FROM THE PROTÉGÉS’ PERSPECTIVE: AN ANALYSIS OF FORMAL MENTORING IN PHYSICAL EDUCATION

by

CHRISTOPHER ANTHONY BUSCH

(Under the Direction of Paul Schempp)

ABSTRACT

The goal of mentoring teachers is to meet four areas of need: a) emotional, b) physical, c) instructional, and d) institutional (Lipton & Wellman, 2005). The purpose of this study was to analyze the formalized mentoring process from the perspectives of the physical education protégé. This study addressed four research questions: a) did the mentoring process support the protégé, b) did the mentor reflect practices taught in the protégés’ teacher education program, c) what were the protégés perspectives on the mentoring relationship, and d) what were the protégés perspectives on the psychosocial and career support provided by the mentor?

Participants were physical educators who completed a formalized mentoring program. A four-part process identified participants: a) national organizations were contacted, b) state associations were contacted, c) direct contact with school districts and/or schools, and d) flyers were handed out at state physical education conferences. The total number of respondents was 586; however, only 394 respondents, from 12 states, met the criteria for participation. Participants answered an on-line Mentoring Function Survey (MFS), which examined two mentoring sub-functions, career and psychosocial support. An Analysis of Variance was used to analyze the MFS, and was significant for seven of the eight MFS factors. Furthermore, results indicated that protégés perceived their mentors as helpful in both career and psychosocial support $r = .839 \ p < .01$, with a Cronbach’s Alpha of .93% and .89% respectively. Physical education protégés insights on their mentoring experience indicated mentors successfully met their career and psychosocial needs. Furthermore, protégés reported that over 70% of their mentors provided supportive communication skills, such as listening skills, interpersonal dialog, and pedagogical support. Protégés indicated that mentors did reflect what they learned in their teacher education program, even though the majority of mentors were not physical educators.

INDEX WORDS: Mentoring, Physical Education, Induction, Physical Education Teacher Education
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CHRISTOPHER ANTHONY BUSCH

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by

CHRISTOPHER ANTHONY BUSCH

Major Professor: Paul Schempp
Committee: Bryan McCullick
William Wraga

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
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DEDICATION

I would like to thank God for providing me the strength to overcome the many hurdles I faced through the duration of this dissertation. I am dedicating this dissertation to my son, Christopher Joseph Busch. He was unaware of many of my hurdles, plights, and internal difficulties. It was through his faith that I learned what teaching and learning is all about.

I started on this quest many years ago. From the beginning, you were on my mind. My only goal was for me to be a father you could be proud of as well as look to as a role model. I cannot believe all the trials we both have gone through and the many more yet to come. You helped me more than you will ever know. The strength you exude as a result of your faith still gets me to stop and listen. I am always here for you and will assist you through your trials as you helped me. Thank you son, I love you, and WE DID IT!!
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CHAPTER 1

Introduction

The induction period of teaching has a tremendous impact on the personal and professional life of teachers (Gold, 1996). This period often puts the beginning teacher in a quandary between educational perspectives taught in their teacher education program and on the job experiences. This quandary develops into a sense of reality shock; specifically a feeling by the beginning teacher who realizes they are not in teacher education anymore. More importantly, this dilemma leads beginning teachers to make choices between instructional strategies taught in their preservice training and what they observe from experienced teachers (Lawson, 1989). Induction programs provide assistance for beginning teachers, who are making the transition from teacher education in a college or university to a full-time teacher in the classroom (Griffin, 1985). The outcomes of induction relate to the degree, type, and quality of support and experiences provided for the beginning teacher through the duration of the program (Lipton & Wellman, 2003).

Induction and mentoring are terms used when discussing beginning teacher support and they are commonly interchanged as meaning the same thing. Research shows that induction is the term representing the entry point into the society of the school as a beginning teacher, and thus, a part of teacher socialization (Feiman-Nemser, 2001; Feiman-Nemser, Schwille, Carver, & Yusko, 1999; Lawson, 1992; Templin & Schempp, 1989). According to Wong (2005), induction and mentoring are often used synonymously and this is an incorrect understanding of induction; Wong states,
Induction is a noun. It is the name given to a comprehensive, coherent, and sustained professional development process that is organized by a school district to train, support, and retain new teachers, which then seamlessly guides them into a lifelong learning program. Mentoring is most commonly used as a verb or adjective, because it describes what mentors do. A mentor is a single person, whose basic function is to help a new teacher. Mentoring is not induction; it is a component of the induction process (p. 42).

Induction is a collection of beginning teacher support mechanisms that guide the beginning teachers through the formation of their teaching foundation. Mentors are a significant element in the support and development of beginning teachers.

Most organizations consider on-the-job training, induction, a critical aspect for development of new employees (Darwin, 2000). Mentoring is commonly used as the primary support to new teachers and is a medium for handing down knowledge, maintaining culture, and securing future leadership (Darwin, 2000). Mentors aid beginning teachers in their acclimation into the social system of the school, the district, and the community (Anzul, 2000). Darling-Hammond (2000) suggested that mentoring would ensure that beginning teachers who remain in teaching will be competent, caring, and qualified teachers. She also believed that,

Beginning teachers, who have access to intensive mentoring by expert colleagues, are much less likely to leave teaching in the early years. . . These young teachers not only stay in the profession at higher rates but become competent more quickly than those who must learn by trial and error (Darling-Hammond, 2000, p. 22).

Mentoring is identified as one of the most complex of all human activities due to the dynamic nature of the relationship and the multitude of variables that influence the mentoring experience (Kent, 2001). There are four types of support new teachers require when they begin
teaching: a) emotional, b) physical, c) instructional, and d) institutional (Lipton & Wellman, 2005). Effective mentoring attends to these four functions of support based on the needs of the beginning teacher. These four forms of support provide an umbrella depicting the significance of mentoring and the comprehensive nature of support needed by beginning teachers. These functions encapsulate both career and psychosocial functions of the mentoring role. The ability for the mentor to meet career and psychosocial needs of the protégé is based on the individual situation and constrained by a) school environment, b) type and degree of the protégé’s needs, c) the ability and experience of the mentor, and d) the relationship that is developed between the mentor and protégé.

Protégés need instructional support and expect to obtain it from their mentor (Lipton & Wellman, 2005). The mentor acts as a bridge between what is learned about instructional practices and actually putting these practices in action (Ahmet, 2002). Applying practices taught in teacher education programs during induction is a difficult step for protégés (Napper-Owen, 1996). To effectively support protégés, mentors should reflect and incorporate practices taught in the protégés’ teacher education program (Saban, 2002). McCaughtry, Cothran, Kulinna, Martin, and Faust (2005) found that physical education mentors indicated a desire to exemplify practices that were taught in their protégés teacher education program, and felt they needed further training to incorporate current practice being taught in teacher education programs. Induction programs monitor, guide, and teach mentors how to meet the needs of protégés; (Gagen & Bowie, 2005; Portner, 2001) thus, supporting the need and use of formalized mentoring.

Wright and Smith (2000) formed a case for formalized mentoring in physical education. Formal mentoring is a component of an induction process where a mentor is assigned to a protégé; additionally, the mentor must follow guidelines established by the induction
coordinators (Allen, Eby, & Lentz, 2005). Informal mentoring differs from formalized mentoring, where the protégé selects the mentor and the two mutually build a relationship that is reciprocal; furthermore, informal mentoring follows no guidelines and is spontaneous (Allen et al., 2005).

Wright and Smith’s (2000) wrote the review with the idea of soliciting research and further discussion on mentoring in physical education. The authors specifically identified the lack of research specific to mentoring in physical education. Their recommendations included the need for an effective match between mentor and protégé to foster a committed and effective relationship. Wright and Smith (2000) believed “kinesiology and physical education students and beginning professionals have special needs and, therefore, should be provided with mentoring models that cater specifically to them. Informal mentoring relationships in our professions are abundant; formalizing them will enhance their effectiveness” (p. 211).

Graber (2001) added to Wright and Smith’s (2000) suggestion for formalized mentoring in physical education by writing a comprehensive report on research on teaching in physical education. This report indicated a need to develop instruments that are specific to physical educators concerns rather than with the reality of teachers’ concerns. Furthermore, the report implied a need for specific and guided induction for physical educators. Research on induction programs in the area of physical education are limited and tend to not include control groups or address curriculum impact (Graber, 2001). She also indicated that studies which focus on the needs of beginning physical educators, as well as, identifying effective practices within the induction process for physical educators will address this need for specificity to physical education.
Although the amount of research focusing on mentoring of physical educators is negligible (Weaver & Chelladurai, 1999; Wright & Smith, 2000), completed research indicates that physical education protégés (Patton et al., 2005) and mentors benefit from formalized mentoring (Carter & Francis, 2001; McCaughtry et al., 2005). Research on formalized mentoring supports the development of mentoring programs, as well as assisting physical educators who mentor physical education protégés (Griffin & Ayers, 2005). Eby and Allen (2002) put forth the notion that in order to understand the mentoring process researchers must examine perspectives of both the mentor and protégé.

Knackstedt (2001), Eby, and Allen (2002), and Eby and Lockwood, (2005) found examination of protégés perspectives on formalized mentoring essential for a) the mentor, b) the development of the mentor/protégés relationship c) identification of protégés needs and, d) assessment of the mentoring program. Furthermore, examination of protégés psychosocial and career needs may notably enhance the effectiveness of formalized mentoring (Knackstedt, 2001, p. 5). Maynard and Furlong (1993) put forth the belief that “before one can begin to plan school-based experience of [beginning teachers,… and consider the role of mentors within that process, “…then one should begin with the [beginning teachers] perspectives” (p. 94).

There is a need for further research in mentoring of physical educators (McCaughtry et al., 2005; Patton et al., 2005; Weaver & Chelladurai, 1999; Wright & Smith, 2000). As a result of their research in physical education teacher education (PETE) mentoring, Ayers and Griffin (2005) found mentoring research challenging and believe there are “important professional groups that have not been represented” in physical education mentoring research, (p. 376). One of their suggestions for future research in physical education is on the mentoring process from both the mentor and protégé perspectives.
Purpose

This study analyzed the formal teacher mentoring process from the perspective of physical education protégés. It is therefore the purpose of this study to investigate physical education protégés perceptions of formalized support in order to gain a better understanding of the degree to which their psychosocial and career needs are being met.

Research Questions

Four questions guide this study. All research questions are from the perspective of the protégé. Research questions guiding this study are,

1. To what degree did a formalized mentoring process support the protégé?
2. To what degree did the mentor mirror what was taught in the protégés physical education teacher education program?
3. What are the physical education protégé’s perspectives of the formal mentoring relationship?
4. What are the physical education protégé’s perspectives of their mentor meeting their psychosocial and career needs?

Significance of Study

Mentoring is an essential core component to induction (Feiman-Nemser, 2003; Ingersoll & Smith, 2004). Any well-designed program will include mentoring and appears important in creating schools in which students experience quality teaching in every classroom. Sparks (2005), believed that:

... Professional learning is part of what teachers do every day, rather than “add-on” or “pullout” from their jobs. Induction programs provide beginning teachers with their
introduction to career-long, team-based professional development, through which they continuously improve their teaching and student learning (p. 241).

This study adds to the limited literature on physical education induction and mentoring by investigating the mentoring dyad from the perspective of the protégé. Through this inquiry, protégés provided insight into the quality of the formalized mentoring relationship, as it applies to their psychosocial and career needs. Information gained from this study potentially will assist mentors, protégés, and induction program designers in development and maintenance of physical education induction. More importantly, this study addresses the usefulness or success of the mentoring component of induction as it applies to physical educators. Effective teaching is essential in every school and in every discipline; physical education is no different from math, reading, or science in this respect. To assist our beginning physical educators and to promote quality physical education, teacher educators, administrators, and practitioners must provide the tools needed specific to the physical education domain. By providing these tools for success beginning physical educators can embark on their quest for lifelong learning within their teaching career. An effective induction program and beneficial mentoring dyad help in bridging the gap between teacher education and their teaching career, and by examining the perspectives of physical education protégés this study may assist in the development or improvement of that process (Mclntyre, 2005; Saban, 2002).

Definitions

1. **Induction**: Term used to describe the period from the completion of the teacher preparation program through the end of the third year of teaching in which teachers are indoctrinated and/or socialized into the teaching profession (Feiman-

2. **Teacher Perceptions:** The information gathered from a teacher’s point of view, such as survey and interview responses, opinions, recollections or descriptions, about various aspects of teaching or strategies of mentoring (Cothran et al., 2008; Smyth, 1995; Tjeerdsma, 1998).

3. **Mentoring:** There are many definitions for mentoring in the research literature. For the purpose of this study, mentoring is an informal or formalized process whereby a more knowledgeable and experienced person acts as a supportive role of overseeing and encouraging reflection and learning within a less experienced and knowledgeable person, so as to facilitate that persons’ career and personal development (Roberts, 2000, p. 162).

4. **Beginning teacher:** Someone who is within the first 3 years of teaching in a specific discipline.

5. **Protégé:** Someone who is a novice participating in a mentoring dyad. In the mentoring literature the term beginning teacher, neophyte, and protégé are used synonymously. Protégé is the term most used in the latest literature (Eby, Allen, Evans, Ng, & DuBois, 2008; Kammeyer-Mueller & Judge, 2007).

6. **Mentor:** Someone, formal or informal, who is an experienced teacher, who supports, challenges, and guides protégés through their induction period and/or mentoring program (Odell & Huling, 2000). For the purpose of this study Mentor refers to the person in the formalized role of mentoring (Ingersoll & Smith, 2004).

7. **Support Provider:** In California, mentors are called support providers.
8. **Supports**: This term is used in the induction and mentoring literature to describe the multiple tools used in the induction process.

9. **Formalized Mentoring Program**: Mentoring programs associated with teacher induction often follow a prescribed program established by the state, county office of education, or a school district. The program has an established procedure and guidelines for the mentor and protégé to follow. Often times these programs dictate the number of meetings, minimum number of hours for meetings, and provide an assortment of documents to be completed by the mentor and protégé throughout the induction program. Additionally, upon completion the mentor and protégé will submit a summary report of all activities and an evaluation of both the protégés ability or competency and the mentoring experience (Oliver & Aggleton, 2002).
CHAPTER 2

Review of Literature

The purpose of this study was to examine formalized mentoring and support in physical education from the perspectives of physical education teachers that have completed a formalized program. Specifically, the four objectives of the study were to: a) determine the extent of support provided by a formalized induction program, b) identify the extent to which the mentor supported what was taught in the protégé’s physical education teacher education program, c) examine the physical education protégé’s perspectives of the mentoring relationship and d) examine the degree in which the mentor met the protégé’s psychosocial and career needs.

The content of this chapter is a review of the literature related to this study. The representative works exemplifying key concepts pertinent to the research questions and issues under investigation are presented. Furthermore, the results form relevant research serve to enhance the discussion of this study by providing a framework for the conclusions and recommendations. This chapter examines: a) induction, b) connecting teachers’ education and teaching and, c) mentoring.

Induction

Induction programs include formalized mentoring as one of many beginning teacher supports; therefore, to understand formalized mentoring and its role, it is beneficial to understand teacher induction. This section presents research and research reviews that identify induction goals, rational, and components; specifically identifying the types of induction supports most documented in education literature. According to Bain (1990) induction is a term used to
describe entry into the workplace and an aspect of socialization into the field of teaching. Induction programs came about in 1978 with Florida being the first state-initiated teacher induction program (Fideler & Haselkorn, 1999). State initiated programs popped up in three clear waves, prior to 1986, 1986-1989, and 1990-1996. The first wave found Florida, Oklahoma, Virginia, California, Kentucky, Maine, New Jersey, and Washington implementing statewide programs with most of them based and supported by local funds. The second wave of induction programs were Connecticut, Idaho, Indiana, Minnesota, Pennsylvania, Georgia, and New Mexico. Rounding out the three-wave evolution of induction programs were Ohio, Colorado, Texas, West Virginia, District of Columbia, Michigan, Missouri, South Carolina, Delaware, Louisiana, and North Carolina. Between the years 1990 and 2000, new teacher participation in induction programs increased from 40%-80% (Ingersoll & Smith, 2004). In 2003, thirty states offered statewide induction programs with 16 states requiring the programs to be funded (Hall, 2005). The primary focus for support in all of these induction programs was mentoring (Fideler & Haselkorn, 1999; Kammeyer-Mueller & Judge, 2007; Portner, 2005). Other forms of support included peer support, seminars, administrator support, reduced teaching load, teacher aides (Ingersoll & Smith, 2004) and mentoring academies (Gagen & Bowie, 2005). All states begin the induction process at the same time; however, all other aspects to the induction process are potentially different in each district, county, and state.

