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Cooperating teachers as models of best practice: Student teachers' perceptions

Connie B. Melder

COOPERATING TEACHERS AS MODELS OF BEST PRACTICE: STUDENT TEACHERS' PERCEPTIONS

by

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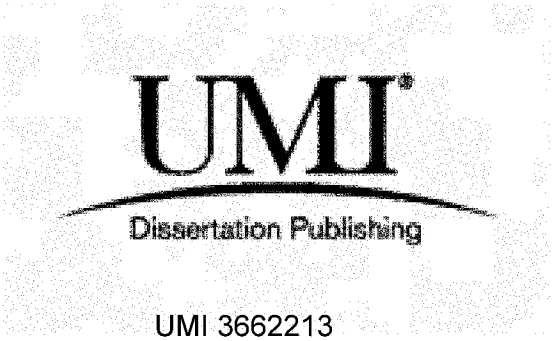

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ABSTRACT

The selection of expert, effective cooperating teachers who can foster successful student teacher experiences and serve as primary role models for teacher candidates is central to the success of student teaching. However, a lack of consensus exists among education professionals on a standardized definition of effective cooperating teachers. The purpose of this dissertation study was to determine if student teachers' perceptions of cooperating teachers' modeled actions of professional standards differed across four certification grade bands: (a) early childhood certification (grades PK-3), (b) elementary certification (grades 1-5), (c) secondary content (grades 6-12) certification in English, mathematics, science, and social studies, and (d) K-12 certification in art, special education, music education, and health and physical education. The researcher collected data using the *Ohio Student Teachers' Perceptions of Cooperating Teachers' Enactment of National Board Core Propositions and Teacher Educator Standards to Promote Student Teacher Learning*. Findings revealed significant differences existed between elementary and K-12 certification student teachers' perceptions of cooperating teachers' modeling of professional standards. Recommendations included development of cooperating teachers' identity as teacher educators and intentional collaboration between university faculty and cooperating teachers. The need for collaboration and professional development, especially in K-12 certification areas, was indicated to address expectations

unique to the disciplines and to promote improvements and alignment with programmatic efforts.

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TABLE OF CONTENTS

LIST OF TABLES

ACKNOWLEDGMENTS

Trust in the Lord with all your heart and lean not on your own understanding; in all your ways submit to him, and he will make straight your paths (Proverbs 3:5-6).

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But now finish the task as well, so that your eager willingness to do it may be matched by your completion of it. (2 Corinthians 8:11).

CHAPTER ONE

INTRODUCTION

The 21st century educator faces more demands than ever, and it is the charge of teacher education programs to graduate highly qualified teachers prepared for the challenges they will face in the modern classroom. Today's teacher must be equipped with the confidence and skill to assess and respond to a wide range of student needs with engaging, relevant instruction that not only present content, but also teach students how to read, write, speak, listen, collaborate, research, and integrate technology.

National reports suggest that the most important resource a community can provide to foster children's academic success is highly qualified teachers (Cochran-Smith, Barnett, Friedman, & Pine, 2009; Gansle, Noell, & Burns, 2012; Rivkin, Hanushek, & Kain, 2005). Research has clearly shown that quality teaching matters to student learning. Teacher quality has been consistently identified as the most important school-based factor in student achievement (McCaffrey, Lockwood, Koretz, & Hamilton, 2003; Rivkin et al., 2005; Rowan, Correnti, & Miller, 2002; Wright, Horn, & Sanders, 1997), and teacher effects on student learning have been found to be cumulative and long-lasting (McCaffery et al., 2003; Mendro, Jordan, Gomez, Anderson, & Bembrey, 1998; Rivers, 1999; Sanders & Rivers, 1996). Studies demonstrating the effects of teachers on student achievement gains highlight how critical it is to improve the quality of the teacher workforce.

