégés to assume responsibilities that would increase personal contact with district personnel who may judge the protégés' potential for future career development produced a mean of 2.88 ( $SD = 1.04$ ) (mid-level) for the NBC teacher mentors. Their protégés responded with a mean of 3.42 ( $SD = 1.11$ ), also falling in the mid-level of neither agreeing nor disagreeing. The means of non-NBC teacher mentors ( $M = 3.27$ ,  $SD = .89$ ) and their protégés ( $M = 3.09$ ,  $SD = .95$ ) registered in the mid-level for item 25.

*Sponsorship.* For the career function of sponsorship, which was measured with only item 26, both groups of mentors and their protégés had mean scores between 3.14 and 3.44, indicating that all groups were uncertain that the mentors had given their protégés projects or work tasks that could prepare their protégés for new teaching assignments, professional growth, or administrative positions if desired.

*Challenging Assignments.* The function of challenging assignments was measured with items 27 and 28. Both groups of mentors were not certain that they had given their protégés projects that presented opportunities to learn new skills (item 27). However, the means of the protégés for item 27 ( $M = 3.66$ ,  $SD = 1.12$  for the protégés of NBC;  $M = 3.64$ ,  $SD = 1.09$  for the protégés of non-NBC) indicated the agree level of response. The mean score for item 28, designed to determine if the mentors had provided their protégés with critical feedback regarding completion of challenging teaching

assignments and work performance, was above 4.04 for all mentors and protégés, indicating agreement that the function was provided.

#### *Psychosocial Category of Functions by Items*

*Acceptance-and-Confirmation.* The highest mean scores were reported for the psychosocial functions. The highest mean score of 4.82 ( $SD = .39$ ) (item 8) was for the psychosocial function of acceptance-and-confirmation and was the mean score for the NBC protégés. These protégés' responses indicated strong agreement that their mentors had conveyed feelings of respect for them as individuals and as professionals. The remaining 3 mean scores for the NBC teacher mentors ( $M = 4.66$ ,  $SD = .69$ ), non-NBC teacher mentors ( $M = 4.60$ ,  $SD = .54$ ), and non-NBC protégés ( $M = 4.64$ ,  $SD = .71$ ) indicated that all members of all dyads strongly agreed that this function was performed. Item 7 was designed to determine if the mentors had encouraged their protégés to try new approaches or methods of teaching and interacting with students. The NBC teacher mentors ( $M = 3.96$ ,  $SD = 1.12$ ), their protégés ( $M = 4.16$ ,  $SD = 1.09$ ), the non-NBC teacher mentors ( $M = 4.20$ ,  $SD = .76$ ), and their protégés ( $M = 4.18$ ,  $SD = .91$ ) all agreed that their mentors had encouraged them to try new teaching methods. The final acceptance-and-confirmation function, measured by item 9, rated mean scores from 3.22 ( $SD = 1.11$ ) for non-NBC teacher mentors to 3.46 ( $SD = 1.27$ ) for the NBC protégés. All mentors' means and their protégés' means indicated a response in the mid category of neither agreeing nor disagreeing that the mentors had asked their protégés for suggestions concerning problems the mentor had encountered at school.

*Role Modeling.* The mean scores for the psychosocial function of role modeling ranged from 3.06 ( $SD = 1.25$ ) for NBC teacher mentors for item 10 to a mean score of

4.71 ( $SD = .63$ ) for non-NBC protégés to item 12. With mean scores recorded for item 10 of 3.06 ( $SD = 1.25$ ) for NBC teacher mentors, 3.20 ( $SD = 1.20$ ) for their protégés, 3.49 ( $SD = 1.14$ ) for non-NBC teacher mentors, and 3.20 ( $SD = 1.12$ ) for their non-NBC protégés, all members of the dyad neither agreed nor disagreed that the mentors had modeled their teaching styles and had encouraged their protégés to imitate the styles. All mentors and protégés agreed that the mentors had modeled their attitudes and values regarding education (item 11) and had encouraged their protégés to strive for high levels of expertise in current and future career positions (item 13). The mean score for NBC teacher mentors to item 12 was 4.50 ( $SD = .79$ ), and the mean score for non-NBC teacher mentors was 4.47 ( $SD = .63$ ), indicating a response at the agree level. There was a difference of 0.01 in the mean scores reported for item 12 by the NBC protégés ( $M = 4.70, SD = .51$ ) and the non-NBC protégés ( $M = 4.71, SD = .63$ ), revealing that both groups of protégés strongly agreed that their mentors had earned their respect.

*Counseling.* The items designed to determine the psychosocial function of counseling included items 14-20. With mean scores of 4.54 or higher for item 14, all mentors and their protégés strongly agreed that the mentors had demonstrated good listening skills in conversations with their protégés. The highest mean score of 4.76 ( $SD = .52$ ) for the counseling function was reported by the protégés of NBC teacher mentors for item 14, and the overall highest mean score, reported by non-NBC teacher mentors, was also for item 14 ( $M = 4.69, SD = .47$ ). With mean scores of 4.48 ( $SD = .76$ ) for the NBC teacher mentors and 4.49 ( $SD = .63$ ) for the non-NBC teacher mentors for item 15, both groups of mentors agreed they had addressed protégés' questions or concerns regarding feelings of competence (item 15). Non-NBC teacher

mentors, NBC protégés, and non-NBC protégés agreed that the mentors had addressed the protégés' concerns regarding relationships with peers, supervisors, and/or work/family conflicts (item 16). The NBC teacher mentors, with a mean score of 3.38 ( $SD = 1.28$ ), rated this item in the mid-level and were less certain that they had addressed this concern. A mean score for item 18 of 3.86 ( $SD = 1.21$ ), recorded by the protégés of NBC teacher mentors, and a mean score of 4.00 ( $SD = 1.17$ ) for the protégés of non-NBC teacher mentors indicated these protégés agreed that their mentors had encouraged them to talk openly about anxiety and fears that detracted from work. The mentors' mean scores for item 18 included 4.04 ( $SD = 1.03$ ) for NBC teacher mentors and 4.24 ( $SD = .80$ ) for non-NBC teacher mentors. All means for mentors and their protégés to item 17 indicated agreement that the mentors had shared personal experiences as an alternative perspective to the protégés' problems or concerns (item 17).

Both NBC teacher mentors, their protégés, non-NBC teacher mentors and their protégés strongly agreed that the mentors had conveyed empathy for the concerns and feelings of the protégés during their discussions (item 19) and had kept the protégés' shared feelings and doubts in strict confidence (item 20). The mean score for both NBC teacher mentors and non-NBC teacher mentors was 4.58 for item 19 ( $SD = .70$  for NBC,  $SD = .50$  for non-NBC), which dealt with conveying empathy, and the mean scores for their protégés was close: 4.54 ( $SD = .54$ ) for NBC protégés and 4.53 ( $SD = .67$ ) for non-NBC protégés. Non-NBC teacher mentors and their protégés had the same mean score of 4.51 for item 20 (keeping confidence), and the NBC teacher mentors and their protégés were also close with the NBC teacher mentors having a mean score for this item of 4.60 ( $SD = .86$ ) and their protégés of 4.62 ( $SD = .64$ ).

*Friendship.* Items 29 and 30 measured the psychosocial function of friendship. Item 29 was designed to determine if the mentors had invited their protégés to join them for lunch or another function at work. The mean score for NBC teacher mentors on this item was 3.44 ( $SD = 1.37$ ), falling in the mid-level range, while the mean score of their protégés for item 29 was 3.62 ( $SD = 1.28$ ), indicating agreement that the function was provided. The mean score for non-NBC teacher mentors was 3.96 ( $SD = 1.13$ ) for item 29, and the mean score of their protégés was 3.93 ( $SD = 1.16$ ) for this item, signifying agreement that the mentors supplied the function. For item 30, the mean scores for NBC teacher mentors, their protégés, and the non-NBC teacher mentors fell in the mid-level range suggesting less certainty that the mentors had interacted with their protégés socially outside of work. The mean score for NBC teacher mentors was 3.22 ( $SD = 1.37$ ) for this item, and the mean score for their protégés was 3.32 ( $SD = 1.45$ ). The mean score for the non-NBC teacher mentors was 3.42 ( $SD = 1.10$ ), while their protégés had a mean score of 3.58 ( $SD = 1.29$ ), indicating that these protégés of non-NBC agreed that their teacher mentors had interacted with them socially outside of work. These means for item 30 reflect Kram's (1985/1988) statement that "there are limits to the friendship function" (p. 39) and that many individuals tend to restrict social contact to the work place (Kram, 1985/1988).

### *Results by Function*

#### *Career Category Functions*

The means used in the comparison of career functions were determined using the composite mean for each function. The mean for each function was computed from the means of each item under the function. See Table 14 for a complete listing of



the mean score and standard deviation for each function. An analysis of the mean scores and the standard deviations of the functions revealed little differences in how the mentors and their protégés perceived the functions were provided. The mean scores for three functions fell in the mid-level range of neither agreeing nor disagreeing that the functions were provided. All groups of participants' mean scores for exposure-and-visibility and sponsorship were in this mid-level range. The NBC dyad also had mean scores in this mid-level range for friendship. The means for the other functions were in the range of agreeing that the function had been provided.

*Coaching.* There were six items designed to determine if the mentors provided their protégés with this function. The mean scores for both NBC teacher mentors (4.29,  $SD = 0.66$ ) and their protégés (4.38,  $SD = 0.68$ ) indicated agreement that the function was provided. The non-NBC teacher mentors' mean for coaching was 4.29 ( $SD = 0.46$ ), and the mean for their protégés was 4.30 ( $SD = 0.61$ ) also agreeing that the non-NBC teacher mentors performed the coaching function and provided “specific strategies for accomplishing work objectives” (Kram, 1985/1988, p. 28), encouraged professional growth, and provided feedback to their protégés.

*Protection.* The means for this function fell in the agree level. The NBC teacher mentors' mean was 3.75 ( $SD = 0.72$ ), and their protégés' mean was 3.74 ( $SD = 1.02$ ) indicating agreement that the NBC teacher mentors had helped their protégés with problems or meeting deadlines. The non-NBC teacher mentors' mean for this function was 3.54 ( $SD = 0.82$ ), while their protégés had a mean score of 3.71 ( $SD = 0.86$ ); both agreed that the function had been provided.

Table 14

*Means and Standard Deviations of Career and Psychosocial Functions for Each Group of Mentors/Protégés*

Category/ Function	NBC Mentors		NBC Protégés		Non-NBC Mentors		Non-NBC Protégés	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
	<i>n = 50</i>		<i>n = 50</i>		<i>n = 45</i>		<i>n = 45</i>	
Career Category								
Coaching (6 Items)	4.29	.66	4.38	.68	4.29	.46	4.30	.61
Protection (2 items)	3.75	.72	3.74	1.02	3.54	.82	3.71	.86
Exposure/Visibility (3 items)	3.15	.88	3.50	.99	3.34	.74	3.34	.76
Sponsorship (1 item)	3.14	1.01	3.44	1.15	3.38	.94	3.36	1.09
Challenging Assignments (2 items)	3.60	.69	4.00	.89	3.71	.69	4.02	.76
Psychosocial Category								
Acceptance (3 items)	3.98	.72	4.15	.72	4.00	.58	4.07	.67
Role Modeling (4 items)	3.98	.70	4.09	.74	4.05	.63	4.09	.64
Counseling (7 items)	4.31	.71	4.39	.61	4.38	.49	4.35	.67
Friendship (2 items)	3.33	1.19	3.47	1.23	3.69	.87	3.76	1.10

*Exposure-and-Visibility.* The mean scores for the function of exposure-and-visibility for both sets of mentors and both groups of protégés were in the mid-level range of neither agreeing nor disagreeing that the mentors had provided opportunities or encouraged their protégés to meet new colleagues or district-level personnel who may be important to future career development. The mean for the NBC teacher mentors was 3.15 ( $SD = 0.88$ ), and the mean for the protégés of NBC was 3.50 ( $SD = 0.99$ ). The mean score for non-NBC teacher mentors was 3.34 ( $SD = 0.74$ ), while their protégés had a mean score of 3.34 ( $SD = 0.76$ ).

*Sponsorship.* The single item designed to measure sponsorship had mean scores in the mid-level range for both mentors and protégés, which suggested that the participants were less certain that the mentors had provided the function. The lowest mean score among the means was the 3.14 ( $SD = 1.10$ ) for the NBC teacher mentors.

*Challenging Assignments.* The two items developed to determine if mentors provided their protégés with challenging opportunities and assignments had mean scores in the agree range. The NBC teacher mentors had a mean of 3.60 ( $SD = 0.69$ ), and their protégés had a mean of 4.00 ( $SD = 0.89$ ) for this function. Those non-NBC teacher mentors had a mean of 3.71 ( $SD = 0.69$ ), while the mean for their protégés was 4.02 ( $SD = 0.76$ ). These mentors and their protégés indicated agreement that the mentors provided challenging assignments and critical feedback upon completion of the assignments.

#### *Psychosocial Category of Functions*

*Acceptance-and-Confirmation.* NBC teacher mentors, their protégés, non-NBC teacher mentors, and their protégés had mean scores for this function at the agree level.

Both protégé groups had mean scores higher than their mentors. The protégés of NBC teacher mentors had a mean of 4.15 ( $SD = 0.72$ ) while their NBC teacher mentors' mean was 3.98 ( $SD = 0.72$ ); the mean for those protégés of non-NBC was 4.07 ( $SD = 0.67$ ), and their non-NBC teacher mentors had a mean of 4.00 ( $SD = 0.58$ ). Mentors and protégés agreed that the mentors encouraged their protégés and respected them both professionally and individually.

*Role Modeling.* The mean scores for the mentors and their protégés fell in the agree range for this function, indicating that the mentors had modeled their teaching styles, attitudes, and values concerning education, and had earned the respect of their protégés. Both groups of protégés had mean scores of 4.09 ( $SD = 0.74$  for NBC protégés;  $SD = 0.64$  for non-NBC protégés). The NBC teacher mentors' mean score was 3.98 ( $SD = 0.70$ ), and the non-NBC teacher mentors had a mean score of 4.05 ( $SD = 0.63$ ).

*Counseling.* A review of the data indicated that the highest mean score of the two categories of functions occurred in the counseling function. The protégés of NBC teacher mentors had a mean score of 4.39 ( $SD = 0.61$ ) for this function, and their NBC teacher mentors had a mean score of 4.31 ( $SD = 0.71$ ). The non-NBC teacher mentors' mean was 4.39 ( $SD = 0.49$ ), and their protégés had a mean of 4.35 ( $SD = 0.67$ ). According to the mean scores of both dyads for this function, the mentors and their protégés agreed that the psychosocial function of counseling was provided to the protégés.