The induction process begins during student teaching and can last through the third year of teaching (Templin & Schempp, 1989). Many researchers identify induction as the period most instrumental in career development for a teacher (Feiman-Nemser, 2001; McDonald, 1980a). The induction period often shapes the teaching characteristics and the developmental path of the teacher (Huberman, 1989). Induction is the indoctrination and socialization into the teaching
profession whereby beginning teachers gain an understanding of all their responsibilities (Feiman-Nemser et al., 1999; Fideler & Haselkorn, 1999; Lawson, 1992; Napper-Owen, 1996; Napper-Owen & Phillips, 1995; Stroot, 1996). Formalized induction programs are various forms of support which acclimate and aid beginning teachers to their new roles. The overshadowing goals of induction programs are similar.

Huling-Austin (1989) conducted a synthesis of teacher induction research. Her findings revealed five common goals to most induction programs:

1. improve teacher performance,
2. increase retention of promising beginning teachers during their induction years,
3. promote the personal and professional well-being of beginning teachers,
4. satisfy mandated requirements and,
5. transmit the culture of the system.

Furthering Huling-Austin’s work, Harry Wong (2002) identified induction programs as multi-year programs that have three characteristics:

1. Comprehensive. There is an organization or structure to the program consisting of many activities and many people who are involved. There is a group that oversees the program and rigorously monitors it to be sure that it stays the course toward student learning.
2. Coherent. The various activities and people are logically connected to each other.
3. Sustained. The comprehensive and coherent program continues for many years.

These eight facets of induction programs establish a framework to understand the rationale of induction.
To further understand the rationale of induction, Kelley (2004) examined the role of induction to help local and national policy reform. Her study was a long-term examination of retention of novice teachers who participated in an induction program that was administered by the University of Colorado and six school districts. Specifically she studied 10 cohorts of inductees through their 5th year of teaching. Additionally, she sought to identify which aspects of the program would affect retention. Retention of teachers is a critical justification for mentoring programs and depicts one aspect of confusion between induction and mentoring. The confusion comes from a correlation of goals between the induction and mentoring programs, which both aim to meet the concerns of educators and politicians.

Data collection occurred each year as each cohort was tracked. Retention statistics were calculated; furthermore, surveys and interviews were used, as well as classroom observations. Data were analyzed by general procedures of domain, taxonomic, and theme analysis. Surveys and interviews were transcribed and coded to present data that was later analyzed. Each year was stored in a file until the last year of the study was complete. Each individual year of data were correlated to obtain a final analysis.

The findings indicate there was an improvement in instructional practices and a sense of professionalism which appears to aid in teacher retention (Kelley, 2004). Additional findings point towards added assistance by universities in expanding their program of study to include “education beyond the initial licensure level…to support practicing teachers early in their profession” (p. 447), as well as continued mentoring support by teacher educators (Gagen & Bowie, 2005). Results imply that a need to “generate financial and human resources that support novice teachers in meaningful career transitions, enrich instructional growth opportunities, and increases the desire to remain in the teaching profession” exists (Kelley, 2004, p. 447). Increased
teacher performance and retention was identified as a common result in mentoring research (Kammeyer-Mueller & Judge, 2007).

Research indicates that teaching experiences that occur during the induction period determine what kind of teacher one becomes if someone remains in the teaching profession (Huberman, 1989; McDonald, 1980b). Based on the support system and educational atmosphere the beginning teacher will construct the proper mind-set to increase their likelihood of becoming a career educator and life-long learner (Harnett, 1991). The role of induction is one where beginning teachers replace their inaccurate subjective warrants with newly found self-image and acquired knowledge and skill (Lawson, 1983b). This support system materializes in many forms and is unique to each school district.

Components of induction programs. According to Gray and Gray (1985), researchers have identified four components in successful teacher induction programs: a) teaching standards, b) mentoring, c) reflective teaching practices, and d) some type of formative assessment system. Moir (2005) identified 12 core components of a quality induction program:

1. Full-time program administrators;
2. Quality Mentoring;
3. Mentor Selection;
4. Mentor development;
5. Formative assessment for beginning teachers;
6. Training in data collection and analysis;
7. Training for site administrators;
8. Teaching standards;
9. High expectations for new teachers, mentors, and students;
10. Training for work with diverse students and English language learners;
11. Networking and training opportunities for beginning teachers; and,
12. Contractually bargained new teacher placement (p. 70).

Moir (2005) makes it clear that these twelve components all interact with each other to develop a “well-rounded, robust system that has the capacity to transform the experience of a teacher’s first years and to bring the entire community of educators into the process” (p. 71). Effective induction brings the beginning teachers into the family of teaching by limiting or expelling the negative factors weighing on the beginning teachers. Effective induction uses a variety of support mechanisms to accomplish this goal.

Horn, Sterling, and Subhan (2002, February) conducted a review identifying common forms of support within various induction programs. Their review identified nine forms of support: a) orientation; b) mentoring; c) adjustment of working conditions; d) release time; e) professional development; f) opportunities for collegial collaboration; g) teacher assessment; and h) program evaluation. These nine elements of induction have been identified in various induction programs across the United States (Feiman-Nemser, 2003; Scott, 1995; Veenman, 1984; Williams & Soares, 2002; Zanting, Verloop, & Vermunt, 2001).

Ingersoll and Smith (2004) examined induction supports and their effects on beginning teachers. They specifically questioned the significance of induction and mentoring, wanting to identify the effect on teacher retention. They examined aspects of induction programs specifically investigating the use of mentoring programs, group activities, and the provision of resources and reduced workloads. The study used data from the National Center for Education Statistics, The Schools and Staffing Survey, and the Teacher Follow-up Survey. Findings indicated teachers who participate in an induction program were significantly less likely to
depart their school at the end of their first year. From the data, 10 induction supports were identified:

1. The mentors were from the same discipline.
2. The mentor taught another discipline.
3. Beginning teachers attended seminars;
4. Beginning teachers had common planning time with their mentor.
5. Collaboration with other teachers.
6. External teacher network was available.
7. Beginning teachers received supportive communication from their supervisors and administrators.
8. Beginning teachers had a reduced teaching load or schedule.
9. Beginning teachers had reduced preparations.
10. Beginning teachers were provided a teacher aide.

The two most common supports received were supportive communication and beginners’ seminars. Factors identified as having the most effect on inductees were “having a mentor from the same field, having common planning time with other teachers in the same subject, and being part of an external network of teachers” (Ingersoll & Smith, 2004, p. 35; Kammeyer-Mueller & Judge, 2007). Factors having minimal or no effect were a “reduction in teaching schedule, number of preparations, and extra classroom assistance” (p. 36). This study specifies that induction does matter and is effective; however, not all induction supports are needed or effective, signifying a need for further investigation of induction programs, there supports, and individual induction needs for teachers according to discipline (Ingersoll & Smith, 2004)
Research and subsequent reviews reveal that induction is a needed component in the socialization of beginning teachers; however, induction programs specific to the individual needs of teachers were not identified. Mentoring, formal and informal, was identified as the most common means of induction support (Kardos, 2005). Formalized mentoring and supportive communication were identified as the common forms of induction. Induction goals, roles, and components were presented to develop a better understanding of how mentoring fits into the socialization and induction process; more importantly for this study it sets a foundation for the examination of mentoring.

*Connecting Teachers’ Education and Teaching*

Research implications suggest practices taught in teacher education is not always reflected by teacher mentors and subsequently abandoned (Huling-Austin & Resta, 2001; Saban, 2002). Teachers’ transition from pre-service teaching to their first position as a teacher is a major step (Hope, 1999). Induction and mentoring are a bridge between teacher training and teaching (Ahmet, 2002); thus, mentors should reflect practices taught in the teacher education program (Saban, 2002). Beginning teachers are fearful of perceptions of incompetence by their peers and often have higher expectations regarding what they thought they could accomplish as an educator (Wilson, Ireton, & Wood, 1997). Beginning teachers find themselves in a tricky position when bringing reform proposals from their teacher education programs into their new school cultures. They risk the possibility of alienation from colleagues and, this socialization puts them into a position of compliance and silence (Schempp, Sparkes, & Templin, 1993).

Research indicates that when pre-service teachers transition from a preparation program to public school teaching and apply theory based teaching practices; they encounter difficulties such as classroom management, behavior management, time management, as well as difficulties
in performing other collateral duties (Burden, 1981, November; Johnston & Ryan, 1980; McDonald, 1980b; Ryan et al., 1980; Veenman, 1984). Mentors increase the effectiveness of induction during this stressful transformation by supporting the protégé through the emulation of teaching practices taught in the protégés teacher education program (Harrison, Dymoke, & Pell, 2006; Huling & Resta, 2001).

Orientation to the physical education profession begins with physical education teacher education (Lawson, 1983a, 1983b). Personal perceptions and aspirations should intertwine with professional perceptions and aspirations to form a master identity within physical education. Unfortunately, teacher education does not always provide this induction service (Lawson, 1989). The induction of beginning physical educators is important in the connection or bridging of the physical education teacher education program content and induction program (Stroot, 1996). By understanding the manner in which the beginning physical educator is inducted influences continued learning and growth (Feiman-Nemser, 2001; Fernandez Balboa, 1997; Stroot, 1996). Once in the schools beginning teachers must make a choice between the perspectives of the school and those introduced and taught in teacher education program. This dilemma may evolve into an internal conflict between the desired teaching practices of the protégé and what the mentor feels is appropriate practice. Nonetheless, the potential for the protégé to abandon or maintain the practices taught and the perspectives gained in the teacher education program exists; thus, causing professional issues between the mentor and protégé (Zeichner & Tabachnick, 1985).

Ahmet (2002) studied six kindergarten teachers to exam how the mentoring process affected them. Ahmet (2002) identified the mentoring process as more than just a teacher recruitment or teacher retention tool. Each teacher had approximately 20 students. The research
used an open-ended questionnaire, in-depth interviews, and systematic observation. Ahmet used six questions to guide the study: a) rationale for mentored teaching; b) needs of the beginning teacher; c) the benefits of mentoring for beginning teachers; d) what makes mentoring effective; e) a veteran teacher’s perception of mentoring, and f) implications for teacher education. Results indicated that mentoring was important and effective, serving as a “bridge between student teaching and self-centered classroom teaching” (Ahmet, 2002, p. 838).

Stanulis, Fallona, and Pearson (2002) performed a narrative inquiry study on mentoring during the induction period. The authors formed new teacher support groups. Three novice teachers had approximately 21 students in their classes. The novice teachers identified “induction into the isolation of teaching, interest in not abandoning university teacher preparation, and the need to learn from mentoring as important aspects to their induction process” (p. 79). Implications of the study indicated the need to increase university involvement in learning to teach during the induction process (Stanulis et al., 2002). Teacher educators and mentors collaborating will assist both the mentor and protégé in the attempt to apply effective teaching practices.

Stroot, Schwager, and Faucette’s (1993) study examined the experiences of three beginning physical educators, all of which were case studies and located in different geographic locations. They found that all three had common experiences of reality shock, role conflict, and isolation; furthermore, all three left for new teaching positions after their first year of teaching. Support for mentoring programs in physical education was identified as a useful induction support. The data indicated the induction process should include “an induction team consisting of university faculty, mentors in the schools, and beginning teachers” (Stroot, Faucette, & Schwager, 1993, p. 385).
Smyth (1998) studied two beginning physical education teachers involved in a yearlong internship with eased entry into the physical education teaching profession. Data were collected by observations and interviews. The program had novices participate in a small number of class preparations. As the year progressed, their teaching responsibilities increased gradually and incrementally. Findings indicated that it was important for beginning physical educators to have access to teaching colleagues and a trained mentor in their subject area and grade level. Results suggest that teachers’ school districts could work in cooperation with college and university faculty to provide continued support for both mentors and beginning physical education teachers.

Fideler and Haseldorn (1999) studied the need for induction programs. The study used elementary school teachers across the nation. The authors mailed surveys to school districts in the nation’s central cities and largest towns. They followed up on the dissemination of the surveys by telephone calls, site visits, and additional survey distribution. Identification of exemplary programs was based on response rates, and these programs were visited. At the exemplary sites, the authors conducted focus group interviews with first-year teachers and their mentors. The surveys served as a catalyst for the interviews.

The survey instrument was 16 pages in length. A total of 1,050 surveys were sent out with 475 follow up surveys, ending up with 118 usable surveys. Fideler and Haseldorn (1999) concluded the length of the survey was the cause for the low response rate. Findings indicated that formalized mentoring programs should match the beginning teachers with a mentor who teaches in the same school, at their same grade level, and in the same subject area supporting Smyth’s (1998) results. Other findings supported the need for formalized mentoring programs and the establishment of induction programs for beginning teachers (Fideler & Haselkorn, 1999).
Napper-Owen and Phillips (1995) performed a study examining the affect of the induction process on first year physical educators. She, a university teacher educator, mentored two protégés that graduated from the teacher education program where she taught. The authors found that first-year physical educators involved in mentor relationships improved pedagogy. Beginning physical education teachers’ wrote more developmentally appropriate lesson plans and were encouraged to be more knowledgeable of pedagogical practice. The participants saw this as an opportunity to avoid professional isolation with the interaction between their mentors. They believed that in their school environments they would have not interacted with other physical educators. These findings support the effectiveness of a discipline specific induction in physical education, (Stroot et al., 1993) and represent the possible outcome of collaborative induction (McCaughtry et al., 2005).

Napper-Owen (1996) continued her work with the same participants as in her previous study. In this study, she sought to ascertain the impact of an induction program past the first-year of teaching physical education. The mentor continued to offer support and guidance; however, the mentor did not actively provide feedback. The mentor in turn, waited for the inductee to initiate the desire for guidance. Findings indicated the participants were more confident in their teaching practices; furthermore, they reduced the amount of presentation time and increased monitoring time. Conversely, management time was also increased; the researcher believed this was to “enhance program outcomes” (Napper-Owen, 1996, p. 118). This research makes an argument for longer induction periods and a continued collaborative induction process.

The biggest identified dilemma for beginning teachers is learning to apply what they have learned in their teacher education program (Napper-Owen, 1996). Teachers must take all the class time they put in behind a desk and instantaneously step in front of desks and present the
curriculum to students who are now behind a desk. Often times, only three or four months have passed since the beginning teacher was sitting behind the desk. There is very little time for beginning teachers to get comfortable with teaching and due to this quick transition time, it is easy to see that beginning teachers need help. Induction programs were designed to help with the transition time; they are to bridge the gap between the theory of pre-service teaching and the real world of effective teaching practices (Ahmet, 2002; Halford, 1998; McIntyre, 2005; Saban, 2002). The studies in this section indicate a need for mentor support by university teacher educators. Needed support by university teacher educators may indicate an underlying need by the mentor to become more confident in supporting the protégé by exemplifying behaviors that support the protégés teacher education program (McCaughtry et al., 2005).