Nationally, the *No Child Left Behind* (No Child Left Behind Act of 2001 [NCLB], 2002) legislation brought increased focus on teacher quality and the evaluation of teachers. A significant part of the conceptual base driving reform in education over the past two decades is the assumption that quality teaching has a key, if not vital, role in shaping students' academic performance (Aaronson, Barrow, & Sander, 2007; Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2009; Darling-Hammond & Youngs, 2002; Gordon, Kane, & Staiger, 2006; Rivkin et al., 2005). Quality teaching has been shown to be a factor in closing achievement gaps and leveling the educational playing field for marginalized groups (Banks et al., 2005; Hollins & Guzman, 2005). Recent proposals by the Obama administration further signal the importance of highly qualified teachers by coupling federal funding with states' abilities to link student achievement data with the evaluation of teachers and school leaders and their effectiveness, most significantly the Race to the Top Program (American Recovery and Reinvestment Act, 2009). States struggle to implement federal mandates regarding highly qualified status and to track "highly qualified" teachers within their systems in a meaningful way.

Researchers and policymakers agree that providing all P-12 students a quality education depends largely on our capacity to staff schools with highly effective teachers. This need has led to scrutiny by policy makers of the quality of university teacher education programs and questions about which components of a teacher preparation program are necessary to ensure new teacher effectiveness (Allen, 2003). Recognizing the important role teacher education can play in improving teacher quality (Cochran-Smith & Zeichner, 2005), researchers have focused on the effects of teacher preparation on student achievement.

Louisiana was the first state in the nation to develop and implement a statewide Value-Added Teacher Preparation Assessment to identify the extent to which teacher preparation programs prepare graduates to teach effectively. Since 2007, Louisiana's Teacher Preparation Program Assessment Model (TPPAM) has used value-added data to measure the effectiveness of teacher preparation programs by linking student growth measures to their teachers and to the colleges and universities that trained those teachers (Gansle, Noell, & Burns, 2012). Louisiana's value-added studies provide strong evidence new teachers, given proper preparation, can be as, or more, effective than experienced teachers (Gansle et al., 2012).

A large study in New York City (Boyd et al., 2009) looked at the effects of features of teachers' preparation on teachers' value-added-to-student-test score performance and found evidence that preparation matters. Results indicated variation across preparation programs in the average effectiveness of the teachers; in particular, preparation directly linked to practice appears to benefit teachers in the first year of practice. The New York study data support that differences in teacher preparation programs can affect new teacher effectiveness. The researchers also found that more effective teacher education included well-constructed and supervised student teaching experiences aligned with future teaching assignments, both in terms of content and grade level.

Implementation of value-added evaluation of teacher effectiveness in Louisiana and nation-wide highlight the responsibility of teacher preparation programs to ensure highly qualified teachers are prepared for the challenges faced in every classroom. Literature and policy research has identified preservice teacher learning as key to P-12

student learning outcomes (Levine, 2006). The most pervasive, and most influential, pedagogy in teacher education is the supervised student teaching experience.

For decades, teaching certification in the United States was based upon the successful completion of a student teaching practicum. Experienced and newly certified teachers have consistently reported their student teaching experiences to be the single most powerful component of their teacher preparation programs (Borko & Mayfield, 1995; Chesley & Jordan, 2012; Guyton & McIntyre, 1990; Valencia, Martin, Place, & Grossman, 2009).

The tremendous value of student teaching as a constructive episode in the final phase before graduation and certification is well recognized as a required component of teacher preparation programs (Cochran-Smith & Zeichner, 2005; Darling-Hammond & Bransford, 2005). Clinical practice was identified by the National Research Council (2010) as one of the three aspects of teacher preparation likely to have the highest potential for effects on outcomes for students, along with content knowledge and the quality of teacher candidates. The capstone event of a sequence of formal education and standard coursework, student teaching can provide the opportunity for a teacher candidate not only to observe teacher actions and behaviors, but also to experience teaching (Lunenberg, Korthagen, & Swennen, 2007).

The significant impact of the student teaching experience on new teachers is clearly supported in the literature, but national studies of teacher education programs continue to report that high quality student teaching programs are not the norm (Darling-Hammond, 2000, 2006; Levine, 2006; National Council on Quality Teaching, 2011). A study found recent graduates of teacher preparation programs believe that student

teaching, rather than the lessons they experienced in university classrooms, was the most effective component of their preservice learning. Many of these teachers reflected, however, that their student teaching programs had few or no standard activities or goals; therefore, the quality of their experiences depended entirely on the knowledge and skill of their cooperating or mentor teachers (Chesley & Jordan, 2012).