*Friendship.* A review of the data for this function in Table 14 indicates that this function received two of the means in the mid-level range of neither agreeing nor disagreeing that the function had been provided to the protégés. The NBC dyad had mean scores in this mid-level range: NBC teacher mentors' mean of 3.33 ( $SD = 1.19$ ) and

their NBC protégés' mean of 3.47 ( $SD = 1.23$ ). The non-NBC teacher mentors' mean of 3.69 ( $SD = 0.87$ ) and a mean of their protégés at 3.76 ( $SD = 1.10$ ) provide evidence that this non-NBC dyad agreed that the mentors had engaged in the function of friendship.

#### Correlated $t$ Tests for the Mentoring Functions

To determine if there was a statistical difference between the NBC teacher mentors and their protégés and between the non-NBC teacher mentors and their protégés on the functions, correlated  $t$  tests were computed. A comparison between all mentors and all protégés was also tested. The probability level for statistical significance was  $p < .05$ . Results from these  $t$  tests, presented in Table 15, revealed a statistically significant difference in two of the career functions among the three combinations of the participants: NBC teacher mentors and their protégés, non-NBC teacher mentors and their protégés, and all mentors and all protégés. One statistically significant difference occurred between the NBC teacher mentors and their protégés on the career function of exposure-and-visibility. According to the mean for this function (Table 14), the protégés of NBC teacher mentors perceived their mentors provided this function more than the mentors perceived. On the function of challenging assignments there was statistically significant difference between the non-NBC teacher mentors and their protégés, with the non-NBC protégés indicating that their mentors provided more of the function than their mentors perceived. According to the data in Table 15, a statistically significant difference also existed between all mentors and all protégés (both NBC and non-NBC) on the function of challenging assignments, with the protégés indicating that the mentors provided more of the function than the mentors perceived. There were no statistically significant differences between any of the dyads on any of the psychosocial functions.

Table 15

*Mean Differences, Standard Deviations, Student's t, and Probabilities for Mentors and Their Protégés by Category Functions*

Category/ Function	NBC Mentors NBC Protégés				Non-NBC Mentors Non-NBC Protégés				All Mentors All Protégés			
	<i>M</i> Diff.	<i>SD</i>	<i>t</i>	<i>p</i>	<i>M</i> Diff.	<i>SD</i>	<i>t</i>	<i>p</i>	<i>M</i> Diff.	<i>SD</i>	<i>t</i>	<i>p</i>
Career												
Coaching (6 items)	-0.09	.74	-0.83	.41	-0.01	.75	-0.07	.95	-0.05	.74	-0.65	.52
Protection (2 items)	0.01	.98	0.07	.94	-0.17	1.07	-1.04	.30	-0.07	1.02	-0.70	.48
Exposure/Visibility (3)	-0.35	1.06	-2.32	.02*	0.00	1.01	0.00	1.00	-0.18	1.04	-1.71	.09
Sponsorship (1 item)	-0.30	1.56	-1.36	.18	0.02	1.42	0.10	.92	-0.15	1.49	-0.96	.34
Challenging Assignments (2 items)	-0.19	1.03	-1.30	.20	-0.31	1.04	-2.02	.05 *	-0.25	1.03	-2.34	.02*
Psychosocial												
Acceptance (3 items)	-0.17	.79	-1.49	.14	-0.07	.70	-0.64	.53	-0.12	.75	-1.56	.12
Role Model (4 items)	-0.11	.84	-0.93	.36	-0.04	.85	-0.35	.73	-0.08	.84	-0.92	.36
Counseling (7 items)	-0.07	.81	-0.60	.55	0.03	.85	0.25	.80	-0.02	.82	-0.25	.80
Friendship (2 items)	-0.14	1.02	-0.97	.33	-0.07	.83	-0.54	.59	-0.11	.93	-1.11	.27

\* = Significant at .05 level

There were no other statistically significant differences between NBC teacher mentors and their protégés on the career functions of coaching, protection, sponsorship, and challenging assignments. No significant differences occurred between this dyad on the psychosocial functions of acceptance, role modeling, counseling, and friendship. Results from the correlated  $t$  tests, produced no other statistically significant differences between the non-NBC teacher mentors and their protégés on the provision of the career functions of coaching, protection, exposure-and-visibility, and sponsorship. No significant differences occurred between these non-NBC teacher mentors and their protégés on the provision of the psychosocial functions of acceptance, role modeling, counseling, and friendship.

A study of Table 15 shows no other statistically significant differences between all mentors and all protégés in the career functions of coaching, protection, exposure-and-visibility, and sponsorship being provided. No significant differences existed between the perceptions of the mentors and the protégés as to the provision of the psychosocial functions of acceptance, role modeling, counseling, and friendship.

#### Independent $t$ Tests for the Mentoring Functions

Independent sample  $t$  tests were used to analyze differences in the functions provided by NBC teacher mentors and non-NBC teacher mentors to their protégés and to compare the differences in perceptions of the mentors' protégés on the functions provided. The assumption of equal variances was tested for each function for NBC teacher mentors and their protégés and for non-NBC teacher mentors and their protégés using the "folded  $F$ " test. Close inspection of the Pooled Standard Error ( $se_p$ ) and Satterthwaite ( $se_s$ ) tests for equal and unequal variances revealed virtually identical

scores. Four of the items were found to have unequal variances: mentor coaching ( $F = 0.02$ ,  $se_p = 0.9950$ ,  $se_s = 0.9949$ ), mentor counseling ( $F = 0.02$ ,  $se_p = 0.6159$ ,  $se_s = 0.6094$ ), protégé protection ( $F = 0.01$ ,  $se_p = 0.8728$ ,  $se_s = 0.8702$ ), and mentor friendship ( $F = 0.04$ ,  $se_p = 0.1003$ ,  $se_s = 0.0952$ ). These values suggest that violations of the homogeneity of variance assumption in these data do not have any practical impact on the tests of significant differences. Consequently, the Pooled standard error for equal variance values was used to determine the computed  $t$  values for all functions.

To consider the possibility of an inflated Type 1 error rate due to the series of multiple  $t$  tests addressing the differences between NBC teacher mentors and their protégés, non-NBC teacher mentors and their protégés, and between both types of mentors and both types of protégés, the familywise error rate must be considered. The familywise error rate is the possibility of making one or more Type 1 errors in a series of comparisons computed collectively. Since each test was considered separately rather than as a set, “the type 1 error risk is *not* inflated” (Huck, 2000, p. 422), and the alpha level of 0.05 “correctly specifies the probability that any given . . . test will cause a true [null hypothesis] to be rejected” (Huck, p. 422).

An analysis of the data in Table 16 revealed no statistically significant differences between NBC teacher mentors and non-NBC teacher mentors and between the protégés of these two groups of mentors in any of the career functions or the psychosocial functions ( $\alpha = .05$ ). This indicates that the mentors, both NBC and non-NBC, were similar in their responses to the mentoring functions. In addition, the protégés of the two groups of mentors were similar in their responses of having the mentoring functions



provided for them. Effect sizes were calculated for the mentors using the following formula for Cohen's *d*:

$$d = \frac{(\text{Mean}_{\text{NBC teacher mentors}} - \text{Mean}_{\text{non-NBC teacher mentors}})}{\text{Pooled } SD}$$

The formula for computing the effect sizes for the protégés was Cohen's *d*:

$$d = \frac{(\text{Mean}_{\text{protégés of NBC teacher mentors}} - \text{Mean}_{\text{protégés of non-NBC teacher mentors}})}{\text{Pooled } SD}$$

Table 16

*Comparison of Category Functions by NBC Mentors vs. Non-NBC Mentors and by Protégés of NBC Mentors vs. Protégés of Non-NBC Mentors*

Category/ Function	All Mentors			All Protégés		
	<i>t</i>	<i>p</i>	<i>d</i>	<i>t</i>	<i>p</i>	<i>d</i>
<b>Career Category</b>						
Coaching (6 items)	0.01	.99	.00	0.60	.55	.12
Protection (2 items)	1.30	.20	.27	0.16	.87	.03
Exposure/Visibility (3 items)	-1.12	.27	.23	0.87	.39	.18
Sponsorship (1 item)	-1.19	.24	.24	0.37	.71	.08
Challenging Assignments (2)	-1.19	.24	.14	0.37	.71	.03
<b>Psychosocial Category</b>						
Acceptance (3 items)	-0.20	.84	.04	0.51	.61	.10
Role Modeling (4 items)	-0.51	.61	.11	-0.03	.98	.00
Counseling (7 items)	-0.50	.52	.10	0.28	.78	.06
Friendship (2 items)	-1.66	.10	.34	1.18	.24	.24

*Note.* *n* = 95 pairs, *df* = 93 for all statistical tests

The effect sizes in this study were interpreted in accordance with Cohen's guidelines of .20 for small, .50 for medium, and .80 for large (Cohen, 1992). A review of the data in Table 16 revealed small effect sizes for all mean comparisons. The smallest differences between the NBC teacher mentors and the non-NBC teacher mentors existed

for the career function of coaching (Cohen's  $d = .00$ ), the psychosocial functions of acceptance-and-confirmation (Cohen's  $d = .04$ ) and counseling (Cohen's  $d = .10$ ), and the psychosocial function of role modeling (Cohen's  $d = .11$ ). The smallest differences between both groups of protégés were for the psychosocial category of role modeling (Cohen's  $d = .00$ ), the career functions of challenging assignments (Cohen's  $d = .03$ ) and protection (Cohen's  $d = .03$ ), and the psychosocial function of counseling (Cohen's  $d = .06$ ).

### Observations from the Study

Observations noted during the study are discussed in relation to the initial contact with principals, the follow-up with the principals who agreed to participate, the administration of the instruments, observations of behaviors during data collection, and patterns of response noted during the data input.

Initially, it was difficult to get access to teachers due to the following reasons and concerns.

1. It was difficult to get past the principals' "gate-keepers" as the researcher did not work in the district or know any of the principals.
2. Most administrators instinctively protected their teachers' time after school, as this time was needed for planning and conferences. Also, the schools in the district routinely receive several requests for research studies during the school year that involve teacher time and participation. Perhaps these many demands on teacher time caused many administrators to be wary of research in general.

3. Due to the state mandatory, high-stakes testing in February and March, administrators were reluctant to ask teachers to participate in activities not directly related to the testing process.

This researcher found two people critical to the study: a personal friend of the researcher who was a retired principal from the district with friends still in the principalship and a principal at one of the elementary schools who took an interest in the study. Both of these professionals took the time to ask about the study and to telephone and email their fellow principals encouraging them to look at the survey and ask their teachers to participate. The current principal even called the researcher mid-way through the study to see how the visits were progressing. This principal then identified other principals willing to set aside time after school for the researcher to meet with their teachers. Without the assistance of these two principals and the persistence of the researcher, it would have been difficult to meet with the teachers and gather the data. Most of the principals that these two either contacted themselves or that the researcher contacted on their recommendation allowed the study to be conducted in their schools.

Efforts at reaching the principals on the telephone proved difficult at first. The retired principal previously mentioned suggested that packets be sent to each principal indicating exactly what was wanted and how many teachers were needed. Included in the packet were the letter from the district indicating approval of the study and permission to survey the teachers (Appendix I), copies of the two survey instruments (Appendices C and D), and a personal letter to the principal (Appendix I). This retired principal encouraged the researcher to add a hand-written note on each letter to her friends still in principal positions to let them know she was interested in the study.

Often, principals who were initially hesitant to ask their teachers to participate due to time constraints and state testing pressures would agree to teachers' voluntary participation after their fellow principals informed them (either by email, telephone call, or at the principals' meetings) that the process was quick, the responses anonymous, and the data would not be reported by school.

After at least one follow-up telephone call or email to the principals, they either scheduled the meetings themselves or delegated this responsibility to a teacher or assistant principal. In some instances, the principal would give the researcher the name and telephone number of the teacher who would assist in organizing the meeting. More teachers attended the after-school meetings and completed the surveys when teachers scheduled, organized, and asked their fellow teachers to attend the meetings than when the principals did the organization. Also, the assistant principals seemed to have had more time to organize the meeting than did the principals.

Finding days to schedule the meetings after school with the mentors and the protégés sometimes proved difficult for several reasons.

- The principals held faculty meetings once a week, and the teachers had required state testing meetings on some days.
- Parent conferences and appointments off campus kept some mentors and protégés from attending.
- Fridays were not good days to ask teachers to remain at school after hours.
- Scheduling the meeting before a faculty meeting did not prove as productive in collecting data or getting teachers to attend

the meeting as some teachers who were not part of the study entered and left the room while instructions were being given.

- Asking the mentoring dyads to remain after a faculty meeting seemed to have been more productive.
- Overall, faculty-meeting days were not as productive as when a special meeting was called after school solely for the purpose of explaining the study and asking the mentors and protégés to complete the surveys. Faculty meeting days appeared to have too many agenda items, which crowded the time needed to explain the study.

The researcher discovered that the school's media center and/or a large classroom were good places to hold the meeting, as these rooms provided enough space to allow the mentors to move from their protégés and complete the surveys. Small rooms did not allow enough space for teachers to complete the surveys, so participants had to wait until someone else had finished.

Overall, the administration of the survey instruments went smoothly. An intercom announcement made shortly before the meeting asking mentors to bring their protégés ensured that the mentors and protégés both arrived to complete the surveys. In some instances one member of the dyad arrived to complete the survey, but the other member remained in the classroom or elsewhere on campus. The person at the meeting would go find the partner, and both would return to complete the surveys.

Collecting the data when one member of the mentoring dyad worked at another school proved challenging. In these instances where either the mentor or the protégé was not at the same school, an effort was made to collect the data from the other school. In

two cases, the mentors called the protégés and inquired if the protégés would complete the survey. The researcher went to the protégés' schools, which were nearby, and administered the survey to the protégés, who had been identified by their room numbers. In both cases, the second school was visited on the day that the mentor completed the survey. In two other instances, the researcher left each protégé's survey in an envelope in the front office of each school, and the protégé completed the survey, sealed the envelope, and left it in the office. The researcher then returned to the schools and retrieved the envelopes. In other cases, it was difficult to get the missing member's response and still keep the confidentiality requirement. In these cases, the data from the mentors and protégés whose partners could not be contacted were not included in the study.

At several schools and at the National Board meeting, co-mentoring (Mullen, Kochan, & Funk, 1999) was the norm as several mentors had two or three protégés who attended the meeting ready to complete the surveys. In these instances, the researcher explained the study to the mentors and the protégés and asked each mentor to think of the strength of the mentoring relationship in selecting one protégé to complete the forms. One of the protégés usually indicated that she had something else to do and did not mind being excluded from participating in the study. In several cases, a protégé had more than one mentor. Again, the protégé was asked to select the mentor with whom they had the strongest mentoring relationship. Often, one mentor would volunteer to abstain from completing the survey. These multiple mentoring/protégé cases were the result of more new teachers than mentors at the schools or protégés remaining with their mentors for longer than a year.