Within the shaping of physical education teachers knowledge and beliefs, there are three major aspects: a) influence from personal experience with physical education (Rich, 2001); b) experiences in sport (Curter-Smith, 1999; Dodds, Placek, Doolittle, Pinkham, & Ratliffe, 1992; Templin, 1979); and c) professional contact with physical educators, coaches, and others in the area of sport and activity (Mawer, 1995). All of this contact results in a socialization that is traceable and influential to their teaching practices, and ideologies (Schempp & Graber, 1992). Hayes, Capel, Katene, and Cook (2008) researched the knowledge prioritized by student teachers, formal mentors, and physical education teacher educators working together in a secondary physical education initial teacher education course. One researcher conducted interviews to identify each participant’s understanding of subject knowledge in physical education and their prioritization of such. The study lasted one year with two interviews for each participant. Important findings indicated that, “it may be necessary for the parties involved in initial teacher education to work together to reassess expectations” about the level of content
knowledge in which physical education protégés can bring with them upon placement (p.340). Moreover, that there needs to be a collaborative relationship between teachers, mentors, and physical education teacher educators.

There are many induction/mentoring programs and in general, they are one-size-fits-all; meaning there is no distinction between teaching subject matter and discipline. Many of these programs use various induction supports sustaining the broad notion that all teachers, instruction and teaching environments are the same. Prior to 1983, there was an absence of research on mentoring in teacher induction and a rapid increase ever since (Little, 1990). “Two thirds of the published references to mentoring in the 1980’s concentrate on mentoring as a principal component of induction programs” (p. 321); furthermore, mentoring “occupies center stage in the design of efforts to expand support for new teachers while also tightening scrutiny of their performance” (p. 322). Mentors are the bridge for protégés to cross over the turbulent waters of teaching (Ahmet, 2002; Gaston & Jackson, 1998). Collaborative induction teams help protégés apply what they learned in their pre-service programs to real world experience (Saban, 2002). Over 60% of the induction programs in the United States mandate some aspect of mentoring; however the term mentoring is allusive and has many meanings (Hall, 2005). 

Mentoring

There is a plethora of research on mentoring and mentoring in education. The most noted areas of mentoring research in education are in mentor needs, mentor training, mentoring relationships, and perceptions of the mentoring dyad from both the mentor and protégé perspectives. The physical education mentoring literature is limited. The mentoring literature focuses on a) mentoring in K-12 schools, b) mentoring between students, c) teachers mentoring students, and d) teacher educators mentoring teachers, as well as, new teacher educators in
higher education (Weaver & Chelladurai, 1999; Wright & Smith, 2000). This section on mentoring presents a working definition for mentoring, as it relates to this study, and the roles and goals of the mentoring process. Furthermore, presented research and research reviews describe mentoring relationships, identify perspectives of mentors and protégés on the mentoring dyad and, concluding with research describing how mentoring meets the psychosocial and career needs of protégés.

Beside induction another term often used as synonymous with mentoring is coaching. Coaching and mentoring are different in practice. The difference between mentoring and coaching is that coaching is the act of being directly concerned with the improvement of performance and development of a skill by a form of teaching or educating, whereas mentoring uses the application of advising and counseling functions and is often long-term in nature (Parsloe, 1995). The concept of mentoring came from Greek mythology. Mentor was the name of Odysseus’s trusted friend. Upon Odysseus’s departure for his journey, he entrusted Mentor with the raising of his son Telemachus. It is from this story that the term mentor came to mean a substitute parental figure with the highest relationship for trust. A modern definition of mentoring is,

A formalized process whereby a more knowledgeable and experienced person actuates a supportive role of overseeing and encouraging reflection and learning within a less experienced and knowledgeable person, so as to facilitate that person’s career and personal development…and appears to have the essential attributes of: a) process; b) supportive relationship; c) helping process; d) teaching-learning process; e) reflective process; f) career development process; g)
As such, mentoring is the title given to those in the society who assist and guide those who are beginners or those less developed. Mentoring is the “professional practice that occurs in the context of teaching whenever an experienced teacher supports, challenges, and guides novice teachers in their teaching practices;” (Odell & Huling, 2000, p. xv). Moreover, the behaviors of a mentor helps his or her protégé become self-reliant (Portner, 2001).

With the current teacher shortage, teacher retention, and teacher recruitment are at the forefront for validating the need for mentoring. Studies indicate that mentoring aides the mentor as much as it supports the protégé by helping teachers learn curriculum, improve pedagogy, improve their understanding of students, as well as improve on making judgments about effective professional learning for teachers (Ball & Cohen, 1999; Bush & Chew, 1999; Cohen, McLaughlin, & Talbert, 1993; Hayes, 2001; Kammeyer-Mueller & Judge, 2007; Krueger, 1999).

Hall (2005) examined the role of mentoring in our education system around the United States. He used many methods to collect this data, internet sites, e-mailing questions to state officials, and phone calling various state agencies for information and verification. Hall compared his results to a report done in 1998 by the American Federation of Teachers. Results indicated that in 2004 there were 33 states that mandated mentoring programs for beginning teachers.

In comparison to the 1998 report, this was an increase of 24% in mandated mentoring programs (Hall, 2005). Twenty-three states require mandated training for mentors. According to Hall (2005), there were 11 states committed to teacher mentoring Arkansas, Connecticut, Delaware, Illinois, Indiana, Iowa, Louisiana, Mississippi, Missouri, New Mexico, and South
Carolina. These states all required mandated mentoring programs, provided funding for the mentoring program, and required mentor training. Kerka (1997) contended that learning is most effective when situated in a context where individuals construct meaning through interactions with others by using new knowledge and skills. These interactions work in conjunction with clinical supervision where the mentor and protégé plan together, the mentor observes the protégé, and provides constructive feedback (Wilson et al., 1997).

Teacher-training programs that use formalized mentoring have five general goals:

1. To provide continuing assistance to reduce the identified common problems of beginning teachers.

2. To support the development of the knowledge and skills needed by beginners to be successful in their initial teaching position.

3. To integrate beginning teachers into the social system of the school, the school district, and the community.

4. To increase the positive attitudes of beginning teachers about teaching.

5. To increase the retention of good beginning teachers in the profession (Mills, Moore, & Keane, 2001; Odell, 1986).

The goals identified by Mills et al. (2001) are reflected in Weaver and Chelladurai (1999) road map for formalized mentoring in physical education and sport. Their model has six stages of mentoring: a) mentor/protégé identification, b) compatibility, c) barriers to mentoring, d) mentoring, e) organizational practices, and f) outcomes. The first stage identifies factors that are important in the mentoring dyad; for example, the mentors, experience, position, status, and traits affect the compatibility, for the protégé, abilities, gender, race, and traits affect compatibility. Stage two identifies compatibility. The mentoring model identifies barriers to mentoring which
includes availability, proximity, networking, stereotyping, sexual connections, and tokenism. Weaver and Chelladurai found that mentoring occurs in four phases: a) initiation, b) cultivation, c) separation, and d) redefinition. Within the phases of mentoring psychosocial and career functions are identified. The final stage of their model of mentoring is the outcomes from a compatible mentoring relationship. Their review identifies protégé outcomes as advancement and growth, mentoring outcomes were intrinsic satisfactions, status, respect, and power (Weaver & Chelladurai, 1999).

Rowley (1999) examined the mentoring process through observation and analysis of established formal mentoring programs to identify the qualities needed for effective mentoring. He developed a framework that defines high-performing mentoring qualities. Those identified qualities included:

1. Committing to the roles and responsibilities of mentoring.
2. Accepting the beginning teacher as a developing person and professional.
3. Reflecting on interpersonal communications.
5. Modeling personal and professional growth.
6. Communicating hope and optimism for the future.

This section described mentoring as it is seen in the literature and applied in the educational setting of induction. With the understanding of the role mentoring plays in teacher induction, recognizing the goals of formalized mentoring in education is relatively easy. Combining those definitions with the identified characteristics of effective mentors will assist in deciphering the complexities of the mentoring relationship. Effective mentoring dyads are
essential for learning to transpire; the key ingredient to these dyads is the mentor/protégé relationship.

The mentoring relationship. This section identifies research that describes the importance of the mentoring relationship. According to Lipton and Wellman (2003), mentored teachers develop patterns and practices of effective teaching, as well as lifelong commitments to professional growth, as a result of learning-focused mentoring relationships. Mentors begin by developing an identity as a growth agent who builds the capacities in others to be effective problem solvers and decision makers. Beginning teachers must possess a willingness to learn as well as be a learner within the mentoring relationship. “The ultimate goal of learning-focused mentoring is to create colleagues who can fully participate in the professional life of the school” (Lipton & Wellman, 2005, p. 149).

Patton et al. (2005), headed a project examining the mentoring process. The project lasted one year and had four phases: recruitment, baseline, intervention, and implementation. Participants for the project included middle school physical education teachers (10 teachers from four schools), volunteer mentors for each school (6 university faculty and 3 experienced physical educators), and a research team (1 research assistant, 5 university teacher educators, and 4 doctoral students). Data collection for this project consisted of a) mentor records, b) field notes from in-service training and mentor brainstorming sessions, c) four teacher interviews, d) one mentor interview, and e) one researcher focus-group interview. The research questions that guided the study were: a) What factors contributed to effective mentoring and professional growth on behalf of the teachers involved, and b) What contexts, activities, and interactions among participants influenced mentoring relationships and facilitated the development of communities of practice?
Patton et al. (2005), found physical education teacher mentors needed “ongoing support” that without it they “could not effectively initiate changes,” and “that hands-on training and feedback in the construction of assessment tools and assistance in the management of assessment were essential” (p. 312). The mentors stated, that it was important to take each teacher as an individual; supporting Sweeny’s (2005) contention of individualism. The mentors also believed that a one-size-fits-all mentoring model was not effective for addressing the individual needs of the physical educator. The evolution of support from the mentors started with “housekeeping tasks” and ended with a focus on the “improvement of pedagogical behaviors” (p. 316).

Patton’s et al. (2005), study also indicated that building trust was essential to the effective relationship between mentors and protégés (Patton, et al., 2005). The authors believed the mentor/protégé relationship was expedited by the use of chat rooms and email; moreover, the fact that mentors “willingness to give” and the protégés “willingness to accept” were the biggest factors perpetuating the effectiveness of the mentoring dyad. Patton et al., (2005) identified three steps to help break down barriers between teachers and mentors: a) “taking a nonjudgmental approach to mentoring;” b) “providing frequent opportunities for teachers and mentors to interact,” and c) “showing a willingness to tackle less substantial issues related to teaching and learning before more significant factors are addressed in order to gain trust and facilitate the mentoring relationship” (p. 322). These steps were essential in facilitating the growth of a lasting relationship and aid in the development of a community of practice.

Smith, Basmadjian, Kirell, and Koziol (2003) studied English teachers learning through mentoring. They investigated the pre-service teachers of English and the way a mentor can assist them. They specifically studied three doctoral students and the instruction of pre-service teachers. These teachers were at two separate universities. They all participated in the mentoring
programs at each university. Data were collected by informal interviews and transcribed for coding. Findings revealed all three were not well versed in the application of theory. Through the mentoring relationship, they worked through their misunderstandings and became comfortable in their presentation of the material. Additionally, the study presented support for Ball and Cohen’s (1999) and Cohen’s (1993) study where the protégé had gained a better understanding of their students and had a heightened feeling of professionalism.

Carter and Francis (2001) examined mentoring and beginning teachers’ in workplace learning. Participants included 220 beginning teachers and 245 supervisors and mentors. A combination of case studies and a survey ascertained the effectiveness of mentoring in education. Survey results indicated that mentoring was effective; additionally, that “university collaboration in teacher education with particular emphasis on internship programs and mentoring strategies” make key contributions to the induction experience of beginning teachers (Carter & Francis, 2001, p. 259). The case studies revealed important instructional practices, professional interactions, as well as “transmission, transactional, and transformational approaches to teacher learning” (Carter & Francis, 2001, pp. 254-255). The correlation of qualitative and quantitative methodologies in this study provides strong evidence supporting the effectiveness of mentoring programs.

Carter and Francis (2001) found effective mentors exhibit seven characteristics within their mentoring relationships:

1. empathize with the circumstances of the beginning teacher by providing psychosocial support;
2. teaches close by;
3. shares the same students and/or teach at the same class level;
4. is regarded as an exemplary teacher by others;
5. is friendly and approachable;
6. is the same gender as the beginning teacher; and
7. is capable of initiating and fostering collaborative enquiry and reflection on practice thus, conceptualizing teacher learning as moving beyond transmission thereby incorporating transactional and transformational processes (p. 258).

These characteristics play an essential role in the development of mentoring relationships and consideration of these characteristics when constructing the mentor dyad will help to increase the compatibility of mentors and protégés resulting in effective mentoring and learning (Weaver & Chelladurai, 1999). “Mentoring relationships provide continuous cycles of learning through which both mentors and new teachers learn from one another throughout their relationship” (Sparks, 2005, p. 243).

Oliver and Aggleton (2002) wrote a review of research which examined key findings on research on mentoring with relevance to health promotion. They questioned the appropriate ways of preparing health promotion specialists as well as who has a role in the development of these specialists. Oliver and Aggleton (2002) found little to no research on mentoring in health promotion, and had to look outside the discipline for mentoring research that may be related or connected to health promotion. They examined mentoring research in education, business management, and nursing. The authors examined a ten-year period from 1990 to 2000 and used online database such as ERIC, BIDS, EMBASE, and MEDLINE. Their concern was not to be comprehensive but to “identify key issues in the conceptualization and application of mentoring, and its potential relevance to health promotion” (Oliver & Aggleton, 2002, p. 32).
They found that mentors had a conflict when they assessed protégé’s performance. However, this is not to say that mentors cannot provide corrective criticisms. This identified an important issue within teacher education where cooperating teachers have to assess their student teachers and where mentors, in formalized programs, assess and report to supervisors of the formalized program. They concluded that mentoring was effective; however, it requires a plan and support from all involved.

Examples for successful mentoring programs include: “an agreed and clear operational definition of what mentoring is and what it is expected to achieve and a policy framework” identifying goals and expectations of those involved (Oliver & Aggleton, 2002, p. 37). This review indicates the mentoring process is not always perfect. The data reveals a difficult situation arises between mentors and protégés when the mentor documents formal assessments. This dual role negatively affects the mentoring relationship and hinders the element of trust (Bray & Nettleton, 2007). As such, a clear distinction between critical friend or assessor must be established early within the mentoring relationship and by the induction program (Halal, 2006). Nonetheless, mentoring has more benefits to teacher development than drawbacks. In an effort to reduce mentor/protégé drawbacks, one should know what attributes or characteristics a mentor should possess.

Littleton and Tally-Foos (1992), conducted an analysis of a formalized mentor training program. Data were collected by a survey that was administered to each mentor during their mentor training program for two consecutive years. The results indicated that mentors should be in the same location and subject matter as the protégé. Other findings included: the need for mentor training, time to mentor, building of trust between within the dyad, and mentors should have no more than one protégé during an academic year. The most significant finding was that
mentors believed they should not have responsibilities of formal evaluations of their protégé; this can seriously jeopardize the relationship and strain the development of trust needed for an effective mentor/protégé relationship (Griffin, 1985). This does not mean the mentor should not evaluate the protégé’s performance. It is essential that mentors identify areas of concern or difficulty for the protégé to focus on during induction (Anzul, 2000). Most mentors in this analysis believed the mentoring process is built on the foundation of trust between the mentor and protégé.

Martin and Robbins (1999) described aspects of an induction program they supervise which addressed the importance of the first five days on the job. Through anonymous evaluations by participants Martin and Robbins (1999) found that prioritizing mentoring issues and providing appropriately timed support in the appropriate form, in the beginning as well as throughout induction, was integral for the total development of emotional and career aspects of the beginning teacher. According to Sweeny (2005), timing is an essential component to mentoring and the development of mentoring relationships. Mentors have to choose what to cover in the time they have for mentoring. Mentors are seen as all knowing within the mentoring relationship (Danielson, 2002), and each mentoring dyad and episode is a case-by-case event. Each protégé has different concerns and progress at different rates, suggesting mentors should take each protégé as an individual and cultivate the mentoring relationship (Sweeny, 2005).