Selection of expert, effective cooperating teachers who can foster successful student teaching experiences and serve as a primary role model for the teacher candidate is central to the success of student teaching (Cochran-Smith, 1991; McIntyre, Byrd, & Foxx, 1996; Wideen, Mayer-Smith, & Moon, 1998). Multiple studies, however, have shown a lack of sufficient preparation for cooperating teachers (Britzman, 2003; Clarke, 2007; He, 2010; Kent, 2001; Wilson, 2006) resulting in unclear expectations and understanding of their roles and responsibilities (Koskela & Ganser, 1995). Lack of consistency and rigor in field work and clinical practice has made university-based programs vulnerable to both criticism and competition.

Criticisms specific to student teaching may be remedied through improved effectiveness of cooperating teachers as field-based teacher educators. Given the important role of cooperating teachers in the student teaching experience, teacher preparation programs need to ensure that the skills and the commitment of assigned cooperating teachers are exemplary, and that the cooperating teachers themselves are models of best practice (Chesley & Jordan, 2012).

Statement of the Problem

Universities and school systems collaborate in the formation and development of potential new teachers. The P-12 schools need well-prepared quality teachers, and universities need effective, qualified teachers to serve as cooperating teachers during the student teaching practicum. In recent years, cooperating teachers have taken on increasing responsibility for the preparation of preservice teachers. Cooperating teachers must model, instruct, assess and provide feedback to student teachers based on professional and national standards that regulate what teacher candidates should know and be able to do (National Council for Accreditation of Teacher Education [NCATE], 2008). While most cooperating teachers are well intentioned in their work with student teachers, research suggests few are adequately prepared by schools, colleges and departments of education for the challenging work of cooperating teaching (Koskela & Ganser, 1995; Sinclair, Dowson, & Thistleton-Martin, 2006).

The issue of teacher effectiveness pervades the field of education, yet there is a lack of consensus among education professionals on a standardized description of cooperating teachers' effectiveness. A shared expectation regarding knowledge, skills, and dispositions necessary for cooperating teachers' work as teacher educators has yet to be broadly adopted (Holbert, 2011). Given the importance of providing quality cooperating teachers, this study investigated specific differences in cooperating teachers' actions based on grade level and content area as perceived by student teachers. The problem is a lack of shared expectation through a common language and framework across programs for teacher candidates regarding knowledge, skills, and dispositions necessary for cooperating teachers' work as teacher educators.

Purpose of the Study

The purpose of this study was to determine if student teachers' perceptions of cooperating teachers' modeled actions of professional standards were consistent across context, specifically certification grade bands. This study analyzed data from student teachers studying within specific certification and grade levels to identify perceived context-specific differences in cooperating teacher actions. Data from the study can be used to identify needs regarding professional development and preparation of cooperating teachers for their work with student teachers.

Research Questions

The following research questions emerged to guide the study:

1. Are student teachers' perceptions of cooperating teachers' modeling of Core Propositions in Student Teaching significantly different across certification grade bands?
2. Are student teachers' perceptions of cooperating teachers' modeling of Enactment of Standards for Teacher Education in Student Teaching significantly different across certification grade bands?
3. Are student teachers' perceptions of cooperating teachers' behaviors during the student teaching experience in relation to learning about teaching significantly different across certification grade bands?
4. Are student teachers' perceptions of cooperating teachers' personal teaching efficacy significantly different across certification grade bands?
5. Are student teachers' perceptions of personal teaching efficacy significantly different across certification grade bands?

Hypotheses

The hypotheses which guided this study are:

1. There is no significant difference in student teachers' perceptions of cooperating teachers' modeling of Core Propositions in Student Teaching across certification grade bands.
2. There is no significant difference in student teachers' perception of cooperating teachers' modeling of Enactments of Standards for Teacher Education in Student Teaching across certification grade bands.
3. There is no significant difference in the student teachers' perception of cooperating teachers' behaviors during the student teaching experience in relation to learning about teaching across certification grade bands.
4. There is no significant difference in the student teachers' perception of cooperating teachers' personal teaching efficacy across certification grade bands.
5. There is no significant difference in student teachers' perceptions of personal teaching efficacy across certification grade bands.

Significance of the Study

Cooperating teachers have been cited as being the most influential individuals in terms of making impressions and modeling classroom practices that their student teachers are likely to follow and continue throughout their careers (Crasborn, Hennissen, Brouwer, Korthagen & Bergen, 2008; Killan & Wilkins, 2009). In light of the critical value of the student teaching experience for teacher candidates and the significant influence of the cooperating teacher as a primary role model, the challenge remains for teacher education to ensure cooperating teachers model effective teaching behaviors.