At two schools with multiple partners for the mentors and the protégés, the mentors paired themselves at the meeting. One mentor indicated having mentored three protégés at the meeting and of being a protégé of another mentor while undergoing National Board Certification. Some protégés indicated they were mentored by mentor A, B, and/or C, while some mentors had protégé A, B, and/or C. In these instances, the researcher explained the purpose of the meeting, the importance of pairing the dyad based upon the strength of the mentoring relationship, and of only completing one survey. The mentors and the protégés then paired themselves, and each pair was provided with matched surveys. All mentors and protégés who arrived at the meeting were thanked for volunteering and provided with refreshments.

Some mentors mentioned that they were required to participate in staff development in order to serve as an official mentor in the district. No mentor-training programs explained the mentoring functions to the mentors in any of the schools. Teachers who mentored only teachers striving for National Board Certification were not required to have the training for this purpose, but if these mentors were asked to mentor another teacher not seeking National Board Certification at the school, they had to have attended the required training.

During the administration of the surveys, there were no questions concerning the number or the meaning of any of the items on the survey. On the demographic side of the survey, some mentors wanted to know if they were to include all protégés they had mentored in the past 2 years, even if the number was large. The researcher replied that they were to record the number of protégés whom they served in a mentoring capacity within the past 2 years. The definition of mentoring was read again, and the mentors

recorded the number of protégés. Mentors and protégés completed their respective surveys and gave them to the researcher.

A quick look at some of the surveys completed early in the study revealed some items were skipped on the mentor or the protégé survey. These were usually one of the one-line items sandwiched between shaded items, such as item 4. The researcher skimmed each survey and asked the mentor or protégé to answer the item(s) not marked. At subsequent meetings, the researcher instructed all participants to complete all items and then to look back over each item to be sure all items were checked as an effort to be sure no items were left blank. This resulted in all items being checked.

A large number of the NBC teacher mentors ( $n = 20$ , 40%) did not complete the space asking for the year of National Board Certification. In some instances, the NBC teacher mentor would leave it blank or put the certification area instead of the year.

A majority of the mentors and the protégés listed the core academic courses (language arts, math, science, and social studies) or a mixture of subjects from these core courses as the subjects taught, such as language arts and social studies. Only a small number listed subjects in the arts, physical education, Exceptional Student Education, or media.

This study involved largely Caucasian female teachers. Some mentors and some protégés of minority ethnic groups as well as male protégés wanted to complete the survey at the meeting of NBC teacher mentors and protégés that was held on the weekend, but the other members of the dyads taught at the secondary levels of middle school or high school. Even if these minority members had completed the surveys, the resulting data on ethnicity and gender would have changed very little.



Another demographic observation involved the number of protégés some mentors had served in the past 2 years. Some National Board mentors indicated serving a large number of protégés in this time period. One-half (50%) of these NBC teacher mentors indicated they had mentored 10 or more protégés over the 2 years; 1 listed 40 protégés. One non-NBC teacher mentor served 10 protégés, and 1 mentored 21 protégés. It is possible that mentors with large numbers of protégés utilized a different or a less stringent definition of mentoring than the one listed on the survey and given orally by the researcher before collecting the data. It is unclear how mentors had the time to effectively serve such large numbers of protégés and to provide the functions at an equal level to each.

The researcher observed several response patterns of mentors and protégés while inputting the data. In a few instances, the mentor, the protégé, or both checked the top choice for all of the items (or all but 1 item) on the survey, indicating that all or most of the functions were performed at the highest level. Providing all of the functions at such a high level to multiple protégés or to protégés new to teaching in the present year or even the past year may have indicated either an unclear definition of the functions, not carefully reading the items, not discriminating between the items, or a close-to-perfect mentoring relationship.

The mid-point range of neither agree nor disagree was selected by some mentors and protégés as their responses to many items. Selecting this level could indicate an unclear understanding of the item, a hesitancy to mark an item at a lower level, truly not knowing if the item was performed, or just wanting to complete the survey quickly.

Including this mid-level response in the survey did not prove as useful as the researcher had hoped, as it did not provide the information needed.

Most mentors and protégés appeared to carefully read the survey items and took the time to complete the form. Several thanked the researcher for conducting the study on mentoring functions and requested that their principals be informed of the results. Almost all of the surveys were clearly marked and easy to read. In one instance, the mentor indicated no protégé; however, the protégé was at the meeting completing the corresponding survey.

### Summary

This chapter described the characteristics of the study participants, which was comprised of four samples: 50 National Board-certified teacher mentors (NBC), the 50 protégés of the NBC teacher mentors, 45 non-National Board-certified teacher mentors, and the 45 protégés of teacher mentors not NBC. The mentors and their protégés were paired for the research, which determined which mentoring functions the mentors and their protégés perceived had been provided in the relationship. The origin of the mentoring relationships was discussed, with results indicating administrative assignment of mentors to protégés for a majority of the relationships.

A demographic profile of the study participants was provided. Means and standard deviations for each item in the instruments and for the grouped functions were analyzed and discussed for each group of research participants. Cronbach alphas, which examined the internal consistency of each subscale, were presented and discussed, as were the skewness and kurtosis. The Pearson correlation coefficients indicating the relationship between the functions were provided and discussed.

To address the four research questions, means were calculated for item and function means, and correlated and independent sample *t* tests were computed. Correlated *t* tests showed a statistically significant difference in two of the career functions among the four groups of research participants. The NBC teacher mentors and their protégés differed on the provision of the career function of exposure-and-visibility, the non-NBC teacher mentors and their protégés differed on the function of challenging assignments, and all mentors and their protégés also differed on the provision of challenging assignments. Both groups of protégés perceived that their mentors had provided more of the exposure-and-visibility and challenging assignments functions, which were significantly different, than did their mentors. There were no statistically significant differences between any group of mentors and protégés on the provision of psychosocial functions.

Results from independent sample *t* tests indicated no statistically significant differences between NBC teacher mentors and non-NBC teacher mentors in their perceptions of having provided any of the career or the psychosocial functions. There were no differences between the protégés of the two mentoring groups as to functions provided.

## CHAPTER 5

### SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to compare the career and psychosocial mentoring functions that National Board-certified (NBC) teacher mentors and non-National Board-certified (non-NBC) teacher mentors perceived they provided to their protégés at the elementary grade levels. The protégés' perceptions of the mentoring functions provided by their NBC teacher mentors and non-NBC teacher mentors also were identified and compared. This chapter presents a summary of the study on mentoring functions, conclusions based on the research, implications for educators interested mentoring relations and the functions mentors provide, and recommendations for further research.

#### Summary of the Study

The process of mentoring, from the formal to the informal, has been investigated in the business field to determine what specific functions mentors provide to their protégés. In the field of education, research has often been limited to the design, development, and evaluation of mentoring programs. Noe's (1988) study, which was conducted at the administrative level, investigated the specific mentoring functions identified by Kram (1983, 1985/1988). No quantitative studies had been reported involving the mentoring functions at the elementary level in the public schools, and no instruments had been adapted to measure these functions in the public schools prior to this study. Studies involving National Board-certified (NBC) teachers had focused on the

achievement of their students and not on these teachers serving as mentors or on the functions they provided their protégés. This study focused on the career and psychosocial mentoring functions that NBC teacher mentors and non-NBC teacher mentors perceived they provided to their protégés. The perceptions of their protégés about which functions their mentors provided were also measured.

The instruments used in this study were the Mentoring Functions Scale for the Mentor and the Mentoring Functions Scale for the Protégé. Both of these instruments were adapted from Noe's (1988) Mentoring Functions Scale for the Protégé. The comprehensive and detailed process of adapting these instruments for public school teachers included reviews by public school administrators, university researchers with expertise in mentoring, and public school teachers. Both Kram (1983, 1985/1988) and Noe (1988) were among the expert university researchers to review both instruments.

In early 2006, the instruments were administered to 95 pairs of mentors and their protégés in after-school meetings at the schools. All mentors and protégés were at elementary levels from PK-5. The majority of mentors and protégés were female; there were no male NBC teacher mentors and only three male non-NBC teacher mentors. The demographic characteristics among the mentors were comparable as were the characteristics of their protégés, with the exception of the protégés' number of years in teaching.

The results from the study revealed both mentors and protégés rated items designed to measure the mentoring functions in the range of 2.88 to 4.76 on a 5-point Likert scale and from 3.14 to 4.39 for the overall function score. Overall, there were no statistically significant differences at the .05 level in the mentoring functions provided to

protégés as perceived by NBC teacher mentors and non-NBC teacher mentors and by their protégés. The results did reveal statistically significant differences in two functions: NBC teacher mentors and their protégés differed on the provision of exposure-and-visibility, and non-NBC teacher mentors and their protégés and all mentors and all protégés differed on the provision of the challenging assignments function.

### Conclusions

The conclusions for the study are discussed below. The results for each research question as determined by the study are also provided.

#### *Career and Psychosocial Mentoring Functions Provided by Mentors*

Research question number one was: What career and psychosocial mentoring functions do National Board-certified and non-National Board-certified teacher mentors perceive they provide to their protégés?

National Board-certified teacher mentors and non-NBC teacher mentors perceived that they had similarly provided all of the career and the psychosocial functions for their protégés, with one exception. The non-NBC teacher mentors perceived that they had provided the friendship function for their protégés while the NBC teacher mentors were less certain that the function had been provided.

The NBC teacher mentors and the non-NBC teacher mentors agreed that they had provided the career functions of coaching, protection, and challenging assignments for their protégés but both groups of mentors reported less certainty of having provided the career functions of exposure-and-visibility and sponsorship for their protégés.

Both groups of mentors agreed that they had provided their protégés with the psychosocial functions of acceptance-and-confirmation, role modeling, and counseling.

The psychosocial function of counseling was the function both groups of mentors indicated they had provided to their protégés the most; the second two functions, acceptance and role modeling, were almost identical across all groups.

Counseling (psychosocial) and coaching (career) were the two functions identified as being uniformly provided by both groups of mentors for their protégés. Sponsorship (career) and exposure-and-visibility (career) were the functions the mentors perceived they had least performed.

#### *Comparison of Mentors and Protégés in Perceptions of Functions Provided*

The second research question was: How do mentor teachers and their protégés compare in their perceptions of the mentoring functions being provided?

Both comparisons of mentors and their protégés reported that all functions had been correspondingly provided. However, an analysis of the data in Table 15 indicates a significant difference in the perceptions of the NBC teacher mentors and their protégés in the provision of the exposure-and-visibility function ( $p < .05$ ). A significant difference was also found between the non-NBC teacher mentors and their protégés and between all mentors and all protégés in the provision of the challenging assignments function. Overall, NBC teacher mentors were less certain of having provided opportunities for their protégés to meet new colleagues or personnel who might be important to the protégés' future development. All mentors and non-NBC teacher mentors agreed that they took the opportunity to challenge their protégés professionally; however, inspection of the data indicates a difference in the perceptions of these mentors and their protégés in the provision of the function. Both groups of protégés perceived slightly higher provision of the challenging assignment function than did their mentors.

*Comparison of Functions Provided by NBC Teacher Mentors  
and Non-NBC Teacher Mentors*

Research question three was: How do National Board-certified teacher mentors and non-National Board-certified teacher mentors compare in their perceptions of having provided the mentoring functions?

There were no statistically significant differences in the perceptions of functions provided by the two groups of mentors. Friendship was the one function where the mentors differed on their perceptions of providing the function, but the difference was not significant. The non-NBC teacher mentors agreed that they had provided their protégés with the friendship function while the NBC teacher mentors were less certain they had provided the function.

*Comparison of Functions as Perceived by Protégés of NBC and Protégés of Non-NBC*

The fourth research question was: How do the protégés of National Board-certified and non-National Board-certified teacher mentors compare in their perceptions of the mentoring functions being provided?

There were no differences in the perceptions of either group of protégés regarding the functions provided by their mentors, with one exception. Protégés of non-NBC teacher mentors suggested that their mentors had provided the function of friendship, but the protégés of the NBC teacher mentors were less certain the function had been provided.

Counseling was reported to be the most frequently provided function. The protégés of NBC teacher mentors perceived sponsorship was the least provided function,



while the protégés of non-NBC teacher mentors perceived exposure-and-visibility as the least provided function.

### Implications

This section discusses implications of the study for educators interested in mentoring relationships and the functions mentors provide their protégés. These educators include NBC teacher mentors, non-NBC teacher mentors, school and district administrators, and scholars.

#### *Implications for Teacher Mentors*

Florida has a stringent high-stakes state testing process that occurs in February and March of each year. The results of these tests contribute to the grade that each school receives. In the district in which the study was conducted, there was a tendency of administrators to protect teachers from outside intrusions or after-school meetings that were not focused on testing or the testing process and that required teachers' time and attention after working all day. To conduct parallel research in other districts or in a district in which the researcher is not an employee, personal contact with principals may be a necessity. It will be important to get to the "power-brokers" in the system or each school and learn to navigate the gate-keeping processes of the secretaries in the front office.

Since both NBC and non-NBC teacher mentors and their protégés were not sure that the career functions of exposure-and-visibility and sponsorship had been provided, teachers may want to attend or request professional development which addresses all functions, but specifically the functions of exposure-and-visibility and sponsorship. Teachers may also study research on providing these functions to the protégés.

National Board-certified teacher mentors and their protégés were not certain the function of friendship had been provided. Kram (1985/1988) noted that the functions increased over a period of time; therefore, NBC teacher mentors and their protégés may want to continue the relationship after the certification process is completed. Non-NBC teacher mentors may also wish to continue the mentoring relationship with their protégés after the first year of teaching.

Some mentors reported multiple protégés over a 2-year period. Teacher mentors (NBC and non-NBC) might consider limiting the number of protégés so time will be available to build the trust and respect of fewer protégés. With this extended time and fewer protégés, the functions of exposure-and-visibility, sponsorship, and friendship, as well as the other functions may be better provided.

#### *Implications for School and District Administrators*

According to Kram (1983, 1985/1988), educational training programs can enhance an understanding of mentoring and its function in career development. Since mentoring relationships in which the total range of career and psychosocial functions are provided more closely exemplify the “classic” mentoring relationship (Kram, 1985/1988), schools and district administrators might consider developing or updating a mentoring training program to include the specific career and psychosocial functions mentors perform. Examples illustrating the functions and details of how to incorporate the functions in a school setting might be provided.

Although cause-effect cannot be directly assumed from this research, the possibility exists that this district’s program, which was required of non-NBC teacher mentors and available for NBC teacher mentors, provided the mentors with the skills

needed to successfully mentor other teachers. It seems appropriate that the district maintain the current mentor-training program. The district may want to investigate the least provided functions and specifically incorporate these into the training program.