Cranton (1996) discussed the transformation of adult learners through professional development and said, “We are learners of our discipline and students of our clientele. We keep up to date by attending conferences, reading journals, and perhaps formally studying our discipline. This learning, too, feeds into our practice” (p. 5). As such, veteran teachers within the same discipline should mentor protégés. Mentoring dyads within the same discipline promote
conversations contributing to the transformation of protégés leading to effective classroom practices with that discipline (Boreen, Johnson, Niday, & Potts, 2000; Gordon, 1991; Portner, 1998; Schwille, Nagel, & DeBolt, 2000). Boreen et al. (2000) discussed the increased effectiveness of the mentoring dyad when both mentor and protégé are from the same discipline; thus, guiding protégés through applied practice by connecting theories learned in their teacher education programs to real world experiences. Protégés find the assistance from mentors within the same discipline more credible, direct, and usable (Boreen et al., 2000).

To enhance beginning teachers self-improvement and increase teacher retention a clear nature of collegiality must be present between mentors and protégés (Walling, 1994). He believed that collegiality presents a reciprocal feeling of support; furthermore, mentors and protégés should actively work to promote a mutually benefiting relationship. Walling (1994) goes on to state,

Much in the successful induction and retention of teachers depends on first impressions that are reinforced by the day-to-day professional culture. Teachers who are welcomed into a community of colleagues are more likely to fare better—to achieve success in the classroom, to grow in the profession, and to stay in education—than are those who merely are assigned to a classroom (p. 69).

Gaston and Jackson (1998) discuss mentoring and its importance of the mentor/protégé relationship. They believed that mentoring could help protégés through the difficult times associated with the new position. Furthermore, they felt the mentor/protégé relationships are not a one-sided interaction; both parties should give and receive from the experience. Within these mentor/protégé dyads, a mutual support and confidentiality adds to the development of collegiality (Anzul, 2000; Walling, 1994). By cultivating a positive and constructive mentoring
relationship mentors can alleviate or reduce the tension that comes with the mentor/protégé relationship, as identified by Oliver and Aggleton (2002).

Zachary (2002) described the mentoring process with the metaphor of growing something from seeds. The seeds are the foundation for the stages of successful mentoring relationships that incorporates: a) working the ground, b) tilling the soil, c) planting the seeds, d) nurturing growth, and e) reaping the harvest. This metaphor correlates with the five common traits of a mentoring relationship. Mentoring is: a) insightful, b), best accomplished as a role model c) a supportive and protective process, d), a nurturing process and e) an affirming process (Smith, 1994).

Odell and Ferraro (1992) studied two cohorts of beginning elementary teachers. These teachers participated for one year in a collaborative university/school mentoring program. The aim of the study was to see if mentoring effected retention and to obtain “the retrospective assessments of the content of the mentoring support that they had received” (Odell & Ferraro, 1992, p. 210). Two separate groups of K-5 teachers ($n=160$) from 76 different elementary schools participated. Mentoring occurred inside and outside of the classroom. Data were collected by use of a survey questionnaire. Of the 160 participants 141 were located four years later and only 100 responded with a return rate of 70.9%. The questionnaire consisted of 12 questions, six refereed teacher demographic information, one address the assessment of the teacher mentoring support, three questions focused on the perceived quality and influence of the teachers’ mentoring experiences, and two questions asked about current and future intentions within teaching.

Results indicated 96% of the teachers remained in the profession. Results of mentoring experiences and helpful mentor support were on a 5–point Likert scale, ranging from 1 (negative) to 5 (positive). Results for these two questions were 4.1 and 4.2 respectively. Further
results indicated that four years after beginning teachers’ mentoring experience they still valued
the emotional support they received from their mentors; moreover, that “providing emotional
support to beginning teachers may have an efficacious impact on subsequent teacher retention”
(p. 203). Mentoring relationships are important when addressing the needs of the protégé and can
play a vital role when addressing emotional and career needs of protégés.

   Effects of mentoring on psychosocial and career needs. According to Gold (1996) and
Weaver and Chelladurai (1999), there are a variety of factors that provided the impetus for
beginning teacher support, such as, teacher retention, performance (career support), and
professional well-being (psychosocial support). Since the mid-1980’s, there has been an interest
and increase in providing support for beginning teachers. The evolution of support programs is
ongoing and there is an “urgent need for data regarding the effectiveness of different types and
sources of support for new teachers (Gold, 1996, p. 560). Support for beginning teachers may be
placed in two categories: a) instructional-related support (career) and b) psychological support
(psychosocial). Instructional-related support includes knowledge development, pedagogical skill
development, and instructional strategies (Gold, 1996). Psychological support seeks to increase
the protégé’s confidence, perceptions of effectiveness, self-esteem, self-reliance, and to assist in
the development of stress management routines (Gold, 1996).

To understand the mentoring process or to obtain a clear description of the effectiveness
of formalized mentoring, administrators and researchers must examine the perceptions of those
involved. This section presents research examining outcomes of effective mentoring on
psychosocial and career needs. Furthermore, research identifying the perceptions of both mentors
and protégés through each perspective will be explored.
Roberts (2000) reviewed mentoring research to identify outcomes of effective mentoring. Results from his phenomenological review revealed nine outcomes of effective mentoring: a) latent abilities discovered; b) performance improvement; c) retention of staff; d) growth in protégé confidence; e) personal growth of mentor and protégé; f) increased awareness of role in the organization; g) increased effectiveness in the organization; h) self-actualization; and, i) a resonating phenomenon that protégés become mentors themselves (p. 160). The beneficial outcomes of effective mentoring are not limited to just these nine identified characteristics. These nine characteristics and their resultant outcomes enhance and add to the learning environment for children by addressing teachers’ individual needs, as well as, the professional needs of the veteran teacher. The mentoring dyad is useful in the development of teachers’ professional growth; moreover, it is an important component to the induction process in teaching.

Brock and Grady (1998) studied the perceptions of principals and beginning teachers regarding problems, role expectations, and assistance in the first year of teaching. They mailed surveys to a randomly selected group of 75 first year teachers in Nebraska, and 65% were returned. Results indicated beginning teachers believed the principal to be filling an informal role as a mentor. Most teachers reported a need for mentors as an integral part of the training process (Brock & Grady, 1998), and the teachers viewed mentoring as one of the strongest training strategies available to them during their induction (Hardy, 1994; Maulding, 2002).

McCaughtry, Cothran, Kulinna, Martin, and Faust (2005) studied the implementation of a mentorship program focused on reform-based professional development. They had two questions that guided their study; a) how does a reform-based professional development program influence experienced teachers’ self-related competence in mentoring beginning teachers, and b) how do
experienced mentors influence beginning teachers thinking about teaching and the mentoring experience? Participants in the study were 30 elementary physical education teachers that participate in the Exemplary Physical Education Curriculum (EPEC) project. This project consisted of many daylong workshops and yearlong assistance at the teachers’ worksite.

Through one academic year, 15 mentors and 15 protégé teachers participated in professional development in physical education. In addition to the workshops, there were videotaped lesson exchanges, school exchanges, and chat room correspondence. The workshops were spaced over the year with mentor/protégé interaction between each session. The first workshop was a pre-workshop of EPEC training for protégé teachers. In November, there was a workshop on mentor training for mentor teachers and in December a mentor and protégé merging workshop. Between the workshops, the mentors and protégés communicated via chat rooms and visits to each other schools. The final workshops were on EPEC and pedometers and EPEC follow up.

Mentors and protégés completed two different assessment instruments. Mentors completed the Mentor’s Aptitude Inventory nine times and the protégés completed the Mentoring Functions Scale seven times. Results showed that “reform-based professional development can be effective in enhancing mentors’ perceptions of their mentoring skills” (p. 338). Protégés supported the findings by indicating increased self-competence in mentors. McCaughtry et al. (2005) felt that a lack in mentors’ technological content knowledge in comparison to their protégé was an important issue within the mentoring relationship. Furthermore, mentors began to question their abilities if protégé lacked subject-matter knowledge. McCaughtry et al., (2005) also found that teacher mentors played a critical and empowering role in the improvement of beginning teachers’ perception of teaching. Moreover, that protégés “valued the coaching and
practical ideas that were content and context specific from their mentors” and, “psychosocial support and the ability to share thoughts with other teachers was integral” to the mentoring process (p. 340).

In conjunction with the EPIC program identified in the previous study (McCaughtry et al., 2005), Martin, McCaughtry, Kulinna, Cothran, and Faust (2008) examined the impact of mentoring based professional development on physical education teachers efficacy. During a yearlong professional development program, the researchers wanted to determine the effectiveness of their professional development program when integrating new technology. Introduced technology was the use of pedometers and computers in physical education. Surveys were used to collect the data. These surveys used an 11-point Likert scale and addressed the knowledge and comfort using the new technology. Protégés, mentors, and control group participants completed surveys at throughout the training and implementation of pedometer and computer use.

Results indicated that the protégés and mentors “substantially increased their pedometer self-efficacy” which doubled over the course of the year (Martin et al., 2008, p. 78). The greatest increase in self-efficacy, with pedometer use, occurred and was sustained during the workshop, in comparison to the pre and post workshop surveys. In this mentoring study, the protégés began with higher self-efficacy but at the conclusion of the study, differences in self-efficacy scores were insignificant. Computer use also shown an increase in self-efficacy in both mentors and protégés, whereas the control group indicated a decrease in self-efficacy in both pedometer use and computer use (Martin et al., 2008).

Huffman and Leak (1986) examined the beginning teachers’ perceptions of mentors. The beginning teachers participated in a beginning teacher program. After one year, they were
recruited to respond to a questionnaire on the role of the mentor. The questionnaire was designed to identify the most beneficial functions of the mentor. Findings indicated that 96% of the respondents believed mentoring was essential to their induction. They found that mentors were effective in meeting beginning teachers psychosocial and career needs. Results also supported the need for adequate time for mentor training, collaboration, and formal and informal conferencing. The protégés also identified the need for having the mentor in the same grade level and subject matter as the beginning teacher. The authors used the findings to refine their mentoring program.

A need for effective mentoring was sufficient justification and preparation for stepping into the role of being a mentor. In this study Gagen and Bowie (2005) examined the need for mentors for beginning teachers in physical education, as well as, to identify the perceptions of mentors who participated in these mentor training workshops. The goal of the workshops was to increase the number and quality of mentors. Their study included 9 beginning teachers and 16 mentors that were participants in three mentor-training workshops. Mentors were given a survey prior to each workshop to identify their perceived needs and at the end of each workshop to find out if their needs had been met. The mentors indicated a consistent belief that they were not prepared to meet the needs of protégés in the area of instructional strategies and that this was the area the protégés needed them the most. The mentors also identified classroom management, discipline, strategies, and classroom routines as important needs of protégés. Mentors felt they needed more training in lesson planning, content, and scope of lesson plans as well as a job description for their role. Implications of this study show that “comprehensive training, along with the opportunity to ask questions and become more familiar with the problems and expectations involved in their role, will relieve mentors’ anxiety about taking on the
responsibility of mentoring” (Gagen & Bowie, 2005, p. 45). These findings supported Smith’s, (2007) study who examined State-level induction and standards-based reform policies and their affect on the induction experiences and turnover among new teachers.

Smith’s (2007) findings indicated that mentoring was a major component to the induction process. Further findings expressed a need for mentors and protégés to be paired by subject, grade-level taught, and school site. Even though these suggested practices do not always occur, Smith (2007) found that states that strong standards, assessments, and accountability did lower turnover among beginning teachers. Moreover, the findings suggest that not only does a structured induction program be present but also, it should include a formal mentoring component. Previous research indicated that mentors, within the identified induction programs, should be experienced teachers possessing exemplary teaching practices.

Rohrig and Pressley (2008) conducted a study to identify factors that might influence the protégés ability or willingness to implement more effective teaching practices. Participants included two kindergarten, first grade and second grade teachers and their mentors. Random assignment was used to assign school based mentors to each beginning teacher; additionally, one protégé of each grade-level pair was also assigned a researcher provided mentor who worked with the protégé with the researcher provided supplemental program. Data collection consisted of qualitative and quantitative methods. Participants were observed, surveyed, interviewed, and observed participating in mentoring meetings; additionally, mentoring logs were kept to record the thoughts and insights of the participants.

Results indicated that more experienced mentors stimulated more effective teaching by their protégés (Roehrig & Pressley, 2008). Furthermore, mentor training improved the mentors’ effectiveness. Through the mentoring process, mentors focused their efforts on instruction and
management concerns. Single mentor protégé dyads indicated that these less effective protégés were not open to criticism (Roehrig & Pressley, 2008). This study reveals the need for thoughtful pairing of mentor and protégé and indicates the importance of mutual relationship for interactive growth.

Cuddapah (2002) examined new teachers’ perspectives of the mentoring they were or were not receiving. Additional questions of the study were who mentored these new teachers and what was the nature of the mentoring received? The core sample included 10 teachers, 9 teachers who previously went through the New Teacher Institute and the researcher included herself as a participant. Participants were questioned during focus groups and individual interviews. Resulting themes indicated protégés who received mentoring desired a mentor who would model individual lessons, and that protégés wanted a mentor in close proximity to them. The perceptions of these protégés support previously reported research indicating effective mentors are in the same field and in the same location.

Allen, Eby, and Lentz (2005) examined two major aspects of formal mentoring programs, participant input into the mentoring process and prior training of the mentor, and how these characteristics relate to perceived program effectiveness by both the mentor and protégé. The authors closed the gap in the research by examining these relationships from the perspective of both the protégé and the mentor. Mentors serve a pivotal role in the success of formalized mentoring programs; therefore, including their perspective to understanding program effectiveness is important (Noe, Greenberger, & Wang, 2002). The authors had six hypotheses:

Hypothesis 1. Protégé reports of mentor commitment and program understanding will mediate the relationship between protégé input into the mentoring process and protégé perceived program effectiveness.
Hypothesis 2. Protégé reports of mentor commitment and program understanding will mediate the relationship between protégé training and protégé perceived program effectiveness.

Hypothesis 3. Mentor reports of their own commitment and program understanding will mediate the relationship between mentor input into the mentoring process and mentor perceived program effectiveness.

Hypothesis 4. Mentor reports of their own commitment and program understanding will mediate the relationship between mentor training and mentor perceived program effectiveness.

Hypothesis 5. Mentor reports of input into the mentoring process, training, program understanding, and mentor commitment will relate to protégé reports of perceived program effectiveness.

Hypothesis 6. Protégé reports of input into the mentoring process, training, program understanding, and mentor commitment will relate to mentor reports of perceived program effectiveness (pp.11-12).

The authors believed that in considering the experiences of the protégé, mentor and program effectiveness, as well as mentor perceptions of the program can all be captured by considering the experiences of the protégé. Allen et al. (2005) indicated this approach to be particularly important in this study as mentors and protégés in formalized mentoring programs may not share similar experiences during the mentorship.

This study had a total of 175 protégés and 110 mentors. From these participants, 91 mentor dyads were created. Paper and pencil surveys and a web-based version were used to for data collection. The mentor and protégé surveys were identical in question content, with the
exception of the wording to indicate the perspective of each. The paper and pencil surveys contained a protégé survey and a mentor survey; these surveys were assembled into packets for easy transportation. Protégés delivered the mentor survey to their mentors and surveys were matched using a unique numerical code. The web-based survey was a little more complicated; protégés were initially contacted via email and provided a URL address that housed the protégé survey. When the protégés completed the survey, they forwarded the email address of their mentors. An automated email was then delivered to mentors containing their unique survey URL. This process allowed protégé and mentor responses to be matched.

Findings addressed perceived effectiveness of formalized induction/mentoring programs. These programs are created to meet the development needs of the protégé. Since, protégés are the primary beneficiaries; they may view the program favorably whether their participation is required or is voluntary. Results indicated training quality had direct and indirect effects on perceived program effectiveness for the mentoring dyad. For protégés, the indirect effects of training quality operated by enhancing both perceived mentor commitment and program understanding. As such, protégés who better understood the induction program and respected their mentor used the mentorship more effectively and committed to the mentorship program. A result of the protégé commitment was a more rewarding experience for their mentor. Additionally, protégés with an increased understanding of the mentoring program may have realistic expectations regarding the mentoring relationship. If a strong relationship doesn’t develop then a mentor’s assessment of the effectiveness of the mentoring program will be negligible. Allen, et al. (2005) study “represents one of the first attempts to systematically examine how the design of a formalized mentoring program relates to mentor’s and protégé’s
perceived effectiveness of the mentoring dyad (p. 30). Their findings demonstrate the importance of considering both mentors’ and protégés’ experience in formal mentoring programs.

Wanberg, Kammeyer-Mueller, and Marchese (2006) studied the predictors and outcomes of mentoring in a formal mentoring program. The researchers had seven hypotheses:

1. Higher levels of protégé and mentor productivity relate to higher levels of career-related mentoring reported by both parties in the formal mentoring relationship.

2. Higher levels of protégé and mentor openness relate to higher levels of career and psychosocial mentoring reported by both parties in the formal mentoring relationship.

3. Protégé perceptions of similarity to the mentor relate to higher levels of career and psychosocial mentoring reported by the protégé.

4. Mentor perceptions of similarity to the protégé relate to higher levels of career and psychosocial mentoring reported by the mentor.

5. Mentor perceptions of support for mentoring relate to higher levels of career mentoring reported by both parties in the formal mentoring relationship.

6. Higher psychosocial and career mentoring reported by the protégé relate to higher protégé satisfaction with one’s mentor, perceived positive influence of the program on one’s job performance, improvements in career goal clarity, and increased intentions to stay with the organization.

7. And, Higher levels of career and psychosocial mentoring reported by the mentor relate to higher mentor reports of the experiences as rewarding, perceived positive influence of the program on one’s job performance, and to improved organizational commitment.
Participants were 96 mentoring dyads selected from two previous programs that were cut due to company downsizing. Of the 96, 70% were same-gender dyads and 67% were matched by race. Mentors and protégés met on average of 5.5 times in six months and 5.3 times in the last six months. Levels of career and psychosocial support were assessed by use of a survey, the mentor role instrument. This instrument examined the factors of sponsorship, coaching, protection, challenge, exposure, role model, counseling, and acceptance items.

Protégés reported that mentors were focused on career mentoring. Mentors reported they focused on both career and psychosocial aspects. Results indicated that proactive mentors provided more mentoring. The researchers concluded that recruiting proactive workers will lead to proactive mentoring (Wanberg et al., 2006). Findings also signify that perceived similarity is not an important aspect to career mentoring within the formal program. Thus, the guidelines and formality of the mentoring program increases the chance of career focused mentoring and may not be specific to mentors (Wanberg et al., 2006). The researchers “suggest there is not a strong correlation between mentoring reports of mentoring from mentors and protégés” (Wanberg et al., 2006, p. 421). Future suggestions were for mentors and protégés to express their desires prior to the mentoring experience.

Summary

In summary, scholars provide an array of research on induction and mentoring in education identifying the importance of such programs (Feiman-Nemser, 2000, April; Feiman-Nemser, 2001; Feiman-Nemser et al., 1999; Fideler & Haselkorn, 1999; G. A. Griffin, 1999; Huling-Austin, 1990). According to Locke (1984):

Teacher education should be a life-long process. Virtually everyone who has studied the continuum of development from presocialization of recruits to retirement of veterans has
concluded that the key juncture is neither preservice nor in-service training – it is the first two years of employment, the induction years. If physical educators do not come to grips with the fact, learn about how induction shapes teacher behavior, plan how to best prepare graduates for the rigors and dangers of induction, and decide how to share a part in the action, then they will remain on the outside – mostly just looking in (p. 169).

As identified by the research reported in this chapter mentoring is the most significant and instrumental component to the induction program (Ball & Cohen, 1999; Hayes, 2001; Ingersoll & Smith, 2004; Kardos, 2005; Maynard, 2000; Portner, 1998, 2005; Strong & Baron, 2004). A key ingredient to successful mentoring is the mentor/protégé relationship (Lipton & Wellman, 2003, 2005). The mentoring relationship affects all aspects of the mentor’s ability to guide the protégé (Oliver & Aggleton, 2002). For the most effective mentoring relationship to develop the mentor dyad should be at the same location, subject area, and similar grade level, providing easy access for the protégé (Boreen et al., 2000; Cothran et al., 2008; Gordon, 1991; Littleton & Tally-Foos, 1992; Portner, 1998; Schwille et al., 2000); thus, enhancing the ability for the mentor to address the psychosocial and career needs of the protégé (Allen et al., 2005; Allen, Eby, & Lentz, 2006).

Marian Franck (2007) wrote a viewpoint discussing the missing link to quality physical education instruction. She posed three questions: a) “what is a quality physical education program, b) what is a quality teacher and, c) what or who connects the two to provide effective instruction” (p. 6)? The answer to the third question is a curriculum supervisor and coordinator providing a mentoring role. Franck believes a “lack of mentoring,” within K-12 programs, is the problem and with increased effective mentoring the quality of teaching in physical education could be increased (p. 7).
Oliver and Aggleton (2002) and Allen, Eby, and Lentz (2005) identified the importance in examining the mentoring process to understand its nature and effect in the development of protégés. Studies addressing the importance of the perceptions of protégés are few but provide a needed insight into the formalized program (Allen et al., 2006; Brock & Grady, 1998; Cothran et al., 2008; Martin et al., 2008; McCaughtry et al., 2005). Specifically, research in physical education mentoring is limited in both amount and scope (Cothran et al., 2008). The importance of understanding the perspectives of physical education protégés provides important insights into the further development of beginning physical education teachers’ induction for both the mentor and protégé (Gagen & Bowie, 2005; Locke, 1984; Wanberg et al., 2006). Cothran et al. (2008), states, “the most important prompt for future research and programming is that participants perspectives must be explored and considered” (p. 250).
CHAPTER 3

Methods

Introduction

The purpose of this study was to examine formalized mentoring and support in physical education from the perspectives of physical education teachers that have completed a formalized program. Their perspectives will add to the limited literature on mentoring in physical education within formalized induction programs. Research questions guiding this study are:

1. To what degree did the induction program help the protégé adjust to the responsibilities of being a physical educator?

2. To what degree did the mentor support what was taught in the protégés physical education teacher education program?

3. What are the physical education protégé’s perspectives of the mentoring relationship?

4. What are the physical education protégé’s perspectives of the affects of mentoring on the protégé’s psychosocial and career needs?

Participants

The American Federation of Teachers (AFT) (1998) performed a study that examined the number of states that mandated mentoring programs. The AFT identified 21 states that mandated mentoring programs. These states included: Colorado, Connecticut, Indiana, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Mississippi, Missouri, New Jersey, New
Mexico, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Texas, Utah, and West Virginia (AFT, 1998).

In 2004, Hall investigated whether the number of formalized mentoring programs had changed. He examined each state to see if there were any changes to the number of states that require formalized mentoring. The Hall (2005) study identified thirty-three states which require mandated mentoring within a formalized induction program. Recognized states were: Alaska, Arkansas, California, Colorado, Connecticut, Delaware, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Massachusetts, Michigan, Mississippi, Missouri, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Rhode Island, Pennsylvania, South Carolina, Texas, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin (Hall, 2005). Twelve states added formalized mentoring programs between 1998 and 2004. As such, over 60% of the United States requires formalized mentoring programs.

To address the research questions the selection of participants includes K-12 physical educators that have completed a formalized mentoring program within the states identified as requiring mandated mentoring programs. An appropriate sample size for valid generalization to the physical education population was determined to be 384 participants (Jaeger, 1984). Of the 586 respondents, 192 did not receive formalized mentoring as defined by Roberts (2000), leaving 394 eligible participants and exceeding the desired sample size for generalizable results.

Participant accusation was difficult. Identifying physical educators who have completed a formalized mentoring program was not a record easily obtainable. The researcher wanted to collect data through email correspondence and sought to acquire email addresses of physical educators in the identified states. Initial acquisition of email addresses was acquired from National Alliance for Sport and Physical Education (NASPE) (see Appendix A); however, there
were only 75 addresses. State Alliance for Health, Physical Education, Recreation, and Dance (AHPERD) (see Appendix B) organizations offered to help; however, they were not allowed to provide the researcher with email addresses. A few states offered to help disseminate the survey to their physical education members, California, North Carolina, Texas, New Mexico, and Connecticut. These states sent out an email through their membership database. Additionally, North Carolina inserted a notice in their state convention handout. The researcher waited a week then sent out further requests. Approximately three days after the participant request distribution a second request was sent; four days later, a third and final request for participation was sent out. Research indicates that, at most, two follow up request will increase the response rate (Nardi, 2003; Porter, 2004). In this study, the researcher found that further effort was required to acquire adequate participants for data collection. After these attempts, the researcher had minimal responses (56), according to the Survey Research Center.

At this point, the researcher began to mail letters to all previously stated agencies, mail request letters and make direct phone calls to school districts (see Appendix C) and physical education representatives in larger city school districts, recruit colleagues to pass the site onto fellow physical educators. These efforts took over eight months; the response rate began to increase but was not to an acceptable number. The researcher then resorted to direct solicitation by attending conferences, commonly attended by physical educators, to hand out flyers seeking participants. This process took an additional six months.

Design

The design of this study is descriptive and analytical; as such, after long thought about the research questions, the researcher examined the best way to answer these questions as they pertain to physical educators. Realizing the potential size of the participant population the
researcher believed a qualitative study would not be effective or efficient in answering the research questions.

The researcher wanted data that would be usable by all formalized mentoring programs. With that decision, the researcher concluded a survey instrument would be the best way to obtain data that is generalizable to the population (Jaeger, 1984; Salant & Dillman, 1984). Furthermore, a survey can accommodate a potentially large population such as physical education teachers in the 33 identified states (Cohen & Manion, 1994).

Research data collection in the field of education is commonly acquired by use of surveys (Feiman-Nemser et al., 1999; Hussar, 2005; Portner, 2005). According to Rea and Parker (Rea & Parker, 2005) the use of surveys is an acceptable and effective means of data collection. Survey instruments are used to understand people’s interests and concerns. Resulting data should reflect the descriptive, behavioral, or preferential characteristics of the respondents. Other effective uses for survey research include examination of relationships involving characteristics such as perceived social support; this self-reporting research is commonly performed by surveys (Hutchinson, 2004). Self-reporting research entails the compilation of information from all members of a population or sample and this information is standardized and quantifiable. The use of surveys to collect data from a cross section of a population help to establish the status of that population as it relates to one or more variables, as in the case of physical education mentors and protégés (Fowler, 2002).

**Instrumentation**

Before constructing a survey to address the research questions the researcher examined multiple survey instruments used to examine mentoring. After an extensive search, the researcher identified the Mentoring Function Scale (MFS) this instrument has been used to examine
mentoring personal, in corporate setting, as well as in education (Noe, Greenberger, & Wang, 2002). The MFS was created to examine the mentoring relationship between school administrators and teachers ready for advancement (see Appendix D). The MFS specifically examines the perspectives of protégés psychosocial and career needs within a mentoring relationship (Noe, 1988).

The MFS examines two sub-functions, psychosocial and career. The psychosocial factors assess the extent to which the mentor provided: a) coaching, b) counseling, c) acceptance and confirmation, and d) served as a role model. The factors pertaining to the protégés’ career were a) protection, b) exposure and visibility, c) sponsorship, and d) challenging assignments. This instrument used a Likert scale to obtain protégé perceptions, the scale ranged from a very slight extent equaling 1 to a very large extent equaling 5. The internal consistency estimate for career-related functions scale was .89, and .92 for the psychosocial related functions (Noe, 1988).

The MFS was modified to address physical educators (see Appendix E). Question 5 added the word physical; question 18 school administrators was replaced with physical educators, and question 20 administrator position was replaced with coaching position. Question 30 was added to address the mentor support of the physical education teacher education program. Questions 31 through 41 addressed the nine most common forms of induction support, as identified by Ingersoll and Smith (2004), and the degree to which they supported beginning physical educators. The instrument obtained descriptive characteristics, such as state where teaching occurred during mentoring, gender, mentors gender, undergraduate institution, years of teaching experience in physical education, location of mentor (on/off campus), mentor subject area, did the mentor coach a sport during induction; as well as, a screening question that asked if the respondent was formally mentored. If the respondent marked yes, then they continued with
the rest of the survey. However, if they marked no, they went to a page with two questions; a) would they have liked to be in a formalized mentoring program and b), what areas of support did they want most, career needs, emotional needs, or both.

In deciding to use the MFS, the researcher contacted Dr. Raymond Noe to request permission to use and modify the instrument for this study. Permission was granted on November 19, 2005 (Personal communication, November 2005) (see Appendix F). After obtaining permission to use the instrument, the researcher investigated the various ways to deliver the survey to the participants, personal interview, mail, or on-line.

With the potentially large population, the interview survey method was ruled out. This left mailing the survey or creating an on-line survey. The researcher believed the population was knowledgeable enough to effectively use the internet to obtain the survey and complete it, as most educators are now required to use email to request substitute teachers and receive notices from administrators and district offices (BTSA, 2006). Furthermore, on-line surveys were the most economical means to disseminate the survey to such a large population. The researcher then obtained information on constructing an on-line survey from the Survey Research Center at the University of Georgia. Prior to on-line survey construction, the researcher performed a pilot study.

*Pilot Study*

A pilot study testing the instrumentation was performed on a similar mentoring dyad. The survey was handed out to 11 student teachers to examine the mentoring relationship of cooperating teachers (CT) and student teachers. The purpose of the pilot test examined the effectiveness of the instrument and the clarity of the questions for physical educators. The pilot study test was a paper and pencil survey. The participants were asked to record the amount of
time it took them to complete the survey, to make sure the completion time was reasonable for teachers in the field. Addressing this aspect was an effort to increase return rates, teachers have limited time and this survey needs to reflect that while acquiring the required data. Pilot study analysis revealed no issues with the survey and all participants stated the time to take the survey was reasonable. At this point, the survey was presented to the survey research center for on-line construction. An electronic letter of consent was created with an electronic signature section for the participant to use prior to survey access (see Appendix F). After on-line survey construction, the survey was administered to the original pilot study participants for a correlation of unaltered questions. The correlation analyses showed a statistically significant correlation $r(11) = .869 \ p < .01$ (2-tailed). The survey was ready for dissemination.

*Data Collection*

The researcher presented the research study to the Institutional Review Board (IRB) at the University of Georgia. IRB approval was obtained on May 23, 2006. Data collection took over a year to obtain the desired number of participants to generalize the results. The MFS was disseminated to physical education protégés through the internet. A web site, provided by the Survey Research Center at the University of Georgia, contained the MFS and aided in data collection. Participants logged on, read and agreed to the letter of consent (see Appendix G), and proceeded to the first survey questions. Respondents answered a series of qualifying questions designed to screen respondents to leaving only those who have completed a formalized mentoring program. Upon collection of the data, the Survey Research Center placed it into a data analysis program file and returned the data to the researcher for analysis.
Data Analysis

Factor analysis was used to identify the underlying constructs assessed by the Mentoring Functions Scale. Correlation analysis tested the sub-functions, psychosocial and career. Regression analysis examined the contribution of protégé characteristics and quality of interaction to explain the career and psychosocial benefits obtained by the protégés. Participants were asked questions to identify specific characteristics of the participants. Descriptive statistics asked were: a) gender of protégé and mentor, b) location of mentoring experience, c) protégé and mentor grade level(s) being taught, d) mentors teaching location while mentoring the protégé, e) discipline taught by the mentor, f) if the mentor coached a sport while mentoring, g) planning time, h) collaborations with other teachers, i) availability of extended teacher network, and j) if the protégé received reduced teaching load, preparations, or a teacher aide. The descriptive questions correlate with previous research on effective mentoring practices and procedures, and were used to clarify the reported MFS results.