National Board-certified mentors, their protégés, non-NBC mentors, and their protégés were unsure that the career functions of exposure-and-visibility and sponsorship had been provided to the protégés. NBC mentors and their protégés were less assured that the friendship function had been provided. Kram (1985/1988) noted that the specific functions provided by mentors would change over time as the needs of the protégés changed; some protégés would need less coaching and more sponsorship. Kram also contended that increasing the range of functions depended on the rapport and trust that had developed between the mentor and the protégé over a period of about six months to a year. Therefore, the content of mentoring training programs might consider including specific examples of how these functions may be incorporated in a mentoring relationship in the schools, especially in relationships that extend beyond a year.

Since both the NBC mentors and the non-NBC mentors perceived they provided the same level of all functions except for friendship, which the non-NBC mentors and their protégés indicated were provided, school and district administrators might want to investigate the possibility of formalizing the mentoring process for non-NBC mentors and including equal remuneration for the assistance these non-NBC mentors provide to protégés.

Many mentors in this study reported mentoring more than 10 protégés in a 2-year period. With so many protégés, it might be difficult for teacher mentors to gain the trust and respect of all the protégés. Kram (1983, 1985/1988) indicated that time was needed

to build trust and rapport in order to provide the mentoring functions of counseling and friendship. Therefore, districts and/or schools might consider limiting the number of protégés assigned to mentors during a school year and extending the mentoring relationship longer than a year.

### *Implications for Scholars*

Mentors have provided the career and psychosocial functions to protégés in business (Kram, 1983), in educational administration (Noe, 1988), and now public schools at the elementary grade levels. Because mentors and protégés agreed that the mentors performed most of the functions, scholars who develop mentoring programs may be interested in including these functions and how to provide them to protégés in the training materials. Functions performed with less certainty, such as exposure-and-visibility, sponsorship, and friendship, might be integrated into these programs.

Scholars designing mentoring programs, consulting with districts on the topic, or providing professional development to mentors and protégés might encourage districts and mentors to increase the time span of mentoring and reduce the number of protégés per mentor each year.

As part of an evaluative process for mentoring and mentoring programs, scholars can look at these mentoring function subscales from an accountability perspective to determine whether mentors are in fact performing the necessary functions when working with protégés. The mentoring scales may be used with protégés to determine if the functions have been provided for them. In a related fashion, protégés can use a basic knowledge of the functions as a guide to enhance their acquisition of mentoring functions from their teacher mentors.

As scholars and researchers visit the phenomenon of the mentoring relationship, this study can serve as a basis for additional research into a variety of mentoring areas, including functions that are discussed in more detail in the future research section.

Finally, for scholars and politicians in the state department of education, this study may impact future policy. The state is spending substantial funds to reward NBC teacher mentors when this study indicated no difference in the mentoring functions performed by NBC teacher mentors and those performed by non-NBC teacher mentors.

### Recommendations

The recommendations included in this section pertain to suggestions for further research on the career and psychosocial mentoring functions that mentors provided their protégés at the elementary grade levels. These recommendations relate to three areas: specific suggestions to improve the survey instruments, the data collection process, and recommendations for future research.

#### *Improvement to Survey Instruments*

The demographic information items on the mentor survey instrument were developed to gather as much information about the mentors as possible while still providing confidentiality. One question often was not completed: the question asking the year that a NBC mentor was certified. Future researchers who might consider using the instrument may want to omit this question, move the placement of the question on the survey form, or type the question in bold.

The wording for the mid-level rating in the Likert-type scale used for each item did not prove as useful as the researcher had hoped since many mentors and protégés chose this response, indicating that they were not sure the function was provided.

Researchers considering future use of the surveys may wish to offer four choices instead of five. Better choices for the four categories might be disagree, somewhat disagree, somewhat agree, and agree. Some future researchers may want to use a two-choice selection of yes or no, which might force the participant to evaluate whether the function is really provided. Eliminating the mid-level response so the participants choose among these four (or two) categories may provide the researcher with more information regarding the extent the functions are actually provided.

#### *Data Collection Process*

Early in the data collection process, a few mentors and protégés overlooked one of the one-line items placed between larger shaded items. Researchers interested in future use of the surveys might consider increasing the space after these items to make the reading of the items easier for the participants.

The data collection for this study involved the first 3 months of the second semester of the public school year. The high-stakes state assessment tests began in February and ended in March. The researcher encountered several principals who would not ask their teachers to do anything after school that did not involve testing or preparing for the tests; these principals indicated they would be more receptive after the state testing was completed. Future researchers might consider conducting a comparable study after the testing process is completed or beginning the study earlier in the school year and completing it before the second semester.

Data collection was initiated with assistance from two principals who contacted other principals. One was recently retired and a personal friend. The second was a young principal at a school located in a growing neighborhood. Both principals were

interested in the study and contacted fellow principals who were initially hesitant to ask teachers to consider participating. Researchers considering comparable studies may need to have personal contact with a principal or encourage one or two principals to assist in contacting fellow principals. It may be difficult to conduct analogous research in other districts without this personal contact.

After the initial contact had been established with principals, the researcher communicated with them or the person they designated to communicate with the researcher. Since more data were collected when a teacher at the school organized the meeting and asked fellow teachers to attend, future researchers might want to suggest that principals ask a teacher to communicate with the researcher.

At several schools, mentors reported serving multiple protégés or two mentors worked with one protégé. For this study, these mentors and protégés had to select one mentor or protégé to complete the surveys. Future research could consider replicating this study with multiple mentors and/or protégés, matching one mentor with multiple protégés and coding the protégés A, B, and/or C. Multiple co-mentors for one protégé could be coded mentor A and mentor B. Research might determine if mentors perform the same level of functions or different functions and levels of functions for each protégé. Of interest, too, would be the perceptions of multiple protégés with the same mentor comparing the functions provided by the one mentor to each protégé.

#### *Future Research*

The recommendations presented in this section relate to areas that future researchers may want to consider in pursuing mentoring functions further. These

recommendations concern the characteristics of the involved schools, mentors and protégés, and numbers of protégés.

This study was conducted exclusively with mentors and their protégés at the elementary school level for the purpose of determining the mentoring functions the mentors provided their protégés from the perception of both members in the mentoring relationship. This research could be expanded to include middle school and/or high school mentors and their protégés to determine if these mentors provide the career and psychosocial mentoring functions to their protégés. Research expanded to these secondary levels may identify the categories of functions provided or not provided by the secondary school sample.

A majority of mentors and protégés in this study taught the core courses of language arts, math, science, and social studies at the elementary level. Very few of the mentors and protégés instructed students in the areas of the fine arts, physical education, Exceptional Student Education (ESE), or media. Future researchers might want to investigate the mentoring functions provided by mentors and the perceptions of their protégés in these specific areas. Of interest, too, may be how mentors and protégés in the areas listed above compare in the provision of the mentoring functions.

Research for this study was conducted exclusively in one large urban school district in Florida. Additional research is needed to determine if the results found in other districts in the state of Florida would mirror those of this study. Additional research could be expanded to include other states in different parts of the country.

In a large majority of the mentoring relationships involving non-NBC teacher mentors and their protégés, administrators asked the teacher mentors to serve as the



protégés' mentors. The NBC teacher mentors and their protégés were more evenly split on the establishment of the relationship. Some protégés invited the NBC teacher mentor to serve in the role; other protégés noted that the administration asked the mentors to serve. The NBC teacher mentors responded that 16 of their protégés requested them to serve as their mentor, while 22 of the NBC teacher mentors indicated the administration proposed they work with the protégés. With a majority of all mentors, both NBC and non-NBC, replying that the relationship was initiated formally, further research could investigate the mentoring functions and benefits provided by mentors in informally established mentoring relationships in the schools, especially among relationships with non-NBC serving in the mentor role.

In this study, NBC teacher mentors served protégés who were candidates for National Board Certification and protégés who were not National Board candidates. Future research might investigate and compare the mentoring functions NBC teacher mentors provide protégés who are candidates for National Board Certification with the functions these NBC teacher mentors provide protégés not applying for this certification.

A majority of the participants in this research were female and Caucasian. Additional research with a larger sample of males and minorities is needed to determine if males and minorities in the mentoring role provide the same or other functions for their protégés. Research could also investigate the mentoring functions provided by mentors, either minority or female Caucasian, to males and minority protégés.

Some of the protégés were candidates for National Board Certification, while other protégés were in their first year of teaching. At the conclusion of the research, the candidates for National Board had not completed the process, and some new teachers had

not been informed of their job status or placement for the coming year. Future research could be designed to compare the mentoring functions provided to those protégés who obtain National Board Certification with the functions provided to those protégés who do not complete the process or make the certification. Also, teachers who were not retained in their teaching assignment might be included to further compare the functions provided to teachers by their mentors.

Many mentors indicated they had mentored 10 or more protégés over the last 2 years. Another area for future research could compare the mentoring functions these mentors, who serve large numbers of protégés, provide for each of their multiple protégés with the functions provided by mentors who serve only one protégé.

Each of these areas affords opportunities to incorporate qualitative research methods to investigate in-depth research questions as a follow-up to this study. One example is the case study process in which the relationship between the mentor and the protégé may be studied in detail over a period of time. A comprehensive study of the mentoring process as performed by a NBC teacher mentor and a non-NBC teacher mentor may provide a more detailed report of the functions these mentors provide and specific activities used to perform the functions.

Since this study relied upon self-report, additional research using observation as a technique to verify what these participants reported is another option. With the self-report technique, there was no way to verify that the functions were actually performed. A study designed to observe mentors, both NBC and non-NBC, as they work with the protégés could determine if what mentors report actually occurs.

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## APPENDICES

Appendix A  
Original Mentoring Questionnaire  
(Noe, 1988)



## Noe's Original Mentoring Questionnaire

As you may recall, during Springfield Simulation you were encouraged to interact with a developmental mentor – someone who could provide suggestions about your work problems, skill development, and career decisions. The mentor was intended to be a person you could trust and ask for advice without feeling threatened in any way. The following questions ask you about various aspects of your relationship with your developmental mentor, your peers, and the school climate. Your responses will not be used for any personnel action nor will they be made available to the mentor; they are strictly confidential and for research purposes only.

The first set of questions asks you to provide us with some personal information. This information is used only to describe characteristics of the mentees and mentors who are participants in this study.

1. Your Age \_\_\_\_\_
2. Your Sex \_\_\_\_\_
3. Your marital status (single, married) \_\_\_\_\_
  - 3A. If married, spouses work (Check one)  
 Not Employed  
 Full Time  
 Part Time
4. Number of dependent children \_\_\_\_\_
5. The highest degree you have received \_\_\_\_\_
6. Your position \_\_\_\_\_
7. Months since last job change \_\_\_\_\_
8. Name of your mentor \_\_\_\_\_
9. Approximate age of your mentor \_\_\_\_\_

**The next set of questions asks you to describe your relationship with your developmental mentor.**

10. Estimated number of hours you have spent with your mentor since Springfield follow-up meeting.  
\_\_\_\_\_

Appendix A (continued)

11. How much have you interacted with your mentor since Springfield (since follow-up meeting)?  
Circle one.

1 = Never interacted with my mentor

2 = At least once, but not more than three times

3 = About once a month

4 = About two or three times a month

5 = About once a week

6 = More frequently than once a week

12. Please list below some of the reasons why you did or did not interact frequently with your mentor.

**In answering the next set of questions, please use the following scale:**

**1 = To a very slight extent**

**2 = To a small extent**

**3 = To some extent**

**4 = To a large extent**

**5 = To a very large extent**

**6 = Don't know**

**Please write your response in the space provided.**

To what extent has your mentor...

\_\_\_ 13. ... reduced unnecessary risks that could threaten the possibility of you becoming a school principal or receiving a promotion?

\_\_\_ 14. ... provided you with support and feedback regarding your performance as an educator?

\_\_\_ 15. ... helped you to finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete?

\_\_\_ 16. ... helped you to meet new colleagues?

\_\_\_ 17. ... given you assignments or tasks in your work that prepare you for an administrative position?

\_\_\_ 18. ... taken credit and/or blame in controversial situations?

\_\_\_ 19. ... given you responsibilities that increased written and personal contact with individuals in school administration?

\_\_\_ 20. ... suggested specific strategies for achieving your career goals?

Appendix A (continued)

- \_\_\_21. ... given you assignments that present opportunities to learn new skills?
- \_\_\_22. ... assigned responsibilities to you that have increased your contact with people in the district who may judge your potential for further advancement?
- \_\_\_23. ... shared history of his/her career with you?
- \_\_\_24. ... spoken highly of your abilities and skills to your supervisor and/or upper level administration (superintendent, etc.)?
- \_\_\_25. ... shared ideas with you?
- \_\_\_26. ... nominated you for desirable lateral moves or promotions?
- \_\_\_27. ... suggested specific strategies for accomplishing work objectives?
- \_\_\_28. ... given you feedback regarding your performance in your present job?
- \_\_\_29. ... encouraged you to prepare for advancement?

**Answer the next set of questions about your relationship with your mentor using the following scale:**

- 1 = Strongly disagree**
- 2 = Disagree**
- 3 = Neither agree nor disagree**
- 4 = Agree**
- 5 = Strongly agree**
- 6 = Don't know**

- \_\_\_30. My mentor has encouraged me to try new ways of behaving in my job.
- \_\_\_31. I try to imitate the work behavior of my mentor.
- \_\_\_32. My mentor has invited me to join him/her for lunch.
- \_\_\_33. I agree with my mentor's attitudes and values regarding education.
- \_\_\_34. My mentor is motivated to help me.
- \_\_\_35. My mentor has demonstrated good listening skills in our conversations.
- \_\_\_36. I respect and admire my mentor.
- \_\_\_37. My mentor has discussed my questions or concerns regarding feelings of competence, commitment to advancement, relationships with peers and supervisors or work/family conflicts.
- \_\_\_38. My self-confidence has increased as a result of my relationship with my mentor.
- \_\_\_39. I will try to be like my mentor when I reach a similar position in my career.