Assumptions

Survey research comes with a few underlying assumptions. According to Hutchinson (2004), the overriding assumptions comes from “the reliance on self-reported data [where the] survey responses reflect the reality of the respondent to the greatest extent possible” (p. 287). Survey responses are supposed to reflect the nature of the social world under investigation. The assumption is “that respondents report the information correctly and truthfully, within the constraints of their memory, comprehension, and level of trust” (Hutchinson, 2004, p. 287). Another assumption associated with survey research is the respondents’ interpretation of the survey questions; researchers should construct questions where the respondents will all interpret the questions in the same way.
Summary

The purpose of this study was to examine the mentoring relationship through the eyes of the protégé. The rationale for mentoring is to meet the psychosocial and career needs of the protégé. The Mentoring Functions Scale specifically examines those needs focusing on eight individual factors: a) coaching, b) counseling, c) acceptance and confirmation, d) served as a role model e) protection, f) exposure and visibility, g) sponsorship, and h) challenging assignments. Data results addressed the research questions and illuminated the aspects of a formalized mentoring relationship for physical educators.
CHAPTER 4

Results

Introduction

The purpose of this study was to examine formalized mentoring and support provided to physical education protégés during their induction experience. This study focused on four research questions: a) did the mentoring help the protégés development of instructional and professional teaching practices, b) did the mentor support the protégés’ teacher education experience, c) what were the protégés perspectives of the mentoring relationship, and d) did the mentoring experience meet the psychosocial and career needs of the protégé? The chapter begins with descriptive statistics as well as support results. Following the descriptive statistics, the MFS statistical results as a whole are represented by a factor analysis, Analysis of Variance, and Pearson’s correlation. Each function, career and psychosocial, has four factors and follows their corresponding function. These statistical procedures identify the perspectives reported by physical education protégés

Descriptive Results

As previously identified, the first question of the survey was a screening question to separate teachers who were formally mentored from those who were not part of a formalized mentoring program. Of the 586 respondents to the on-line survey, 192 did not receive formalized mentoring (see Figure 1). Response to the desired mentoring focus, of those not formally mentored, indicates that 55% wanted the focus on career aspects over emotional support, (see Figure 2). No further questions were asked from those who were not formally mentored.
There were 394 mentoring dyads meeting the formalized mentoring criteria as identified by Roberts (2000). Carter and Francis (2001) states that mentor and protégé gender was an important aspect of the mentoring dyad; 58% of the mentors were male and 55% of the protégé’s were female with 5% of the protégé’s failing to identify their gender (see Figures 3 & 4).
Figure 5 identified twelve states, out of 33, participated in the survey; however, 84% of the participants came from 4 states, New Mexico (11%), Connecticut (12%), North Carolina (18%), and California (53%). The number of total respondents as a whole do not reflect the perspectives from individual state systems, with exception of California. During induction protégés taught in elementary schools (K-8) 79.55% of the time (see Figure 6). Mentors taught almost an identical amount of elementary grade levels (75.5%), see Figure 7. There appeared to be a ratio of mentors to protégés within each identified grade level, being K-5, 6-8, or 9-12. On the surface this supported the study by Carter and Francis (2001) where mentors should mentor those in the same grade levels being taught while engaged in the mentoring process. However, this does not guarantee that the mentor and protégé were matched by the same criteria.

Figure 5. Participants’ location by state when formally mentored.
Taking a closer look at Mentors and Proteges revealed that 11% of the mentors were teaching K-5 and also mentoring proteges who were teaching k-5 (see Figure 8). Mentors and proteges teaching 6th-8th grades during the proteges induciton was 59% of the middle school respondents (see Figure 9). Similarly high school mentor and protégé matches were 66% of those who taught high school during their mentoring experience (see Figure 10). Interestingly, even with the middle and high school matches being over 59% and 66% respectively, there were only 27% of the mentors teaching at the same teaching site as their protege (see Figure 11).
Figure 8. Mentor's grade-level taught while mentoring a K-5 Protégé.

Figure 9. Mentor's grade-level taught while mentoring a 6-8 Protégé.

Figure 10. Mentor's grade-level taught while mentoring a 9-12 Protégé.
Figure 11. Mentor's teaching site while assigned a Mentor.

Figure 12, shows that 42% of the female respondents were matched with female mentors during their formalized mentoring program. There was a slight increase in male mentor/protege matches which occurred 58% of the time.

During the mentoring experience the mentors came from a variety of teaching assignments. Figure 13 indicates 8 areas of teaching in which the mentors were selected. Mentors of physical educators were selected outside of the discipline 80% of the time, (See Figure 14). During the time of mentoring, 72% of the mentors did not coach a sport (see Figure 15).
In summary, descriptive results indicated that mentors and protégés did not match up as prescribed by the research. The majority of respondents came from California and North Carolina. Fifty-eight percent of the responding mentors were male; additionally, mentor and
protégé respondents were distributed equally across grades K-12. Of the mentors, 73% were not at the same teaching site as the protégé, 81% were not physical educators, and 40% were classroom teachers. Most mentors (72%) did not coach a sport, which is not surprising with the time requirements of mentoring a protégé teacher. The following section describes the support, career and psychosocial, given and received by the participants.

**Support Results**

Induction supports identified by Ingersoll and Smith (2004), stated that mentors were from both in and out of the protégés discipline; furthermore, the beginning teacher attended seminars, collaborated, had common planning time with their mentor, was assigned a teacher aide, and received a reduced teaching load and/or reduced preparations. Additionally, beginning teachers received supportive communication from supervisors. The respondents to the MFS did not identify many of these supports.

Common planning time for mentors and protégé has occurred 10% of the time (see Figure 16). Collaborations with other teachers occurred with 37% of the respondents (see Figure 17). Protégé’s were exposed to an external teacher support network 9% of the time (see Figure 18). Reduced teaching loads, reduced preparations, and teacher-aides, were the least common beginning teacher supports provided with 96%, 95%, and 88% of the respondents not receiving any of these supports (see Figures 19, 20, & 21 respectively). The two most common beginning teacher supports provided to the respondents were protégé’s attending beginning teacher seminars (77%) and receiving supportive communication from supervisors (81%), (See Figures 22 & 23).
Figure 16. Common planning time for mentor and protégé.

Figure 17. Collaborations with other teachers.

Figure 18. Protégé had an external teacher network.
Figure 19. Reduced teaching load.

Figure 20. Reduced preparations.

Figure 21. Protégé received a teacher aide.
Figure 22. Protégé’s attend beginning teachers’ seminars.

Figure 23. Supportive communication from supervisors.

Figure 24 indicates how many respondents received support from an informal mentor during the formalized mentoring process. Results indicate that 76% of the respondents had support from an informal mentor; 42% indicated they received a large extent, or more, of support from their informal mentor.

Figure 24. Protégé had an informal mentor.
**Mentoring Function Scale**

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship between mentors and protégé’s. The independent variables were the eight factors of the Mentoring Function Scale (MFS) (see Appendix D). The dependent variable was protégé’s perceptions. The ANOVA was significant for seven of the eight factors, Coaching $F(1,380) = 14.353, p = .001$, Counseling $F(1,383) = 17.141, p = .001$, Acceptance $F(1,386) = 6.706, p = .01$, Role model $F(1,386) = 17.412, p = .001$, protection $F(1,386) = 4.172, p = .042$, exposure $F(1,386) = 2.581, p = .109$, and challenging $F(1,380) = 6.269, p = .013$.

Correlation coefficients were computed between the two functions of career and psychosocial. Using the Bonferroni approach to control for Type I error between the two functions, the results of the correlational analyses show that the correlations were statistically significant $r(382) = .839 p < .01$ (2-tailed). The correlation indicates that both career support and psychosocial support are perceived as helpful by protégé’s. The internal consistency for each factor was calculated. The Cronbach’s Alpha for the two functions was .93% and .89% respectively. The reliability scores for each factor was: a) coaching (.79), b) counseling (.859), c) acceptance and confirmation (.572), d) served as a role model (.839), e) protection (.736), f) exposure and visibility (.781), g) sponsorship, and h) challenging assignments (.707).

The MFS is divided into two sub-functions, career and psychosocial, with eight factors, coaching, counseling, acceptance and confirmation, role model, protection and exposure, sponsorship, and challenging. The following section displays the results by functions Career and Psychosocial; each category is followed by the corresponding factors and MFS questions.
Psychosocial Functions

Coaching. This factor included questions 1, 2, 23, 24, 25, and 26. Question 1, 85% of the respondents had their mentor share their career experiences with them (see Figure 25). Questions 2 and 23, indicated that 79% of the mentors encouraged their protégé’s to prepare for advancement and suggested specific strategies for achieving career goals (see Figures 26 & 27). Question 24, 65% of mentors shared their career experiences with the protégé (see Figure 28). Questions 25 and 26 (see Figures 29 & 30) asked protégé’s about their mentor’s support with providing strategies for completing all work assignments (66%) and evaluated them on performance of said duties (60%). Figures 25 through 30 indicate that over 60% of mentors coached protégés to a satisfactory level of support.

![Figure 25. Question 1, my mentor shared history of his/her career with me.](image)

![Figure 26. Question 2, my mentor has encouraged me to prepare for advancement.](image)
Figure 27. Question 23, my mentor suggested specific strategies for achieving my career goals.

Figure 28. Question 24, my mentor shared ideas with me.

Figure 29. Question 25, my mentor suggested specific strategies for accomplishing work objectives.
Figure 30. Question 26, my mentor gave me feedback regarding my performance in my present job.

Counseling. Questions 8, 9, 10, 11, 12, and 13 addressed the counseling factor of Career Sub-function. Figure 30, the eighth question of the MFS identified the ability of the mentors who were considered good listeners by protégé’s; 73% of the mentors listened to their protégé’s. Question 9 asked protégé’s if their mentors discussed their feelings of competence, commitment to advancement, and educational relationships and 41% of the mentors addressed these issues, but 27% addressed most all of their needs and reassurances (see Figure 32). Mentors often shared personal experience (72%) as a guide to protégé’s when the wanted a different perspective to their problems (see Figure 33). Questions 11 through 13 indicated that 68% of the mentors encouraged open discussion about anxiety and fears and 73% displayed empathy for those concerns; furthermore, 71% kept those concerns in strict confidence (see Figures 34, 35, 36). Protégé’s generally believed that 68% of the mentors met their counseling needs within the formalized mentoring relationship.
Figure 31. Question 8, my mentor has demonstrated good listening skills in our conversations.

Figure 32. Question 9, my mentor has discussed my questions or concerns regarding feelings of competence, commitment to advancement, and relationship.

Figure 33. Question 10, my mentor has shared personal experiences as an alternative perspective to my problems.
Figure 34. Question 11, my mentor has encouraged me to talk openly about anxiety and fears that detract from my work.

Figure 35. Question 12, my mentor has conveyed empathy for the concerns and feelings I have discussed with him/her.

Figure 36. Question 13, my mentor has kept feelings and doubts I shared with him/her in strict confidence.
Acceptance and confirmation. MFS questions 3, 14, and 28 addressed the factor of acceptance and confirmation. Question 3 indicated that mentors encouraged their protégé to try new job behaviors 69% of the time (see Figure 37). Mentors expressed feelings of respect towards their protégé as indicated by 73% of the respondents (see Figure 38). Half of the protégés were asked for their opinions in solving school related problems encountered by their mentors (see Figure 39).

Figure 37. Question 3, my mentor has encouraged me to try new ways of behaving in my job.

Figure 38. Question 14, my mentor has conveyed feelings of respect for me as an individual.
Figure 39. Question 28, my mentor has asked me for suggestions concerning problems she/he has encountered at school.

Role model. The factor of role model was questions 4, 5, 6, and 7 of the MFS. Questions 4, 6, and 7 show that protégés (70%) respect their mentors and want to imitate their work behaviors as well as aim to be like them when achieving a similar career level (see Figures 40, 42, & 43). Figure 41 indicates 68% of the responding protégés agreed with their mentor’s attitudes and values regarding physical education. According to Figure 44, mentors were generally considered an effective role model with respect to supporting practices taught by the protégés physical education teacher education program (62%).

Figure 40. Question, 4, I try to imitate the work behavior of my mentor.
Figure 41. Question 5, I agree with my mentor's attitudes and values regarding physical education.

Figure 42. Question 6, I respect and admire my mentor.

Figure 43. Question 7, I will try to be like my mentor when I reach a similar position in my career.
Figure 44. Question 30, my mentor exhibits characteristics that support what I learned in my teacher education program.

Career Functions

The career functions were the factors of protection, exposure and visibility, sponsorship, and challenging questions as represented in Figures 44 through 51. This section of the MFS exam examined the emotional aspects of the mentor protégé experience.

Protection. This factor of protection, represented by questions 15 and 16, indicated that mentors (65%) tried to protect their protégés from career threatening experiences (see Figure 45). Mentors (64%) assisted their protégé in meeting deadlines and completing difficult assignments (see Figure 46).

Figure 45. Question 15, my mentor reduced unnecessary risks that could threaten the possibility of becoming a school principal or receiving a promotion.
Figure 46. Question 16, the mentor helped you finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete.

Exposure and visibility. A protégés’ exposure was addressed by questions 17, 18, and 19 of the MFS. Questions 17 and 18 show that mentor’s (64%) helped their protégé meet and be in contact with fellow physical educators and colleagues (see Figures 47 & 48). Mentor’s (69%) provided their protégé with assignments that exposed them to district personnel that might evaluate their performance (see Figure 49).

Figure 47. Question 17, my mentor helped me to meet new colleagues.
Figure 48. Question 18, my mentor gave me assignments that increased written and personal contact with other physical educators.

Figure 49. Question 19, my mentor assigned responsibilities to me that have increased my contact with people in the district who may judge my performance.

Sponsorship. The MFS had one question asking the protégés’ perception of their mentor’s assignments and tasks as related to their preparation for a coaching position. Mentors (63%) prepared their protégé for coaching positions by assigning them preparatory tasks.
Figure 50. Question 20, my mentor gave me assignments or tasks in your work that prepared you for a coaching position.

*Challenging questions.* This factor was investigated through questions 21 and 22. Mentors provided opportunities to develop new skills (67%) as well as feedback on the performance of all teaching skills (69%) through the mentoring experience (See Figure 51 & 52).

Figure 51. Question 21, my mentor gave me assignments that present opportunities to learn new skills.
Figure 52. Question 22, my mentor provided me with support and feedback regarding my performance as an educator.

Prior to the MFS survey there were screening questions to separate formally mentored protégés from informal mentored beginning teachers. Respondents who indicated they were not formally mentored were asked two additional questions before thanking them for their time. The two questions were a) would you have liked to have been assigned a mentor in your first two years of teaching, and b) what areas would you have liked the mentor to help you with in our beginning teaching, emotional support, career support, or both. The response was not surprising, of the 192 respondents who did not receive formalized mentoring in their induction 95% indicated they wanted an assigned mentor. These physical educators indicated they desired career support 54.69%, emotional support .48%, and both career and emotional support 44.79% of the time.

It was interesting to see that non-formalized mentored physical educators wanted career support significantly more than emotional support. This information corresponds with the MFS results, which indicated that mentors provided more support in the career sub-function in comparison to the psychosocial sub-function as perceived by the physical education mentee. The preceding results are discussed in the following section as well as their contribution to the study of mentoring in education.
CHAPTER 5

Conclusions

Introduction

The purpose of this study was to examine formalized mentoring and support in physical education from the perspective of physical education teachers that have completed a formalized program. There were four objectives of this study: a) determine the extent of support provided by a formalized induction program, b) identify the extent to which the mentor supported what was taught in the protégés’ physical education teacher education program, c) examine the physical education protégé’s perspectives of the mentoring relationship and, d) examine the degree in which the mentor met the protégé’s psychosocial and career needs. The content of this chapter discusses the conclusions drawn from the performed research. The chapter has six sections. Section 1 describes the significant findings. Section two corresponds with objectives “A” through “D”. Each section discusses the findings in relation to each corresponding research question. The summary discusses the implications of the findings, provides suggestions for mentors, protégés, and policy makers, and proposes areas for further study.

Based on the findings in this study protégés were satisfied with their mentoring experience even though less than 40% met the characteristics of an effective mentoring dyad (Carter & Francis, 2001). As previously discussed an effective mentoring relationship consists of

a. provide empathy and psychosocial support,

b. teaches at same school,

c. same grade level,
d. same discipline,
e. has the same gender,
f. initiates and fosters collaboration,
g. accepting teacher as beginning professional, and
h. models personal and professional growth.

Most of the mentors were not physical educators and they did not coach a sport during the mentorship. There were few mentor dyad matches by gender, grade level, and school site. Protégés did indicate they respected their mentors and wanted to emulate them as well as achieve their mentors’ level of accomplishment.

Ingersoll and Smith (2004) identified 10 most common forms of beginning teachers’ supports. Of these supports, two were identified as received by most of the protégé respondents, supportive communication from supervisors and attendance of beginning teacher seminars. A majority of protégés in this study did not receive teacher aides (88%), reduced teaching load (95%), or reduced preparations (95%). Seventy-six percent of the protégés had an informal mentor, one who is a fellow educator not connected to the formalized mentoring program. Yet, these protégés felt there was no extended teacher network. Within the mentoring relationship the support provided can be divided into two categories, career and psychosocial; this support is different than the supports described above and is provided by a mentor.

Career and psychosocial support was indicated as being helpful. Psychosocial supports were more predominate than career supports. Counseling, a psychosocial support, was the most supportive factor identified. Protégés found their mentors very communicative about previous experiences, effective listeners, and providers of constructive criticism through feedback on performance. Protégés felt mentors provided them with challenging assignments, opportunities to
learn new skills, and exposure. Furthermore, mentors encouraged protégés to prepare for advancement as well as establish a goal setting foundation. Mentors displayed empathy for the experiences the protégés were going through. As such, protégés respected their mentors. The following sections discuss these findings in respect to their relative research question.

*Extent of support provided by a formalized induction program.*

This section focuses on the socialization of the physical education protégés in this study. Socialization for teachers is critical to the development of life-long teaching strategies (Feiman-Nemser, 2003; Scott, 1995; Veenman, 1984; Williams & Soares, 2002; Zanting et al., 2001) which are contingent on the type and success of a beginning teacher’s induction. This study examined the supports identified as common to induction (Ingersoll & Smith, 2004). Only three supports were common among protégés in this study, informal mentors, beginning teacher seminars, and the supportive communication from supervisors. These findings correspond with Ingersoll and Smith (2004) who found that these three factors were highly regarded supports in teachers’ induction. Neither this study or Ingersoll and Smith’s (2004) study clearly identified the term supervisor. It is likely this term meant administrator, but it could mean a curriculum specialist (Franck, 2007) or department head.

Surprising results were in the form of teacher aides. It is common in grades K-3 for physical educators to have some type of teacher aide, whether it is a peer tutor from higher-grade levels or paid teacher aide. Respondents (94%) indicated they did not receive teacher aides. Furthermore, protégés did not receive fewer preparations (97%) or a reduced teaching load (98%). This was not surprising since physical educators are often single subject teachers and used to provide preparation time for other teachers. Previous research identified these supports as
having little to no effect to beginning teaches; this study supports those findings (Ingersoll & Smith, 2004).

As indicated, physical education teachers often find themselves having no teacher aides in middle and high school, planning time, or a reduced teaching load (Capel & Piotrowski, 2000); in fact, in many cases physical education teachers find themselves having to coach one or more sports in addition to their teaching load. Protégés indicated their mentors (72%) did not coach a sport during their mentoring experience; however, they (64%) did help to prepare them for a coaching position. This was interesting being the majority of the mentors were not physical education teachers; however, no inquiry was made for past coaching experience.

Protégés indicated that 76% of them had informal mentors, representing a supportive teacher network; additionally, mentors guided the protégé in meeting new colleagues. However, protégés indicated there was not an extended teacher network available, as described by Ingersoll and Smith (2004). As such, informal mentoring was an important aspect in the socialization process for the physical education protégé.

Further support aspects within the induction process state that having a mentor from the same field, “having common planning time with other teachers or mentors” who teach in the same discipline and grade level are essential (Boreen et al., 2000; Carter & Francis, 2001; Ingersoll & Smith, 2004; Kammeyer-Mueller & Judge, 2007). K-5 protégés (89%) did not have mentors that taught in the same grade level or in physical education. If fact, there were no mentors who met all seven characteristics of an effective mentor as identified by protégés; interestingly less than 35% of mentors met more than three of the seven characteristics identified by Carter and Francis (2001). The next section discusses protégés perceptions of how well their mentoring experience correlated with the physical education teacher education program.
The extent to which the mentor supported what was taught in the protégé’s physical education teacher education program.

In a perfect world, all teachers in the field would support and exemplify effective teaching practices as taught by teacher education programs, in other words, they would mirror the research findings. Unfortunately due to the pitfalls in the field of teaching, teachers in the field do not always reflect what teacher educators are teaching (Huling-Austin & Resta, 2001; Saban, 2002). Many times, skills and theories taught in the teacher education programs are abandoned to fit in with new colleagues at their worksite (Wilson et al., 1997). According to protégés, mentors reflected the practices taught during physical education teacher education (PETE) program of study. Findings reveal a positive correlation between protégés and mentors with respect to PETE as well as with physical education philosophies (Hayes et al., 2008); even though, large portions of mentors were not physical education teachers, contradicting the theory on discipline specific mentoring (Hudson, 2004). Research indicates that protégés, mentors, and university teacher educators find a learning focused relationship productive and beneficial (Cothran et al., 2008; Martin et al., 2008; McCaughtry et al., 2005; Napper-Owen, 1996); as such, examination of the perspectives of a protégés’ induction would be advantageous (Cothran et al., 2008).

Physical education protégés’ perspectives of the mentoring relationship.

The perspectives of teachers’ professional and personal relationships as it pertains to their teaching, are essential in the development of teaching practices and their survival as teachers (Lipton & Wellman, 2003, 2005; Weaver & Chelladurai, 1999; Wright & Smith, 2000). Protégés indicated their mentoring experience was a positive experience. As previously stated, protégés received high amount of supportive communication from supervisors and had mentors who
displayed effective mentoring characteristics leaving participants feeling highly supported (Cohen, 1993; Patton, 2005). Through supportive listening, supportive discourse, and empathy, protégés were able to identify their mentors’ perspectives of professionalism, which were identified as essential by Carter & Francis, 2001 and Patton, 2005. Protégés perceived their mentors respected them professionally (73%). However, only 50% of mentors as identified by protégés, said their mentor would ask them for their opinion when dealing with difficult professional issues. This was the lowest factor score in the survey. This could be due to mentors focusing on content knowledge and the belief that protégés do not have enough experience to assist, even in psychosocial issues (Hayes et al., 2008). Protégés (68%) agreed with their mentor’s opinions towards physical education, even with 80% of those mentors not being physical educators. This factor scores raises some questions since research shows that physical educators are marginalized within education (Capel & Piotrowski, 2000). Nonetheless, this mutual respect leads to an advantageous induction experience leaving both the mentor and protégé with shared experiences (Sparks, 2005). With the mentoring relationship being positive and supportive, the MFS identified specific factors within the relationship, psychosocial and career needs of the protégé.

*Degree in which the mentor met the protégé’s psychosocial and career needs.*

During induction, beginning teachers need support; thus, the induction program connects the mentor and protégé (Lipton & Wellman, 2003;2005). According to Weaver and Chelladurai (1999), two aspects of the mentoring relationship are teaching performance and well-being. Teaching performance is described as the various psychosocial aspects associated with pedagogy as well as the new responsibilities of being a teacher. Teaching performance is correlated with the career aspects of the MFS. Well-being is quiet simply the happiness or psychosocial aspect to
being a teacher. This study examined both sub-functions to identify if mentors met the needs of their protégés. The following two sections discuss the two functions: a) Career and b) Psychosocial. The psychosocial function contained coaching, counseling, acceptance and confirmation, and role model factors. The career function included protection, exposure and visibility, sponsorship, and challenging questions.

**Career functions.** A key aspect to the mentoring experience is collegiality built through psychosocial and career support (McCaughtry et al., 2005). The overall response from physical education protégés indicated that mentors met the career needs of the protégés; however, of the four factors two stood out, exposure and challenging questions.

Protégés indicated that their mentors provided them with opportunities and/or assignments for growth (69%) and development of new skills (67%); furthermore, mentors (69%) supported those opportunities with the appropriate feedback, as established by Patton (2005) and Napper-Owen (1996). Even though career needs were met, many of the factors had aspects of communication associated with them. Mentors provided career support while focusing on the psychosocial aspects of the mentoring relationship as indicated by the high coaching and counseling scores.

**Psychosocial functions.** Gold (1996) states that psychosocial support targets the improvement of confidence, perceived effectiveness, develop routines to manage stress as well as, to foster self-esteem and self-reliance. Rowly (1999) found that effective mentors displayed characteristics of coaching and modeling for professional growth and success, as well as, communicating anticipation and an expectation of a successful future for the protégé. Modeling and communicating is a characteristic displayed by expert teachers (Schempp, McCullick, Busch, Webster, & Mason, 2006), and an essential function within the discipline of physical
education. Physical educators often model skills as well as behaviors to teach sport skills and social responsibility. Mentors scored higher in all the psychosocial factors in comparison to the career sub-factor.

Not surprising, protégés reported the highest overall support in the counseling, coaching, and role model factors. Five out of the six counseling factor questions identified mentors as highly effective counselors as it pertains to their career aspects. Mentors were communicative of their experiences (72%); by sharing their experiences, protégés gain valuable knowledge and insight into their profession; however, effective relationships require both sharing and listening (Martin et al., 2008). Protégés indicated mentors (73%) were also effective listeners, which assists the mentor in identifying the needs and issues of protégés (Patton et al., 2005; Lipton & Wellman, 2003; Oliver & Aggleton, 2002). Moreover, mentors took this insight and information and displayed empathy for the protégé’s anxieties and fears (73%), as well as, kept their conversations confidential (71%) leading to a stronger more productive mentoring relationship (Carter & Francis, 2001; Littleton and Tally-Foos, 1992).

The coaching factor contained two questions with the highest support score. Specifically, mentors (79%) encouraged protégés to look at and prepare for advancement. According to protégés, mentors were effective in suggesting strategies for advancement and goal setting. Mentors have experience, and through mentoring, disseminate that working knowledge as well as the essentials to successfully navigating the given field and school district (Sweeny, 2004). This knowledge saves vital time and potentially alleviates the protégé from experiencing trial and error learning by repeating mistakes previously made by the mentor (Martin et al., 2008).

Communication is a key factor to a successful mentoring relationship. Protégés indicated they received various amounts of effective communication from supervisors and mentors.
Additionally, protégés felt their mentors would listen as well as provide appropriate feedback with empathy. Mentors are often looked at as experts in guiding and teaching the protégé (Allen & Casbergue, 2000). Regardless of the effectiveness of the mentoring relationship protégés will make mistakes; this is not a full proof process.

Summary

“The ultimate goal of learning-focused mentoring is to create colleagues who can fully participate in the professional life of the school” (Lipton & Wellman, 2005, p. 149).

Furthermore, protégés need instructional support and they expect to get it from mentors (Lipton & Wellman, 2005). According to protégés in this study, their induction experience and mentoring relationship was perceived as beneficial. Protégés had high levels of respect for their mentors and believed they represented philosophies taught in their physical education teacher education program. The career aspects of professional growth were met; however, not to the degree the psychosocial aspects were met. Protégés indicated their mentors were effective counselors and coaches; more importantly, they indicated that mentors were effective communicators in respect to the formal mentoring relationship. Mentors were communicative of their experiences, and listened to their protégés to assist with anxieties, fears, as well as content specific aspects. The participants in this study did not represent the established research.

Implications.

The findings of this study support the notion that there are characteristics common to an effective mentoring relationship. However, based on the findings of this study the mentors did not represent the norm. Previous research suggests an effective mentoring relationship puts the mentor at the same school site (Fideler & Haselkorn, 1999; Carter & Francis, 2001), teaching the same grade level, and in the same discipline (Smyth, 1998; Carter & Francis, 2001). The data of
this study contradicts the previous literature (Smyth, 1998; Fideler & Haselkorn, 1999; Carter & Francis, 2001); whereas, protégés indicated that mentors were not at the same school site 73% of the time. Mentors did not teach in the same subject matter 81% and, did not teach the same grade level K-5 (47%), 6-8 (41%), and 9-12 (34%). Previous research indicates that effective mentoring relationships should match in gender. In the current study gender matches occurred 58% for males and 42% for females. Other aspects of the mentoring relationship that did not follow previous research findings were common planning time and collaboration with other teachers (Smyth, 1998; Ingersoll & Smith, 2004). Only 10% of the protégés received common planning time and 37% received collaboration time with other teachers; furthermore, protégés indicated having an external teacher network only 9% of the time.

**Practical application of results.** These implications may be anomalies and warrant further investigation. However, for the physical education protégés in this study the absence of some established characteristics of an effective mentoring relationship did not affect their mentoring experience. What worked for them was the attendance of beginning teacher seminars and receiving supportive communication from their supervisors. Additionally, meeting their psychosocial and career needs was important (see Figure 53). Physical education protégés found these psychosocial aspects particularly helpful, a) sharing personal and professional experiences, b) preparing them for advancement through goal setting, c) provide strategies for mentoring program assignment completion, d) foster a sense of collegiality, e) foster mutual communication, f) confidentiality, g) encourage pedagogical exploration, h) developing mutual respect, and i) most of all be a role model. Career aspects that led to a positive mentoring experience was a) providing assignments to increase professional visibility, b) provide opportunities to develop new pedagogical skills, but more importantly, c) provide feedback on
all teaching skills. Based on the protégés in this study the development of a mentoring relationship that works on mutual confidentiality, collegiality, and communication will end up successful.

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<tr>
<th>MENTORING RELATIONSHIP RECOMMENDATIONS</th>
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<tr>
<td><strong>I. CAREER</strong></td>
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<tr>
<td>1. Providing assignments to increase professional visibility.</td>
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<tr>
<td>2. Provide opportunities to develop new pedagogical skills.</td>
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<td>3. Provide feedback on all teaching skills and assignments.</td>
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<td><strong>II. PSYCHOSOCIAL</strong></td>
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<tr>
<td>1. Sharing personal and professional experiences.</td>
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<td>2. Preparing protégés for advancement through goal setting.</td>
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<td>3. Provide strategies for completing assignments.</td>
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<td>4. Foster a sense of collegiality.</td>
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<td>5. Foster mutual open communication.</td>
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<td>6. Provide confidentiality.</td>
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<td>7. Encourage pedagogical exploration.</td>
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<td>8. Developing mutual respect.</td>
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<td>9. Be a role model.</td>
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*Figure 53.* Practical applications for future physical education mentoring relationships based on this study.

This study adds to the body of literature on formal mentoring in physical education through the investigation of protégés perspectives, and provides practical applications for future mentoring relationships. Additional research on mentoring and the discourse between the protégé, mentor, and university teacher educator will add insight into the nature of an effective physical education mentorship (Cothran et al., 2008). Further research into the perspectives of physical education mentors is also needed to describe the complete mentoring relationship within the physical education mentoring dyad.
REFERENCES


APPENDIX A

NASPE Request Letter

January 29, 2006

Charlene R. Burgeson
National Association for Sport and Physical Education (NASPE)
1900 Association Drive
Reston, VA 20191

Dear Charlene R. Burgeson,

Subject: Request for Research Support

I am sure you are all very busy with the National convention approaching fast, so I will be concise, and thank you in advance for any time and effort you may put forth. I am conducting research at the Sport Instruction Research Laboratory at the University of Georgia under Drs. Paul Schempp and Bryan McCullick. This is work for my dissertation in physical education.