Appendix A (continued)

- \_\_\_40. My mentor has asked me for suggestions concerning problems s/he has encountered at school.
- \_\_\_41. My mentor has interacted with me socially outside of work.
- \_\_\_42. My mentor has conveyed feelings of respect for me as an individual.
- \_\_\_43. I feel comfortable discussing my goals and developmental plans with my mentor.
- \_\_\_44. My mentor has shared personal experiences as an alternative perspective to my problems.
- \_\_\_45. My mentor has contributed to my improvement in a number of skill areas.
- \_\_\_46. My mentor has encouraged me to talk openly about anxiety and fears that detract from my work.
- \_\_\_47. I've enjoyed interacting with my mentor.
- \_\_\_48. I can personally benefit by cooperating with my mentor.
- \_\_\_49. I respect my mentor's competence about things s/he is more experienced in than I.
- \_\_\_50. My mentor can apply pressure on me if I don't comply with his/her suggestions.
- \_\_\_51. My mentor will give special help to those who cooperate with him/her.
- \_\_\_52. I feel I have to cooperate with my mentor.
- \_\_\_53. Following my mentor's advice results in better decisions on my part.
- \_\_\_54. I respect my mentor personally and want to act in a way that merits his/her respect and admiration.
- \_\_\_55. Because s/he is my mentor I am obligated to follow his/her suggestions.
- \_\_\_56. Cooperating with my mentor can positively impact on my performance.
- \_\_\_57. My mentor has a legitimate right, considering his/her position, to expect that suggestions will be carried out.
- \_\_\_58. I defer to my mentor's judgment in areas in which s/he is more familiar than I.
- \_\_\_59. I cooperate with my mentor because I have a high regard for him/her as an individual.
- \_\_\_60. My mentor can make things more difficult for me if I fail to follow his/her advice.
- \_\_\_61. My mentor can penalize me if I don't follow his/her suggestions.
- \_\_\_62. I cooperate with my mentor because I wish to be identified with him/her.
- \_\_\_63. My mentor has conveyed empathy for the concerns and feelings I have discussed with him/her.

Appendix A (continued)

- \_\_\_ 64. My mentor has helped me to clarify my career goals.
- \_\_\_ 65. I feel as though my mentor really cares for me as a person.
- \_\_\_ 66. My mentor has kept feelings and doubts I shared with him/her in strict confidence.
- \_\_\_ 67. My mentor has provided me with assistance and direction on how to solve problems I face on my job.

**The next set of questions concern you work environment and your peer relationships. Use the following scale to answer the next set of questions.**

- 1 = Strongly disagree**
- 2 = Disagree**
- 3 = Neither agree nor disagree**
- 4 = Agree**
- 5 = Strongly agree**
- 6 = Don't know**

- \_\_\_ 68. The people I work with can be counted on to help me develop administrative skills.
- \_\_\_ 69. My peers can help me progress in my career.
- \_\_\_ 70. I believe that the opportunity to consult with someone who is a more experienced educator than myself is a valuable experience.
- \_\_\_ 71. Feelings of trust exist between school administration, teachers, and support staff in my school.
- \_\_\_ 72. I prefer a team-oriented work environment.
- \_\_\_ 73. I have very few close friends and confide in few people.
- \_\_\_ 74. I value my peers' opinion of my performance as an educator.
- \_\_\_ 75. Discussing my career interests with others will benefit me in the long run.
- \_\_\_ 76. Because of others' expectations it is hard to change my attitudes, behaviors, and interests.
- \_\_\_ 77. I derive my greatest source of satisfaction at work from my relationships with my peers.
- \_\_\_ 78. I often receive informal information from peers that helps me to perform my job better.
- \_\_\_ 79. It is probably best not to discuss your anxieties and frustrations with the people with whom your work.
- \_\_\_ 80. I often discuss my career goals and plans with my peers.
- \_\_\_ 81. Success in my job is dependent upon help I receive from my colleagues.

Appendix A (continued)

**Use the following scale to answer the next set of questions**

- 1 = To a very slight extent**
- 2 = To a small extent**
- 3 = To some extent**
- 4 = To a large extent**
- 5 = To a very large extent**
- 6 = Don't know**

To what extent...

- \_\_\_ 82. ... has your school conducted in-service or sponsored programs regarding listening skills, work relationships, and/or communication skills?
- \_\_\_ 83. ... do feelings of trust exist between school administration, teachers, and support staff?
- \_\_\_ 84. ... does the climate of your school encourage frequent and open communications among all individuals?

**In answering the last set of questions consider your work relationships, particularly with those individuals in your school whom you would consider as peers. Place an X next to the statement you feel best describes your relationship with your peers. Please mark only one response per question.**

85. Which statement best describes the level of commitment among your peers?

- \_\_\_ Our discussions are usually limited to work-related issues; most of the time we provide each other with information about work-related problems or issues.
- \_\_\_ Our discussions are usually limited to work-related issues but occasionally work and family concerns are discussed.
- \_\_\_ Our discussions are often work-related, but concerns regarding family and career issues are frequently discussed. As a result, I have close personal friends in my peer group.

86. Which Statement best describes the intensity of your relationship with your peers?

- \_\_\_ Social, with a casual and limited sharing of personal experiences and desires.
- \_\_\_ Social, with a reasonable amount of discussion of personal thoughts, wishes, desires, and experiences.
- \_\_\_ Social, but also providing security, comfort, and feelings of belongingness on the job.

87. Which statement best describes the issues discussed with your peer group?

- \_\_\_ Work only.
- \_\_\_ Mainly work issues, but some limited discussion of nonwork and family concerns.
- \_\_\_ Relationship is one in which discussion of both family, personal, and work issues are frequently and openly discussed.

Appendix A (continued)

88. Which statement best describes the needs satisfied as a result of your peer relationships?

\_\_\_ Obtain sources of information regarding job and career problems and opportunities.

\_\_\_ Obtain direct and honest feedback about ideas, projects, etc. as well as information regarding job and career problems and opportunities.

\_\_\_ Obtain direct and honest feedback, information regarding job and career problems and opportunities, and a chance to express your personal and professional dilemmas.

Appendix B

Mentoring Functions Scale for the Protégé

Extracted from

Original Mentoring Questionnaire

(Noe, 1988)



**Mentoring Functions Scale for the Protégé  
(Noe, 1988)**

Noe's questions for the *Mentoring Functions Scale* are embedded in a larger instrument, which include questions on demographics, time spent with the mentor, work environment and peer relationships, and the mentoring functions. The questions for the mentoring functions are taken from Noe's original document and reproduced with original directions and in the original format. The numbers to the questions are different, but the questions are in the same order as the original.

**Directions:** As you may recall, during . . . Simulation you were encouraged to interact with a developmental mentor—someone who could provide suggestions about your work problems, skill development, and career decisions. The mentor was intended to be a person you could trust and ask for advice without feeling threatened in any way. The following questions ask you about various aspects of your relationship with your developmental mentor, your peers, and the school climate. Your responses will not be used for any personnel action nor will they be made available to the mentor; they are strictly confidential and for research purposes only.

**In answering the next set of question, please use the following scale:**

- 1 = To a very slight extent**
- 2 = To a small extent**
- 3 = To some extent**
- 4 = To a large extent**
- 5 = To a very large extent**
- 6 = Don't Know**

**Please write your response in the space provided.**

To what extent has your mentor . . .

- \_\_\_\_\_ 1. . . . reduced unnecessary risks that could threaten the possibility of you becoming a school principal or receiving a promotion?
- \_\_\_\_\_ 2. . . . provided you with support and feedback regarding your performance as an educator?
- \_\_\_\_\_ 3. . . . helped you to finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete?
- \_\_\_\_\_ 4. . . . helped you to meet new colleagues?

Appendix B (continued)

- \_\_\_\_\_ 5. . . . given you assignments or tasks in your work that prepare you for an administrative position?
- \_\_\_\_\_ 6. . . . given you responsibilities that increased written and personal contact with individuals in school administration?
- \_\_\_\_\_ 7. . . . suggested specific strategies for achieving your career goals?
- \_\_\_\_\_ 8. . . . given you assignments that present opportunities to learn new skills?
- \_\_\_\_\_ 9. . . . assigned responsibilities to you that have increased your contact with people in the district who may judge your potential for further advancement?
- \_\_\_\_\_ 10. . . . shared history of his/her career with you?
- \_\_\_\_\_ 11. . . . shared ideas with you?
- \_\_\_\_\_ 12. . . . suggested specific strategies for accomplishing work objectives?
- \_\_\_\_\_ 13. . . . given you feedback regarding your performance in your present job?
- \_\_\_\_\_ 14. . . . encouraged you to prepare for advancement?

**Answer the next set of questions about your relationship with your mentor using the following scale:**

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Neither agree nor disagree
- 4 = Agree
- 5 = Strongly agree
- 6 = Don't know

- \_\_\_\_\_ 15. My mentor has encouraged me to try new ways of behaving in my job.
- \_\_\_\_\_ 16. I try to imitate the work behavior of my mentor.
- \_\_\_\_\_ 17. My mentor has invited me to join him/her for lunch.
- \_\_\_\_\_ 18. I agree with my mentor's attitudes and values regarding education.
- \_\_\_\_\_ 19. My mentor has demonstrated good listening skills in our conversations.

Appendix B (continued)

- \_\_\_\_\_ 20. I respect and admire my mentor.
- \_\_\_\_\_ 21. My mentor has discussed my questions or concerns regarding feelings of competence, commitment to advancement, relationships with peers and supervisors or work/family conflicts.
- \_\_\_\_\_ 22. I will try to be like my mentor when I reach a similar position in my career.
- \_\_\_\_\_ 23. My mentor has asked me for suggestions concerning problems s/he has encountered at school.
- \_\_\_\_\_ 24. My mentor has interacted with me socially outside of work.
- \_\_\_\_\_ 25. My mentor has conveyed feelings of respect for me as an individual.
- \_\_\_\_\_ 26. My mentor has shared personal experiences as an alternative perspective to my problems.
- \_\_\_\_\_ 27. My mentor has encouraged me to talk openly about anxiety and fears that detract from my work.
- \_\_\_\_\_ 28. My mentor has conveyed empathy for the concerns and feelings I have discussed with him/her.
- \_\_\_\_\_ 29. My mentor has kept feelings and doubts I shared with him/her in strict confidence.

## Appendix C

### Mentoring Functions Scale for the Mentor

**Mentoring Functions Scale**  
**for the**  
**Mentor**





Appendix C (continued)

**Directions:** The items on this instrument are indicators of the major functions that mentors provide to their protégés. Mentoring functions are those activities and aspects of a developmental mentoring relationship that contribute to the protégé's growth and development. For the purposes of this instrument, a mentor is another teacher who befriends, guides, supports, counsels, coaches, and serves as a role model.

Think about your relationship with your protégé as you read each statement. Your answers should be based on your experience as a mentor to a protégé within the past 2 years or with your current protégé.

**For each item, check (✓) the choice that most closely represents your perceptions of your behavior as a mentor.**

Statement	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. I have shared my career history with my protégé.					
2. I have encouraged my protégé to participate in professional development/growth activities.					
3. I have suggested specific strategies to my protégé for achieving career goals.					
4. I have shared professional ideas with my protégé.					
5. I have suggested specific strategies to my protégé for accomplishing teaching objectives.					
6. I have given my protégé feedback regarding performance in his/her present position.					
7. I have encouraged my protégé to try new approaches or methods of teaching and interacting with students at school.					
8. I have conveyed feelings of respect for my protégé as an individual and as a professional.					
9. I have asked my protégé for suggestions concerning problems I have encountered at school.					
10. I have modeled my teaching style for my protégé.					
11. I have modeled my attitudes and values regarding education for my protégé.					
12. I have tried to earn the respect and admiration of my protégé.					

Please turn over 

Appendix C (continued)

Statement	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
13. I have encouraged my protégé to strive for the same level of expertise upon reaching my similar career position.					
14. I have demonstrated good listening skills in our conversations.					
15. I have addressed my protégé's questions or concerns regarding feelings of competence.					
16. I have addressed my protégé's concerns regarding relationships with peers, supervisors, and/or work/family conflicts.					
17. I have shared personal experiences as an alternative perspective to my protégé's problems or concerns.					
18. I have encouraged my protégé to talk openly about anxiety and fears that cause work detractions.					
19. I have conveyed empathy for the concerns and feelings my protégé has discussed with me.					
20. I have kept feelings and doubts my protégé shared with me in strict confidence.					
21. I have helped my protégé with problems that could threaten the possibility of him/her obtaining other desired positions/ assignments.					
22. I have helped my protégé complete projects/tasks or meet deadlines that otherwise would have been difficult to complete.					
23. I have helped my protégé meet new colleagues.					
24. I have given my protégé projects that increased written and personal contact with colleagues.					
25. I have encouraged my protégé to assume responsibilities that increase personal contact with people in the district who may influence his/her future career development.					
26. I have given my protégé projects or work tasks that prepare him/her for new teaching assignments, professional growth, or administrative positions if desired.					
27. I have given my protégé projects that present opportunities to learn new skills.					



Appendix C (continued)

Statement	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
28. I have provided my protégé with critical feedback regarding completion of challenging teaching assignments and work performance.					
29. I have invited my protégé to join me for lunch (or another function) at work.					
30. I have interacted with my protégé socially outside of work.					

*Thank you again for your time!*

*It is appreciated.*

**Amy S. Wilson**  
**{Address}**  
**{City, State ZIP}**

## Appendix D

### Mentoring Functions Scale for the Protégé

**Mentoring Functions Scale**  
**for the**  
**Protégé**



**Directions:** Please respond to each item by providing the requested information or by checking the appropriate response. Thank you for your time and interest.

### Demographic Information

**Protégé Number:** \_\_\_\_\_

Please tell me about yourself and your mentor.

1. Identify the school/work site where you work: \_\_\_\_\_
  
2. How did you choose this mentor? (Check all applicable answers.)  
 I asked the person to be my mentor.  
 Administrator asked mentor to mentor me.  
 Mentor asked me if he/she could mentor me.  
 Other (please explain)  
\_\_\_\_\_  
\_\_\_\_\_
  
3. What is the subject area(s) that you teach? \_\_\_\_\_
  
4. Are you ESE certified? \_\_\_\_\_
  
5. How many years have you been teaching? \_\_\_\_\_
  
6. What level is your school designated?  Elementary  K-8
  
7. Circle the grade level(s) that you teach: PK K 1 2 3 4 5 Other \_\_\_\_\_
  
8. What is the highest degree you have completed?  Bachelor  Master  
 Specialist  Doctorate
  
9. Are you a candidate for National Board Certification?  Yes  No
  
10. What is your gender?  Male  Female
  
11. What is your racial/ethnic background?  
 African American/Black  Native American/Indian  
 Asian/Pacific Islander  Caucasian/White  
 Hispanic/Latino  Other, please specify  
\_\_\_\_\_

**Please continue on next page →**

Appendix D (continued)

**Directions:** The items on this instrument are indicators of the major functions that mentors provide to their protégés. Mentoring functions are those activities and aspects of a developmental mentoring relationship that contribute to the protégé’s growth and development.

Think about the relationship with your mentor as you read each statement. For the purpose of this instrument, a mentor is another teacher with three years of teaching experience who befriends, guides, supports, counsels, coaches, and serves as a role model for you. Your answers should be based on your relationship with a mentor during the past 2 years.

**For each item, check (✓) the choice that most represents your relationship with your**

Statement	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. My mentor has shared his/her career history with me.					
2. My mentor has encouraged me to participate in professional development/ growth activities					
3. My mentor has suggested specific strategies for achieving my career goals.					
4. My mentor has shared professional ideas with me.					
5. My mentor has suggested specific strategies for accomplishing teaching objectives.					
6. My mentor has given me feedback regarding my performance in my present position.					
7. My mentor has encouraged me to try new approaches or methods of teaching and interacting with students.					
8. My mentor has conveyed feelings of respect for me as an individual and as a professional.					
9. My mentor has asked me for suggestions concerning problems he/she has encountered at school.					
10. My mentor has modeled his/her teaching style and encouraged me to imitate the style.					
11. My mentor has modeled his/her attitudes and values regarding education.					

Please turn over 

Appendix D (continued)

Statement	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
12. My mentor has earned my respect and admiration.					
13. My mentor has encouraged me to strive for high levels of expertise in my current and in future career positions.					
14. My mentor has demonstrated good listening skills in our conversations.					
15. My mentor has addressed my questions or concerns regarding feelings of competence.					
16. My mentor has addressed my concerns regarding relationships with peers, supervisors, and/or work/family conflicts.					
17. My mentor has shared personal experiences as an alternative perspective to my problems or concerns.					
18. My mentor has encouraged me to talk openly about anxiety and fears that detract from my work.					
19. My mentor has conveyed empathy for my concerns and feelings during our discussions.					
20. My mentor has kept the feelings and doubts I shared with him/her in strict confidence.					
21. My mentor has helped me with problems that could threaten my obtaining other desired positions/assignments.					
22. My mentor has helped me complete projects/tasks or meet deadlines that otherwise would have been difficult to complete.					
23. My mentor has helped me meet new colleagues.					
24. My mentor has given me projects that increased written and personal contact with colleagues.					
25. My mentor has encouraged me to assume responsibilities that increase personal contact with people in the district who may judge my potential for future career development.					

Please turn over 

Appendix D (continued)

Statement	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
26. My mentor has given me projects or work tasks that could prepare me for new teaching assignments, professional growth, or administrative positions if desired.					
27. My mentor has given me projects that present opportunities to learn new skills.					
28. My mentor has provided me with critical feedback regarding completion of challenging teaching assignments and work performance.					
29. My mentor has invited me to join him/her for lunch (or another function) at work.					
30. My mentor has interacted with me socially outside of work.					

*Thank you again for your time!  
It is appreciated.*

**Amy S. Wilson  
{Address}  
{City, State ZIP}**

Appendix E

Copy of Noe's Permission Letter



{Address}  
{City, State ZIP}  
July 21, 2004

Dr. Raymond A. Noe  
{College of Business}  
{Department}  
{Street}  
{City, State ZIP}

Dear Dr. Noe:

I am a doctoral candidate at the University of South Florida, and I would like to use your Protégé Questionnaire that was published in *Personnel Psychology* (1988) in my doctoral study. The university requires that I have your permission to use the instrument. Please sign the enclosed letter and return it to me in the stamped envelope. Thank you for your permission to use your instrument.

Sincerely,

Amy S. Wilson

Appendix E (continued)

{College of Business}  
{Department}  
{Street}  
{City, State ZIP}  
July 30, 2004

Amy S. Wilson  
{Address}  
{City, State ZIP}

Dear Ms. Wilson:

Thank you for your interest in the Protégé Questionnaire. You have my permission to use the questionnaire as part of your dissertation work on mentoring at the University of South Florida.

Sincerely,



Raymond A. Noe  
Robert and Ann Hoyt Designated Professor of Management

Appendix F

Draft of Mentoring Functions Scales for Mentors and Protégés

Directions for School Administration Panel

Address}  
{City, State Zip}  
February 21, 2005

Dr. {First, Last Name}  
{Address}  
{City, State Zip}

Dear Dr. {Last Name}:

Because of your expertise related to mentoring, I need your help in the validation of both a mentor version and a protégé version of a mentoring instrument that I am developing for my dissertation at the University of South Florida. The mentor version, *The Mentoring Functions Scale: **Mentor Version***, assesses the extent to which teacher mentors believe they provide career and psychosocial functions to their protégés at the PK-12 public school level. The *Mentoring Functions Scale: **Protégé Version*** assesses the extent to which these protégés perceive their mentors provide the career and psychosocial functions.

It is extremely crucial that I have your expert help in validating both instruments. So that you will have the wording of the original instrument, I have enclosed a copy of Dr. Raymond A. Noe's original *Mentoring Functions Scale*, from which both of these instruments were adapted.

In addition to Noe's original instrument, the directions for completing the scoring sheets, **Sheet A: Mentor Validation and Sheet B: Protégé Validation** are enclosed. If you have any questions, please send an email to {email address} and I will contact you immediately. Upon completion of both instruments, please place the completed scoring sheets for each version in the enclosed stamped envelope and place the packet in the mail.

Thank you for your assistance and your time.

Sincerely,

Amy S. Wilson  
Ph. D. Candidate

### Intent of Study

This study is designed to enable mentor teachers in the public schools to evaluate the extent to which they perceive that they provide the career and psychosocial functions of mentoring and to enable the mentors' protégés to evaluate the extent to which they perceive their mentors providing the functions.

The *Mentoring Functions Scale: Mentor Version* (**Sheet A: Mentor Validation—yellow paper**) and the *Mentoring Functions Scale: Protégé Version* (**Sheet B: Protégé Validation—pink paper**) are self-rating instruments. The original *Mentoring Functions Scale* (**Sheet C—blue paper**), which is organized by factors, is a self-rating instrument developed by Dr. Raymond A. Noe for use with educators desiring to become school administrators. It assessed the extent to which protégés believed that their mentors provided career and psychosocial functions. Dr. Wayne B. James and I modified Noe's instrument for the following purposes:

1. To adapt the instrument for this study's target population of public school teachers serving as mentors at the PK-12 level and the protégés of these mentors.
2. To enable mentor teachers in the public schools to evaluate the extent to which they perceive performing the mentoring functions.
3. To enable the mentors' protégés to evaluate the extent to which they perceive their mentors providing the functions.

The following instruments are attached: *Mentoring Functions Scale: Mentor Version* (identified as **Sheet A: Mentor Validation—yellow paper**), *Mentoring Functions Scale: Protégé Version* (identified as **Sheet B: Protégé Validation—pink paper**), and Noe's original *Mentoring Functions Scale* (identified as **Sheet C—blue paper**).

## Directions for Completing Validation Scoring Sheet A

### SHEET A: MENTOR VALIDATION (YELLOW PAPER)

The purpose of this activity is to compare the wording of each item on **Sheet A (yellow paper)** with Noe's original wording of each item **Sheet C (blue paper)** and to rate the extent that the wording on Sheet A, the mentor version, conveys a similar meaning as Noe's wording on Sheet C and, therefore, is appropriate for the teacher mentor. The items on Sheet A correspond by number to the items on Sheet C.

A copy of the original *Mentoring Functions Scale* (**Sheet C –blue paper**), developed by Noe and from which both of these instruments were developed, is enclosed so that you will have the original wording of Noe's instrument. **Please read Noe's original version of each item as you come to an item in Sheet A: Mentor Validation (yellow paper).**

#### 1<sup>st</sup> Step: **Sheet A: Mentor Validation**

- A. It would be easier if you place Sheet A and Sheet C side-by-side.
- B. Read the first item from **Sheet A: Mentor Validation (yellow paper)**. Each item corresponds by number to Noe's original item number, so the first item on **Sheet A** corresponds with the first item on **Sheet C**.
- C. Read the items on **Sheet A** from the standpoint of the **teacher mentor** at the PK-12 level.
- D. Compare the item on Sheet A with the corresponding number item on Sheet C.
- E. Rate whether the modified item on Sheet A is appropriate for the teacher mentor at the PK-12 level.
- F. Rate each item on a scale from 1 to 5, with 1=not appropriate, 2=somewhat not appropriate, 3=a neutral mid-point between the two extremes, 4=somewhat appropriate, and 5=very appropriate for the teacher serving as a mentor to the protégé.  
**Remember, a score of 5 indicates that the item on Sheet A is very appropriate for the teacher mentor, and a score of 1 indicates that the item is not appropriate.**
- G. Complete all 29 items.

#### 2<sup>nd</sup> Step:

- A. Please indicate any suggested word changes for Sheet A in the space under Comments/Suggested Word Changes to the right of the item.
- B. If additional space is needed, please use the back of the instrument or attach additional sheets.  
Please be sure to indicate which item number and version (A or B) to which your additional comments refer, if you use additional sheets.

#### 3<sup>rd</sup> Step:

- A. Place Sheet A in the enclosed envelope after completing Sheet B. Return both instruments to me. **Please return by March 10, 2005.**

**VALIDATION SHEET A: MENTOR VERSION**

*MENTORING FUNCTIONS SCALE*

VALIDATION SCORING SHEET

**Directions:**

- 1<sup>st</sup>:** Read each item from the standpoint of the *mentor*. Then, read Noe’s original wording of each item. Score each item on this instrument from 1 to 5 on the appropriateness of the item from the standpoint of the mentor. A score of 5 indicates that the item is very appropriate for the mentor, and a score of 1 indicates that the item is not appropriate at all.
- 2<sup>nd</sup>:** Indicate any suggested word changes for this instrument in the space under comments/suggested word changes. If additional space is needed, please use the back of this instrument or attach additional sheets. Please be sure to indicate which item number and version (A or B) to which your additional comment refers.
- 3<sup>rd</sup>:** Place this instrument and the Protégé Version (B) in the enclosed envelope and return them to me.

Item	Rating From 1 - 5	Comments/Suggested Word Changes
1. I have shared my history of my career with my protégé.		
2. I have encouraged my protégé to prepare for advancement.		
3. I have encouraged my protégé to try new ways of behaving in his/her job.		
4. My protégé has tried to imitate my work behavior.		
5. My protégé agrees with my attitudes and values regarding education.		
6. My protégé respects and admires me.		
7. My protégé will try to be like me when he/she reaches a similar position in his/her career.		
8. I have demonstrated good listening skills in our conversations.		

Appendix F (continued)

**SHEET A:** *Mentoring Functions Scale: Mentor Version* Validation Scoring Sheet

<b>Item</b>	<b>Rating From 1 - 5</b>	<b>Comments/Suggested Word Changes</b>
9. I have discussed protégé’s questions or concerns regarding feelings of competence, commitment to advancement, and relationships with peers and supervisors or work/family conflicts.		
10. I have shared personal experiences as an alternative perspective to my protégé’s problems.		
11. I have encouraged my protégé to talk openly about anxiety and fears that detract from his/her work.		
12. I have conveyed empathy for the concerns and feelings my protégé has discussed with me.		
13. I have kept feelings and doubts my protégé shared with me in strict confidence.		
14. I have conveyed feelings of respect for my protégé as an individual.		
15. I reduced unnecessary risks that could threaten the possibility of advancing in the field or of receiving a promotion for my protégé.		
16. I helped my protégé finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete.		
17. I helped my protégé meet new colleagues.		
18. I gave my protégé assignments that increased written and personal contact with school administrators.		
19. I have assigned responsibilities to my protégé that have increased his/her contact with people in the district who may judge his/her potential for future advancement.		
20. I gave my protégé assignments or tasks in his/her work that prepare him/her for advancement.		



Appendix F (continued)

**SHEET A: Mentoring Functions Scale: Mentor Version Validation Scoring Sheet**

<b>Item</b>	<b>Rating From 1 - 5</b>	<b>Comments/Suggested Word Changes</b>
21. I gave my protégé assignments that present opportunities to learn new skills.		
22. I provided my protégé with support and feedback regarding his/her performance as an educator and teacher.		
23. I have suggested specific strategies to my protégé for achieving career goals.		
24. I have shared ideas with my protégé.		
25. I have suggested specific strategies to my protégé for accomplishing work objectives.		
26. I have given my protégé feedback regarding performance in his/her present job.		
27. I have invited my protégé to join me for lunch (or another function) at work.		
28. I have asked my protégé for suggestions concerning problems I have encountered at school.		
29. I have interacted with my protégé socially outside of work.		

Please return this instrument to: Amy S. Wilson  
 {Address}  
 {City, State Zip}

## Directions for Completing Validation Scoring Sheet B

### SHEET B: PROTÉGÉ VALIDATION (PINK PAPER)

The purpose of this process is to compare the wording of each item on **Sheet B (pink paper)** with Noe's original wording of each item **Sheet C (blue paper)** and to rate the extent that the wording on Sheet B, the protégé version, conveys a similar meaning as Noe's wording on Sheet C and, therefore, is appropriate for the teacher protégé. The items on Sheet B correspond by number to the items on Sheet C.

A copy of the original *Mentoring Functions Scale* (**Sheet C—blue paper**), developed by Noe and from which both of these instruments were developed, is enclosed so that you will have the original wording of his instrument. **Please read Noe's original version of each item as you come to the corresponding item in Sheet B: Protégé Validation (pink paper).**

#### 1<sup>st</sup> Step: **Sheet B: Protégé Validation**

- A. It would be easier if you place Sheet B and Sheet C side-by-side.
- B. Read the first item from **Sheet B: Protégé Validation (pink paper)**. Each item corresponds by number to Noe's original item number, so the first item on **Sheet B** corresponds with the first item on **Sheet C**.
- C. Read the items on **Sheet B** from the standpoint of the teacher protégé at the PK-12 level.
- D. Compare the item on Sheet B with the corresponding number item on Sheet C.
- E. Rate whether the modified item on Sheet B is appropriate for the teacher protégé at the PK-12 level.
- F. Rate each item on a scale from 1 to 5, with 1=not appropriate, 2=somewhat not appropriate, 3=a neutral mid-point between the two extremes, 4=somewhat appropriate, and 5=very appropriate for the teacher protégé.  
**Remember, a score of 5 indicates that the item on Sheet B is very appropriate for the teacher protégé, and a score of 1 indicates that the item is not appropriate at all.**
- G. Complete all 29 items.

#### 2<sup>nd</sup> Step:

- A. Please indicate any suggested word changes for Sheet B in the space under Comments/Suggested Word Changes to the right of the item.
- B. If additional space is needed, please use the back of the instrument or attach additional sheets.  
Please be sure to indicate which item number and version (A or B) your additional comments refer, if you use additional sheets.