My research focus is on support providers (mentors), protégés (beginning teachers), and formalized mentoring programs. Currently I am focusing on California’s BTSA and Connecticut’s BEST programs. My research indicates these two programs are very successful and highly regarded systems nationwide, as such; I am using physical educators in both states as participants for the study. Depending on the availability of contact information I have considered to perform this study nationwide.

My study comprises the use of a survey and two open-ended short-answer questions. The survey will be put on-line by the Survey Research Center here at the University of Georgia. The survey is brief, 32 questions. What I need is contact information, e-mail or physical mailing addresses, for physical educators in California and Connecticut. I prefer those who have been teaching 3-5 years, but understand that it maybe difficult to sort members.

I am requesting any assistance that NASPE may be able to provide in distributing my survey to physical educators in these states or possibly nationwide.

Again, thank you for your support, time, and effort. I greatly appreciate any assistance that can be provided. If you have any further questions please contact me at buschman@uga.edu or 706-340-5592.

Sincerely,

Christopher A. Busch
APPENDIX B

State AHPERD Request Letter

January 29, 2006

Quentin A. Christian
CAHPERD
1501 El Camino Ave., Suite 3
Sacramento, CA 95815-2748

Dear Quentin A. Christian,

Subject: Request for Research Support

I am sure you are all very busy with the State convention approaching fast, so I will be concise, and thank you in advance for any time and effort you may put forth. I am conducting research in the Sport Instruction Research Laboratory at the University of Georgia under Dr. Paul Schempp. This is work for my dissertation in physical education. I was raised in central California, Manteca, and will be returning soon, with any luck I will be working in the University of California system in Northern California.

My research focus is on support providers (mentors), protégés (beginning teachers), and the California BTSA program; specifically, analyzing the formalized mentoring program for physical educators. My research indicates the California BTSA program is very successful and highly regarded system nationwide, as such; I am using California BTSA participants as one group for the study.

My study comprises the use of a survey and two open-ended short-answer questions. The survey will be put on-line by the Survey Research Center here at the University of Georgia. The survey is brief, 32 questions. What I need is contact information, e-mail or physical mailing addresses, for physical educators in California. I prefer those who have been teaching 3-5 years, but understand that it maybe difficult to sort members.

I am requesting any assistance that CAHPERD maybe able to provide in distributing my survey to physical educators in California. I know money is tight but if it is possible to support me with the contact information I will provide all results for publication in your state Journal or work in with your office for future publications regarding collected data.

Again, thank you for your support, time, and effort. I greatly appreciate any assistance that can be provided. If you have any further questions please contact me at buschman@uga.edu or 706-340-5592.

Sincerely yours,

Christopher A. Busch
APPENDIX C

Direct Solicitation Request Letter

The University of Georgia

College of Education

Department of Kinesiology

Mr. Davis,

I am sure you are very busy so I will be concise, and thank you in advance for any time and effort you may put forth. I am conducting research at the Sport Instruction Research Laboratory at the University of Georgia under Dr. Paul Schempp and Dr. Bryan McCullick.

My research focus is on physical education protégés (beginning teachers) and their perception of support provided to them by mentors within a formalized mentoring program during their induction.

Data will be collected by a brief on-line survey. The on-line survey will be administered by the Survey Research Center here at the University of Georgia.

The support I am requesting is in the form of contact information for participant request letter/e-mail distribution; specifically, e-mail or physical mailing addresses, for K-12 physical educators that have been teaching between 2 and 6 years. If you can provide contact information or be able to forward my request for participants I would greatly appreciate it.

I am requesting any assistance that you may be able to provide in distributing my survey web-site link to physical educators.

Again, thank you for your support, time, and effort. I greatly appreciate any assistance that can be provided. If you have any further questions please contact me at buschman@uga.edu or 706-340-5592. I will forward or send further information, upon your response or inquiry.

Sincerely,

Christopher A. Busch
Sport Instruction Laboratory
University of Georgia
APPENDIX D

Mentoring Functions Scale Factor Description

1. Mentor has shared history of his/her career with you. (Coaching)

2. Mentor has encouraged you to prepare for advancement. (Coaching)

3. Mentor has encouraged me to try new ways of behaving in my job. (Acceptance & Confirmation)

4. I try to imitate the work behavior of my mentor. (Role Model)

5. I agree with my mentor’s attitudes and values regarding physical education. (Role Model)

6. I respect and admire my mentor. (Role Model)

7. I will try to be like my mentor when I reach a similar position in my career. (Role Model)

8. My mentor has demonstrated good listening skills in our conversations. (Counseling)

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. (Counseling)

10. My mentor has shared personal experiences as an alternative perspective to my problems. (Counseling)

11. My mentor has encouraged me to talk openly about anxiety and fears that detract from my work. (Counseling)

12. My mentor has conveyed empathy for the concerns and feelings I have discussed with him/her. (Counseling).
13. My mentor has kept feelings and doubts I shared with him/her in strict confidence.  
   (Counseling)

14. My mentor has conveyed feelings of respect for me as an individual. (Acceptance &  
   Confirmation)

15. Mentor reduced unnecessary risks that could threaten the possibility of becoming a  
   school principal or receiving a promotion. (Protection)

16. Mentor helped you finish assignments/tasks or meet deadlines that otherwise would have  
   been difficult to complete. (Protection)

17. Mentor helped you meet new colleagues. (Exposure & Visibility)

18. Mentor gave you assignments that increased written and personal contact with other  
   physical educators. (Exposure & Visibility)

19. Mentor assigned responsibilities to you that have increased your contact with people in  
   the district who may judge your potential for future advancement. (Exposure &  
   Visibility)

20. Mentor gave you assignments or tasks in your work that prepare you for a coaching  
    position. (Sponsorship)

21. Mentor gave you assignments that present opportunities to learn new skills. (Challenging  
    Assignments)

22. Mentor provided you with support and feedback regarding your performance as an  
    educator. (Challenging Assignments)

23. Mentor suggested specific strategies for achieving your career goals. (Coaching)

24. Mentor shared ideas with you. (Coaching)

25. Mentor suggested specific strategies for accomplishing work objectives. (Coaching)
26. Mentor gave you feedback regarding your performance in your present job. (Coaching)

27. My mentor has invited me to join him/her for lunch. (Friendship)

28. My mentor has asked me for suggestions concerning problems she/he has encountered at school. (Acceptance & Confirmation)

29. My mentor has interacted with me socially outside of work. (Friendship)

30. My mentor exhibits characteristics that support what I learned in my teacher education program.
### APPENDIX E

**Mentoring Functions Scale (MFS)**

*Answer each question based on your opinion of the induction/mentoring experience. Mark an "X" over the box that represents the degree of support or interaction received during your experience. The scale is smallest to largest extent of interaction or support.*

<table>
<thead>
<tr>
<th></th>
<th>to a very slight extent</th>
<th>to a slight extent</th>
<th>to an extent</th>
<th>to a large extent</th>
<th>to a very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mentor has shared history of his/her career with you.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mentor has encouraged you to prepare for advancement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td>Mentor has encouraged me to try new ways of behaving in my job.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I try to imitate the work behavior of my mentor.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5</td>
<td>I agree with my mentor’s attitudes and values regarding physical education.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I respect and admire my mentor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I will try to be like my mentor when I reach a similar position in my career.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>My mentor has demonstrated good listening skills in our conversations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>My mentor has discussed my questions or concerns regarding feelings of competence, commitment to advancement, relationships with peers and supervisors or work/family conflicts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>My mentor has shared personal experiences as an alternative perspective to my problems.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>to a very slight extent</td>
<td>to a slight extent</td>
<td>to an extent</td>
<td>to a large extent</td>
<td>to a very large extent</td>
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</tr>
<tr>
<td>11</td>
<td>My mentor has encouraged me to talk openly about anxiety and fears that detract from my work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>My mentor has conveyed empathy for the concerns and feelings I have discussed with him/her.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>My mentor has kept feelings and doubts I shared with him/her in strict confidence.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>My mentor has conveyed feelings of respect for me as an individual.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Mentor reduced unnecessary risks that could threaten the possibility of becoming a school principal or receiving a promotion.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Mentor helped you finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Mentor helped you meet new colleagues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Mentor gave you assignments that increased written and personal contact with other physical educators.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Mentor assigned responsibilities to you that have increased your contact with people in the district who may judge your potential for future advancement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Mentor gave you assignments or tasks in your work that prepare you for a coaching position.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Mentor gave you assignments that present opportunities to learn new skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Mentor provided you with support and feedback regarding your performance as an educator.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Mentor suggested specific strategies for achieving your career goals.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>24</td>
<td>Mentor shared ideas with you.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>25</td>
<td>Mentor suggested specific strategies for accomplishing work objectives.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>26</td>
<td>Mentor gave you feedback regarding your performance in your present job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>27</td>
<td>My mentor has invited me to join him/her for lunch.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>28</td>
<td>My mentor has asked me for suggestions concerning problems she/he has encountered at school.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>29</td>
<td>My mentor has interacted with me socially outside of work.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>30</td>
<td>My mentor exhibits characteristics that support what I learned in my teacher education program.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>31</td>
<td>Induction supports</td>
<td>N/A</td>
<td>recvd</td>
<td>to a very slight extent</td>
<td>to a slight extent</td>
</tr>
<tr>
<td>31</td>
<td>Mentor from the same field (assigned)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>32</td>
<td>Mentor from another field (assigned)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>33</td>
<td>Common planning time</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>34</td>
<td>Collaborations with other teachers</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>35</td>
<td>External teacher network same field</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>36</td>
<td>Supportive communication from supervisors</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>37</td>
<td>Reduced teaching load</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>38</td>
<td>Reduced preparations</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>39</td>
<td>Teacher-aide</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>40</td>
<td>Mentor (self-selected, unassigned)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
APPENDIX F

Instrument Usage Request Electronic Correspondence (E-mail)

**Date:** Sat, 19 Nov 2005 09:33:36 -0500  
**From:** "Noe, Raymond" <noe_22@cob.osu.edu>  
**Subject:** RE: Question for you.  
**To:** "CHRISTOPHER A. BUSCH" <buschman@uga.edu>

Christopher:

OK to use the instrument. Good luck with your research.

Ray

________________________________

From: CHRISTOPHER A. BUSCH [mailto:buschman@uga.edu]  
Sent: Fri 2005/11/18 15:33  
To: Noe, Raymond  
Subject: Question for you.

Dr. Noe,

I am a third year doctoral student at the University of Georgia. I am working on my dissertation focusing on formalized mentoring in physical education. I would like to use your instrument for my dissertation. I wanted to ask your permission to use the MFS instrument.

Thank you for your time and effort.

Christopher A. Busch, ABD  
University of Georgia  
Department of Kinesiology
APPENDIX G

PILOT STUDY CONSENT FORM

I agree to take part in a research study titled “From the Protégés’ Perspective: An Analysis of the Formal Mentoring of Physical Educators” which is being conducted by Christopher A. Busch, of the University of Georgia (706-542-4210) under the direction of Dr. Paul Schempp, Department of Kinesiology, 706-542-9536. As a volunteer, I do not have to take part in this study. I can stop taking part at any time without giving any reason, and without any penalty. I can ask to have information related to me returned to me, removed from the research records, or destroyed. Additionally, as a participant of this research study, I am aware of and acknowledge the following:

- All activities will be related to research.
- The purpose of this research is to study protégés perspectives of mentoring in physical educators in their induction process.
- The procedures are as follows: Each participant will be given the web address for completion of the survey. If the participant is interested in the outcomes of the research they may email me to obtain a digital copy of the results, which will be emailed to them.
- Confidentiality will be maintained by anonymous electronic submission of the survey.
- The researcher is available to answer any questions regarding any part of this research study presently or at any time during the study by calling the following number: 706-542-4210.

My signature below indicates that the researchers have answered all of my questions to my satisfaction, I have read this form in its entirety, and I consent to volunteer for this study. I have been given a copy of this form.

Sincerely,

Christopher A. Busch

__________________________________________________________
Signature of Researcher                                         Date

__________________________________________________________
Signature of Participant                                         Date

For any questions or problems about your rights please call or write: Chris A. Joseph, Ph.D. Human Subjects Office, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, GA 30602-7411; 706-542-3199; IRB@uga.edu.
APPENDIX H

ONLINE CONSENT FORM

Good Day!

I want to thank you in advance for any time or assistance you may provide by answering the questions below.

I am the principle researcher for this study and a PhD. candidate at the University of Georgia. I anticipate the results of this study will improve mentoring and induction for beginning physical education teachers.

Research Information and Informed Consent

The purpose of this research is to study physical education protégés perspectives of formalized mentoring to identify to what degree their career and psychosocial needs were met. In order to study this, I will ask you to provide some demographic information (gender, state where teaching, etc.) and respond to several opinion and behavior questions. I will NOT ask you any identifying information.

The survey should only take about 30 minutes to complete.

The benefits you can expect from it are personal gratification because you helped to improve formalized mentoring and induction for future mentors, possibly yourself, and future physical education teachers.

AS A PARTICIPANT IN THIS STUDY

YOU SHOULD READ AND UNDERSTAND THE FOLLOWING STATEMENTS:

- Only physical education teachers that have completed an induction program or been assigned a mentor by a supervisor (principle, school administrator or district, or required by the state), may participate.

- There are no codes or any other information contained on the questionnaire or any other materials associated with it that identifies you as an individual respondent to this survey.

- All participant responses will be kept strictly confidential; you will NOT be identified in any presentation or publication of this research. All information you provide will be combined with the answers from many other respondents and reported as grouped data by state. No information about you, or provided by you during the research, will be shared with others without your permission, except if required by law.
There is no risk associated with participation in this study. Although your identity will not be associated with the information collected for this study or with any reports, you may have concerns that your identity as a participant in this study will become known. There is a limit to the confidentiality that can be guaranteed due to the technology itself.

NOTE: There is a risk associated with the unlikely chance that somebody else may view the information you provide. For example, you should protect yourself from the types of occurrences identified below:

1. There is a possibility that your responses could be viewed by an outside party if you do not EXIT/CLOSE your Internet browser (e.g. Internet Explorer, NetScape) as soon as you finish answering the questions because your answers may be visible if you (or someone else) click the BACK button on the browser. In order to eliminate this possibility, you should EXIT/CLOSE the browser as soon as you finish answering the questions and have submitted your responses.

2. There is a possibility that your answers could be viewed by an outside party if you leave your browser on and leave the computer terminal before finishing the survey (e.g. answer the phone, leave the computer unattended, etc.). In order to avoid inadvertent access to your answers by a third party, do not leave the terminal or stop responding to the survey until you have completely finished and closed the browser.

If the participant is interested in the outcomes of the research they may email me, Christopher Busch, buschman@uga.edu to obtain a digital copy of the results. If you have any further questions regarding any part of this research study presently or at any time during the study by calling the following number: 706-542-4210.

As a volunteer, I do not have to take part in this study. I can refuse to participate or stop taking part at any time without giving any reason, and without any penalty.

This study is being conducted by Christopher A. Busch under the direction of Dr. Paul G. Schempp. The study has been approved by the researchers’ Institutional Review Board.

Click the “I agree” button below to indicate that you have read this form and understand the information above. The submission of a complete survey constitutes your agreement to participate in the study.

I agree

For any questions or problems about your rights please call or write: IRB Chairperson, Human Subjects Office, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, GA 30602-7411; 706-542-3199; IRB@uga.edu. Disclaimer: The contents and the opinions expressed on this Web page do not necessarily reflect the views of nor are they endorsed by The University of Georgia or the University System of Georgia.