#### 3<sup>rd</sup> Step:

- A. Place Sheet B in the enclosed envelope and return both instruments to me.  
**Please return by March 10, 2005.**

**VALIDATION SHEET B: PROTÉGÉ VERSION**

*MENTORING FUNCTIONS SCALE*

VALIDATION SCORING SHEET

**Directions:**

- 1<sup>st</sup>:** Read each item from the standpoint of the protégé. Then, read Noe’s original wording of each item. Score each item from 1 to 5 on the appropriateness of the item from the standpoint of the protégé. A score of 5 indicates that the question is very appropriate for the protégé, and a score of 1 indicates that the question is not appropriate at all.
- 2<sup>nd</sup>:** Indicate any suggested word changes for this instrument in the space under comments/suggested word changes. If additional space is needed, please use the back of this instrument or attach additional sheets. Please be sure to indicate which item number and version (A or B) your additional comment refers.
- 3<sup>rd</sup>:** Place this instrument and the Mentor Version (A) in the enclosed envelope and return it to me.

<b>Item</b>	<b>Rating From 1 - 5</b>	<b>Comments/Suggested Word Changes</b>
1. Mentor has shared history of his/her career with me.		
2. Mentor has encouraged me to prepare for advancement.		
3. Mentor has encouraged me to try new ways of behaving in my job.		
4. I try to imitate the work behavior or my mentor.		
5. I agree with my mentor’s attitudes and values regarding education.		
6. I respect and admire my mentor.		
7. I will try to be like my mentor when I reach a similar position in my career.		
8. My mentor has demonstrated good listening skills in our conversations.		
9. My mentor has discussed my questions or concerns regarding feelings of competence, commitment to advancement, and relationships with peers and supervisors or work/family conflicts.		

Appendix F (continued)

**SHEET B:** *Mentoring Functions Scale: Protégé Version* Validation Scoring Sheet

<b>Item</b>	<b>Rating From 1 - 5</b>	<b>Comments/Suggested Word Changes</b>
10. My mentor has shared personal experiences as an alternative perspective to my problems.		
11. My mentor has encouraged me to talk openly about anxiety and fears that detract from my work.		
12. My mentor has conveyed empathy for the concerns and feelings I have discussed with him/her.		
13. My mentor has kept feelings and doubts I shared with him/her in strict confidence.		
14. My mentor has conveyed feelings of respect for me as an individual.		
15. Mentor reduced unnecessary risks that could threaten the possibility of advancing in the field or of receiving a promotion.		
16. Mentor helped you finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete.		
17. Mentor helped you meet new colleagues.		
18. Mentor gave you assignments that increased written and personal contact with school administrators.		
19. Mentor assigned responsibilities to you that have increased your contact with people in the district who may judge your potential for future advancement.		
20. Mentor gave you assignments or tasks in your work that prepare you for advancement.		
21. Mentor gave you assignments that present opportunities to learn new skills.		
22. Mentor provided you with support and feedback regarding your performance as an educator and teacher.		
23. Mentor suggested specific strategies for achieving your career goals.		
24. Mentor shared ideas with you.		

Appendix F (continued)

**SHEET B:** *Mentoring Functions Scale: Protégé Version* Validation Scoring Sheet

<i>Item</i>	<b>Rating From 1 - 5</b>	<b>Comments/Suggested Word Changes</b>
25. Mentor suggested specific strategies for accomplishing work objectives.		
26. Mentor gave you feedback regarding performance in your present job.		
27. My mentor has invited me to join him/her for lunch (or another function) at work.		
28. My mentor has asked me for suggestions concerning problems he/she has encountered at school.		
29. My mentor has interacted with me socially outside of work.		

Please return this instrument to: Amy S. Wilson  
{Address}  
{City, State ZIP}

## Appendix G

### Names of Expert Panel Members

Names of Initial Panel Members with Expertise in School Administration

Expert	Subject Area of Expertise	Institution
Jane Lee Padgett	School Administrator	Retired
Dr. William Stratton	School Superintendent	Retired
Dr. Elaine Sullivan	School Administrator	Retired

Names of Validation Panel Members with Expertise in Mentoring

Expert	Subject Area of Expertise	Institution
Dr. H. Norman Cohen	Adult Education	Community College of Philadelphia
Dr. Michael W. Galbraith	Adult Education	Marshall University Graduate School
Dr. Tom Ganser	Teacher Education	University of Wisconsin, Whitewater
Dr. Kathy E. Kram	Management	Boston University
Dr. Carol Mullen	Educational Leadership	University of South Florida
Dr. Raymond A. Noe	Business	Ohio State University
Dr. James B. Rowley	Education and Applied Professions	University of Dayton

Appendix G (continued)

Names of Verification Panel Members with Expertise in Mentoring

Expert	Subject Area of Expertise	Institution/Employment
Dr. Jean Boreen	English	Northern Arizona University
Mr. Hal Portner	Mentoring	Writer/Consultant
Dr. Iris Riggs	Mentoring	California State Univ. San Bernardino
Dr. Ruth Sandlin	Mentoring	California State Univ. San Bernardino
Dr. Tom Smith	Mentoring	Vanderbilt University



## Appendix H

Mentoring Functions Packet Sent to Validation Panel

{Address}  
March 23, 2005

Dr. {First} {Last Name}  
{Address}  
{City, State Zip}

Dear Dr. {Last Name}:

Because of your expertise related to mentoring, I am requesting your assistance in the validation of two instruments I am adapting for my dissertation proposal at the University of South Florida. The study will compare the career and the psychosocial mentoring functions that National Board-certified mentor teachers provide to their protégés with the functions non-National Board-certified mentor teachers provide to their protégés in informal mentoring relationships in the public schools. The two instruments are the *Mentoring Functions Scale: Mentor Version*, which will assess the extent to which teacher mentors perceive they provide career and psychosocial functions to their protégés, and the *Mentoring Functions Scale: Protégé Version*, which will assess the extent to which the protégés perceive their mentors provide the career and psychosocial functions. Both of these instruments were adapted from Dr. Raymond A. Noe's *Mentoring Functions Scale*, which is enclosed so that you will have the original wording of the instrument. It is extremely important that I have your help in this validation, which should take approximately 20 minutes.

In addition to Noe's original instrument, the directions for completing the scoring sheets, **Sheet A: Mentor Validation**, **Sheet B: Protégé Validation**, and the definitions of the functions are enclosed. If you have any questions, please send an email to {email address} and I will contact you immediately. Upon completion of both instruments, please place the completed scoring sheets for each version in the enclosed self-addressed, stamped envelope and place the envelope in the mail. Thank you for your assistance and your time.

Sincerely,

Amy S. Wilson  
Ph.D. Candidate

### Purpose of Study

This study is designed to enable mentor teachers in the public schools to evaluate the extent to which they perceive that they provide the career and psychosocial functions of mentoring. In addition, the study will enable the mentors' protégés to evaluate the extent to which they perceive that their mentors provide these functions. The career functions, as identified by Kathy Kram in 1983, include providing *sponsorship, exposure and visibility, coaching, protection, and challenging assignments* to the protégé. The psychosocial functions include providing *role modeling, acceptance and confirmation, counseling, and friendship* to the protégé. Each of these functions is defined in an enclosed sheet.

The *Mentoring Functions Scale: Mentor Version (Sheet A: Mentor Validation–yellow paper)* is a self-rating instrument that has been adapted for mentor teachers to use to determine if they provide these functions for their protégés. The *Mentoring Functions Scale: Protégé Version (Sheet B: Protégé Validation–pink paper)* is a self-rating instrument that has been adapted for protégés to use to determine if their mentors provide these functions during the mentoring experience. The original *Mentoring Functions Scale (Sheet C--blue paper)*, which is organized by factors, is a self-rating instrument developed by Dr. Raymond A. Noe for use with educators desiring to become school administrators. It assesses the extent to which protégés believe that their mentors provided career and psychosocial functions. Dr. Wayne B. James and I modified Noe's instrument for the following purposes:

1. To adapt the instrument for this study's target population of public school teachers serving as mentors at the PK-12 level and the protégés of these mentors.
2. To assess the extent to which mentor teachers perceive that they perform the mentoring functions identified by Kram.
3. To assess the extent to which the mentors' protégés perceive that their mentors provide the functions identified by Kram.

The following instruments are attached: *Mentoring Functions Scale: Mentor Version* (identified as **Sheet A: Mentor Validation–yellow paper**), *Mentoring Functions Scale: Protégé Version* (identified as **Sheet B: Protégé Validation–pink paper**), Noe's original *Mentoring Functions Scale* (identified as **Sheet C–blue paper**), and a definition sheet of function terms.

## Directions for Completing Validation Scoring Sheet A

### SHEET A: MENTOR VALIDATION (YELLOW PAPER)

The purpose of this activity is to compare the wording of each item on **Sheet A (yellow paper)** with Noe's original wording of each item on **Sheet C (blue paper)** and to determine if the wording on Sheet A, the mentor version, conveys a similar meaning as Noe's wording on Sheet C and, therefore, is appropriate for the teacher mentor. The items on Sheet A correspond by number to the items on Sheet C. Sheet A is an adaptation of Noe's *Mentoring Functions Scale* for public school mentor teachers to use to determine if they provide the career and psychosocial functions for their protégés. Some verbiage in Sheet A has been changed for consistency of wording.

**Please read Noe's original version of each item as you come to the corresponding item on Sheet A: Mentor Validation (yellow paper).**

- 1<sup>st</sup> Step: Sheet A: Mentor Validation**
- A. It is suggested that Sheet A and Sheet C be placed side-by-side.
  - B. Read the first item from **Sheet A: Mentor Validation (yellow paper)**. Each item corresponds by number to Noe's original item number; therefore, the first item on **Sheet A** corresponds with the first item on **Sheet C**.
  - C. Read the items on **Sheet A** from the standpoint of the **teacher mentor** at the PK-12 level.
  - D. Compare the item on Sheet A with the corresponding number item on Sheet C.
  - E. Decide whether the modified item on Sheet A is appropriate for the teacher mentor at the PK-12 level.
  - F. **Check whether your response to each item is appropriate, not appropriate, or no opinion.**
  - G. Complete all 29 items.
- 2<sup>nd</sup> Step:**
- A. Please indicate suggested word changes for Sheet A in the space under Comments/Suggested Word Changes to the right of the item.
  - B. If additional space is needed, please use the back of the instrument or attach additional sheets.  
Please be sure to indicate the item number and version (A or B) to which your additional comments refer, if additional sheets are used.
- 3<sup>rd</sup> Step:**
- A. Place Sheet A in the enclosed envelope after completing Sheet B. Return both instruments to me.  
**Please return by March 26, 2005.**

**SHEET A: MENTOR VALIDATION**

*MENTORING FUNCTIONS SCALE*

VALIDATION SCORING SHEET

**Directions:**

- 1<sup>st</sup>:** Read each item from the standpoint of the teacher mentor. Then, read Noe’s original wording of each item. Decide whether each item on this instrument is appropriate for the teacher mentor at the PK-12 level. **Check your response to each item as appropriate, not appropriate, or no opinion. There are 29 items.**
- 2<sup>nd</sup>:** Indicate any suggested word changes for this instrument in the space under comments/suggested word changes. If additional space is needed, please use the back of this instrument or attach additional sheets. Please be sure to indicate the item number and version (A or B) to which your additional comments refer.
- 3<sup>rd</sup>:** Place this instrument and the Protégé Version (B) in the enclosed envelope and return them to me.

Check One

Item	Check One			Comments/Suggested Word Changes
	Appropriate	Not Appropriate	No Opinion	
1. I have shared history of my career with my protégé.				
2. I have encouraged my protégé to prepare for advancement.				
3. I have encouraged my protégé to try new ways of behaving in his/her job.				
4. My protégé has tried to imitate my work behavior.				
5. My protégé agrees with my attitudes and values regarding education.				
6. My protégé respects and admires me.				
7. My protégé will try to be like me when he/she reaches a similar position in his/her career.				
8. I have demonstrated good listening skills in our conversations.				

Appendix H (continued)

**SHEET A: Mentoring Functions Scale: Mentor Version Validation Scoring Sheet**

Check One

Item	Appropriate	Not Appropriate	No Opinion	Comments/Suggested Word Changes
9. I have discussed protégé's questions or concerns regarding feelings of competence, commitment to advancement, and relationships with peers and supervisors or work/family conflicts.				
10. I have shared personal experiences as an alternative perspective to my protégé's problems.				
11. I have encouraged my protégé to talk openly about anxiety and fears that detract from his/her work.				
12. I have conveyed empathy for the concerns and feelings my protégé has discussed with me.				
13. I have kept feelings and doubts my protégé shared with me in strict confidence.				
14. I have conveyed feelings of respect for my protégé as an individual.				
15. I have reduced unnecessary risks that could threaten the possibility of advancing in the field or of receiving a promotion for my protégé.				
16. I have helped my protégé finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete.				
17. I have helped my protégé meet new colleagues.				
18. I have given my protégé assignments that increased written and personal contact with school administrators.				

Appendix H (continued)

**SHEET A: Mentoring Functions Scale: Mentor Version** Validation Scoring Sheet  
Check One

Item	Appropriate	Not Appropriate	No Opinion	Comments/Suggested Word Changes
19. I have assigned responsibilities to my protégé that have increased his/her contact with people in the district who may judge his/her potential for future advancement.				
20. I have given my protégé assignments or tasks in his/her work that prepare him/her for advancement.				
21. I have given my protégé assignments that present opportunities to learn new skills.				
22. I have provided my protégé with support and feedback regarding his/her performance as an educator and teacher.				
23. I have suggested specific strategies to my protégé for achieving career goals.				
24. I have shared ideas with my protégé.				
25. I have suggested specific strategies to my protégé for accomplishing work objectives.				
26. I have given my protégé feedback regarding performance in his/her present job.				
27. I have invited my protégé to join me for lunch (or another function) at work.				
28. I have asked my protégé for suggestions concerning problems I have encountered at school.				
29. I have interacted with my protégé socially outside of work.				

Thank you for your assistance. Please place this instrument and Sheet B (when completed) in the self-addressed, stamped envelope and return to: Amy S. Wilson  
{Street Address}  
{City, State ZIP}

## Directions for Completing Validation Scoring Sheet B

### SHEET B: PROTÉGÉ VALIDATION (PINK PAPER)

The purpose of this process is to compare the wording of each item on **Sheet B (pink paper)** with Noe's original wording of each item on **Sheet C (blue paper)** and to determine if the wording on Sheet B, the protégé version, conveys a similar meaning as Noe's wording on Sheet C and, therefore, is appropriate for the teacher protégé. The items on Sheet B correspond by number to the items on Sheet C. Sheet B is an adaptation of Noe's *Mentoring Functions Scale* for public school teacher protégés to use to determine if their mentors provide the career and psychosocial functions. Some verbiage on Sheet B has been changed for consistency of wording.

**Please read Noe's original version of each item as you come to the corresponding item on Sheet B: Protégé Validation (pink paper).**

#### 1<sup>st</sup> Step: **Sheet B: Protégé Validation**

- A. It is suggested that Sheet B and Sheet C be placed side-by-side.
- B. Read the first item from **Sheet B: Protégé Validation (pink paper)**. Each item corresponds by number to Noe's original item number; therefore, the first item on **Sheet B** corresponds with the first item on **Sheet C**.
- C. Read the items on **Sheet B** from the standpoint of the teacher protégé at the PK-12 level.
- D. Compare the item on Sheet B with the corresponding number item on Sheet C.
- E. Decide whether the modified item on Sheet B is appropriate for the teacher protégé at the PK-12 level.
- F. **Check whether your response to each item is appropriate, not appropriate, or no opinion.**
- G. Complete all 29 items.

#### 2<sup>nd</sup> Step:

- A. Please indicate any suggested word changes for Sheet B in the space under Comments/Suggested Word Changes to the right of the item.
- B. If additional space is needed, please use the back of the instrument or attach additional sheets.  
Please be sure to indicate the item number and version (A or B) to which your additional comments refer, if you use additional sheets.

#### 3<sup>rd</sup> Step:

- A. Place Sheet B in the enclosed envelope with Sheet A and return both instruments to me.  
**Please return by March 26, 2005.**



**SHEET B: PROTÉGÉ VALIDATION**

*MENTORING FUNCTIONS SCALE*

VALIDATION SCORING SHEET

**Directions:**

- 1<sup>st</sup>:** Read each item from the standpoint of the teacher protégé. Then, read Noe’s original wording of each item. Decide whether each item on this instrument is appropriate for the teacher protégé at the PK-12 level. **Check your response to each item as appropriate, not appropriate, or no opinion. There are 29 items.**
- 2<sup>nd</sup>:** Indicate any suggested word changes for this instrument in the space under comments/suggested word changes. If additional space is needed, please use the back of this instrument or attach additional sheets. Please be sure to indicate the item number and version (A or B) to which your additional comments refer.
- 3<sup>rd</sup>:** Place this instrument and the Mentor Version (A) in the enclosed envelope and return them to me.

Check One

Item	Check One			Comments/Suggested Word Changes
	Appropriate	Not Appropriate	No Opinion	
1. My mentor has shared history of his/her career with me.				
2. My mentor has encouraged me to prepare for advancement.				
3. My mentor has encouraged me to try new ways of behaving in my job.				
4. I try to imitate the work behavior of my mentor.				
5. I agree with my mentor’s attitudes and values regarding education.				
6. I respect and admire my mentor.				
7. I will try to be like my mentor when I reach a similar position in my career.				
8. My mentor has demonstrated good listening skills in our conversations.				

Appendix H (continued)

**SHEET B:** *Mentoring Functions Scale: Protégé Version* Validation Scoring Sheet

Check One

Item	Appropriate	Not Appropriate	No Opinion	Comments/Suggested Word Changes
9. My mentor has discussed my questions or concerns regarding feelings of competence, commitment to advancement, and relationships with peers and supervisors or work/family conflicts.				
10. My mentor has shared personal experiences as an alternative perspective to my problems.				
11. My mentor has encouraged me to talk openly about anxiety and fears that detract from my work.				
12. My mentor has conveyed empathy for the concerns and feelings I have discussed with him/her.				
13. My mentor has kept feelings and doubts I shared with him/her in strict confidence.				
14. My mentor has conveyed feelings of respect for me as an individual.				
15. My mentor has reduced unnecessary risks that could threaten the possibility of advancing in the field or of receiving a promotion.				
16. My mentor has helped me finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete.				
17. My mentor has helped me meet new colleagues.				
18. My mentor has given me assignments that increased my written and personal contact with school administrators.				

Appendix H (continued)

**SHEET B: Mentoring Functions Scale: Protégé Version** Validation Scoring Sheet  
Check One

Item	Appropriate	Not Appropriate	No Opinion	Comments/Suggested Word Changes
19. My mentor has assigned responsibilities to me that have increased my contact with people in the district who may judge my potential for future advancement.				
20. My mentor has given me assignments or tasks in my work that prepare me for advancement.				
21. My mentor has given me assignments that present opportunities to learn new skills.				
22. My mentor has provided me with support and feedback regarding my performance as an educator and teacher.				
23. My mentor has suggested specific strategies for achieving my career goals.				
24. My mentor has shared ideas with me.				
25. My mentor has suggested specific strategies for accomplishing work objectives.				
26. My mentor has given me feedback regarding performance in my present job.				
27. My mentor has invited me to join him/her for lunch (or another function) at work.				
28. My mentor has asked me for suggestions concerning problems he/she has encountered at school.				
29. My mentor has interacted with me socially outside of work.				

Thank you for your assistance. Please place this instrument and Sheet A in the self-addressed, stamped envelope and return to: Amy S. Wilson  
{Street Address}  
{City, State ZIP}

## SHEET C: NOE ORIGINAL SCALE

### MENTORING FUNCTIONS SCALE

**These original statements by Noe correspond by number to the item statements on Sheet A: Mentor Validation and on Sheet B: Protégé Validation.**

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#### Factors and Related Items

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**Factor 1: Psychosocial Mentoring Functions:** Items assess the extent to which the mentor provided coaching, acceptance and confirmation, counseling, and served as a role model.

1. Mentor has shared history of his/her career with you.
2. Mentor has encouraged you to prepare for advancement.
3. Mentor has encouraged me to try new ways of behaving in my job.
4. I try to imitate the work behavior of my mentor.
5. I agree with my mentor's attitudes and values regarding education.
6. I respect and admire my mentor.
7. I will try to be like my mentor when I reach a similar position in my career.
8. My mentor has demonstrated good listening skills in our conversations.
9. My mentor has discussed my questions or concerns regarding feelings of competence, commitment to advancement, relationships with peers and supervisors or work/family conflicts.
10. My mentor has shared personal experiences as an alternative perspective to my problems.
11. My mentor has encouraged me to talk openly about anxiety and fears that detract from my work.
12. My mentor has conveyed empathy for the concerns and feelings I have discussed with him/her.
13. My mentor has kept feelings and doubts I shared with him/her in strict confidence.
14. My mentor has conveyed feelings of respect for me as an individual.

continued on next page

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**Factors and Related Items**

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**Factor 2: Career-Related Mentoring Functions:** Items assess the extent to which the mentor provided protection, exposure and visibility, sponsorship, and challenging assignments.

15. Mentor reduced unnecessary risks that could threaten the possibility of becoming a school principal or receiving a promotion.
16. Mentor helped you finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete.
17. Mentor helped you meet new colleagues.
18. Mentor gave you assignments that increased written and personal contact with school administrators.
19. Mentor assigned responsibilities to you that have increased your contact with people in the district who may judge your potential for future advancement.
20. Mentor gave you assignments or tasks in your work that prepare you for an administrative position.
21. Mentor gave you assignments that present opportunities to learn new skills.

**Items not clearly representing either the career-related or psychosocial-related functions:**

22. Mentor provided you with support and feedback regarding your performance as an educator.
  23. Mentor suggested specific strategies for achieving your career goals.
  24. Mentor shared ideas with you.
  25. Mentor suggested specific strategies for accomplishing work objectives.
  26. Mentor gave you feedback regarding your performance in your present job.
  27. My mentor has invited me to join him/her for lunch.
  28. My mentor has asked me for suggestions concerning problems she/her [*sic*] has encountered at school.
  29. My mentor has interacted with me socially outside of work.
-

## MENTORING FUNCTIONS

The career and psychosocial functions defined below are Kram's functions described in a 1980 study of managers in a corporate organization, as Kram defined them in 1985 for the business world. Educational examples are supplied for this study using examples from this researcher and from Noe in his *Mentoring Functions Scale*.

**CAREER FUNCTIONS:** These functions support advancement in an organization and are possible because of the mentor's position, experience, and influence in the organization.

***Sponsorship:*** The mentor supports the protégé by nominating the protégé for lateral moves and promotions. In education, the mentor may recommend the protégé to the principal for a position such as peer teacher, team leader, department chair, grade level chair, or as the sponsor of a school class or club.

***Exposure and Visibility:*** The mentor provides and encourages the protégé with responsibilities that require written and personal contact with senior personnel. In education, the mentor may encourage the protégé to speak at a teachers' meeting after attending a conference or meeting. The mentor may also encourage the protégé to provide the principal with written documentation after attending conferences or training. The mentor may recommend and encourage the protégé to serve on a focus committee, curriculum committee, or other committee where district personnel participate.

***Coaching:*** The mentor suggests specific strategies for succeeding with work objectives, for being recognized for work, and for achieving specific career objectives. In education, the mentor may share knowledge of the field and of how to successfully navigate the many requirements of educators, such as state and federal laws and rules. The mentor may share teaching ideas with protégé, suggest specific ways for accomplishing a task, or encourage protégé as he/she tries new strategies or behaviors.

***Protection:*** The mentor shields the protégé from contact with senior personnel when that contact may be untimely or potentially damaging. In education, the mentor may attend a conference with the principal, parent, and the protégé when the parent disagrees with decisions protégé made that follow local rules or regulations, state, or federal laws. Mentor may assist protégé in completing assignments or tasks with deadlines that may be difficult to complete, such as setting up a gradebook on computer.

***Challenging Assignments:*** The mentor provides challenging assignments, specific training for the assignments, and performance feedback allowing the protégé to obtain competencies and feeling of accomplishment. In education, the mentor may encourage the protégé to teach using new strategies or techniques, provide the training for the strategies and model them, observe the teacher, and provide specific feedback on the lessons. In addition, mentor will provide protégé with support and feedback regarding performance as a teacher.

Appendix H (continued)

**PSYCHOSOCIAL FUNCTIONS:** These functions enhance the protégé's sense of competence, identity, and effectiveness in the job.

**Role Modeling:** The mentor provides a model for attitude, values, and behavior on the job. In education, the mentor will set a positive example for the protégé to follow in organizing and managing work and in relating to other teachers and educational personnel at the school as well as to supervisors. The mentor provides a model for managing work and family stresses.

**Acceptance and Confirmation:** The mentor provides support, trust, and encouragement as the protégé experiments with new behaviors and takes risks. In education, the mentor may encourage the protégé to try new ways of teaching (or to try another grade level or school) and to recognize that mistakes are part of learning and growing. The mentor accepts the protégé's differences of opinion and shows respect for the protégé.

**Counseling:** The mentor acts as a sounding board for the protégé to discuss anxieties, fears, and ambivalences that may interfere with work. In education, the mentor will demonstrate good listening skills and encourage the protégé to talk freely about teaching concerns and problems. The mentor may discuss questions the protégé has regarding feelings of competence and may discuss the protégé's relationships with other teachers, supervisors, and administrators. Work/family conflicts may be discussed, and the mentor may share personal experiences as an alternative to the protégé's perspective problems. All shared feelings and doubts are kept in confidence.

**Friendship:** Both the mentor and the protégé engage in social interaction that results in mutual liking of each other and informal social contact about work and experiences outside of work. In education, mentor may ask protégé to join him/her for coffee, lunch, dinner, or another social activity after school hours.

**Sources:**

Kram, K. E. (1983). Phases of the mentor relationship. *Academy of Management Journal*, 26, 608-625.

Kram, K. E. (1985). *Mentoring at work: Developing relationships in organizational life*. Glenview, IL: Scott Foresman.

Noe, R. A. (1988). An investigation of the determinants of successful assigned mentoring relationships. *Personnel Psychology*, 41, 457-479.

Appendix I  
District's Permission Letter for Study  
and  
Letter to School Principals



{District Letterhead}

Amy S. Wilson  
{Address}  
{City, State Zip}

Dear Mrs. Wilson:

The {Name of School District} has agreed to participate in your research proposal, *Performance of Mentoring functions by National Board-Certified Teachers and non-National Board-Certified Teachers as Perceived by the Mentors and Their Protégés*. A copy of this letter should be presented to the principal and participants in order to assure them your research had been approved by the district. **Approval is given, however, under the following conditions:**

- 1) Participation by the school, its teachers, students, or parents **is to be on a voluntary basis**. That is, **participation is not** mandatory and you must advise your participants that they are not obligated to participate in your study.
- 2) Confidentiality must be assured for all participants. That is, all data must be aggregated such that the district cannot be identified as well as any other participant including parents, students, and administrators.

Please forward one copy of your completed study for our files.

Good luck with your endeavor. If you have any question, please advise.

Sincerely,

{Name}, PH.D. Director  
Assessment and Accountability

Appendix I (continued)

{Address}  
{City, State Zip}  
February 16, 2006

{Name, Principal}  
{School Name}  
{Address}  
{City, State Zip}

Dear {Principal's Name}:

I know you and your teachers are busy at this time of year as I spent over 36 years working in a Florida district: 30 years teaching and six at the district level. I am asking you to please take a few minutes to review this letter and the accompanying surveys that were designed to determine mentoring functions mentors provide their protégés. If possible, I would like to meet with

- National Board-certified (NBC) teachers who mentor,
- the protégés or mentees of these NBC teachers,
- teachers who mentor and are not NBC,
- and protégés or mentees of these non-Board-certified teacher mentors.

The teachers' participation will contribute to the knowledge base on mentoring in the public schools. The responses are anonymous; the data is confidential, and the total time needed is **no more than 10 minutes after school. Refreshments will be provided to the participating teachers.** I do not need any student contact.

These surveys will be administered as part of a study to compare the career and the psychosocial mentoring functions that National Board-certified teachers perceive they provide to their protégés with the functions non-National Board-certified teachers perceive they provide to their protégés and the perceptions of these protégés. Determining the specific functions provided by mentors and those neglected will provide educators engaged in mentoring or in designing mentoring programs an effective component for use in teacher induction, training, and retention. The district has approved this study, and a letter from {Name} is included.

I will follow-up with a telephone call to discuss the possibility of presenting these surveys to your teachers. I wish you and your staff a successful year at {Name} Elementary.

Sincerely,

Amy S. Wilson  
Ph.D. Candidate

## ABOUT THE AUTHOR

Amy S. Wilson received a Bachelor of Music degree from the University of Mississippi in 1968. Her major instrument was trumpet, and she was a junior high band director for 8 years. Ms. Wilson received a Master of Education degree in curriculum and instruction from the University of South Florida in 1976 and taught various subjects at the middle school level, with a majority of the years spent teaching language arts. When Ms. Wilson entered the Ph.D. program at the University of South Florida in 2001, she was the Coordinator of Staff Development for the School Board of Hernando County, Florida. Ms. Wilson has 30 years of experience teaching at the middle school level and over 6 years working at the district level. Currently, Ms. Wilson is an educational consultant working in professional development and training programs. She enjoys classical music (especially opera), reading, hiking, and American antiques.