The majority of research that defines qualities of a great cooperating teacher is derived from studies of student teachers' satisfaction with their experiences (Connor & Killmer, 2001), rather than examination of cooperating teachers' practice based on a valid and reliable standards-based tool. This study sought data based on standards that more clearly define characteristics considered hallmarks of quality clinical faculty (Holbert, 2011). Analysis of student teachers' perceptions of their cooperating teachers' actions may contribute to research-based data essential for the development and evaluation of teacher education training for cooperative teachers. Data may inform teacher education programs in the selection, evaluation, and preparation of cooperating teachers most likely to promote candidate learning through enactment of teacher educator roles.

Further research is needed to establish clear connections between cooperating teaching actions and student teacher learning in order to identify an appropriate set of expectations for field-based teacher education. This study contributes to the literature by reporting perceived differences in cooperating teachers' actions within specific content areas and grade levels to identify perceived context-specific differences.

If the goal of teacher preparation programs is to prepare effective teachers who impact student achievement positively, it is critical to identify behaviors that constitute quality cooperating teaching. Teacher educators are in agreement that new teachers need the opportunity to develop a vision of good teaching, but they disagree about how to analyze what leads to good teaching (Dewey, 1964; Feiman-Nemser, 2001; Mewborn & Stinson, 2007; Wood, 1991). Examination of data from this study may reveal that not all elements of quality cooperating teaching are represented in individual cooperating teachers or even found consistently in cooperating teachers across contexts. As teacher

educators continue to rely upon the influence of the cooperating teacher, identification of patterns in demonstrated practices will allow focus of efforts on provision of effective professional development and provide a framework for meaningful selection of cooperating teachers. As cooperating teachers' capabilities to promote student teaching learning are examined and increased, the quality of teachers entering the field is likely to be impacted positively (Hoff, 2010).

Despite evidence that the evolution of teaching styles during student teaching is a direct result of the modeling of individual cooperating teachers, research is limited on whether cooperating teachers model effective instructional practices (Hoff, 2010). Research is needed to ascertain consistency of actions and abilities of cooperating teachers to model the necessary knowledge, skills, and dispositions across grade bands and content areas. Data from this study could be used to address a key challenge for teacher education programs in developing high quality student teaching experiences: designing and delivering professional development to improve the ability of cooperating teachers to effectively mentor and model effective professional actions and behaviors.

Definition of Terms

The following terms were defined for clarity as to the meaningful and consistent use of the terms and how they relate to the research questions and data gathered from this study.

1. *Certification Grade Bands:* For the purpose of this study, *certification* refers to the curriculum of study necessary for preparation to teach specific content or grade levels. *Grade bands* refer to the grade levels designated by the State of Louisiana for each certification area (Louisiana Department of Education, 2012a)

2. *Clinical Practice:* "Student teaching or internship that provide candidates with an intensive and extensive culminating activity. Candidates are immersed in the learning community and are provided opportunities to develop and demonstrate competence in the professional roles for which they are preparing" (NCATE, 2008, p. 85).
3. *Context:* For the purposes of this study, *context* refers to the grade level or and/or content area classroom in which the student teacher is placed for the student teaching experience.
4. *Cooperating Teacher:* In this study, *cooperating teacher* is used synonymously with the term mentor teacher and clinical faculty. "P-12 school personnel and professional education faculty who are responsible for instruction, supervision, and/or assessment of candidates during field experiences and clinical practice" (NCATE, 2008, p. 85).
5. *Field Experiences:* "A variety of early and on-going field-based opportunities in which candidates may observe, assist, tutor, instruct and/or conduct research. (NCATE, 2008, p. 86).
6. *Students:* Children and youth attending P-12 schools as distinguished from *teacher candidates.*
7. *Student Teacher:* A teacher candidate who is engaged in an intensive and extensive culminating field experience in which he or she ultimately takes on full responsibility for the duties of a professional educator under the guidance of a cooperating teacher as mentor. A student teacher is a teacher candidate engaged in clinical practice.
8. *Student Teaching or Student Teaching Practicum:* Preservice clinical practice in P-12 schools for candidates preparing to teach.

9. *Teacher Candidate:* In the context of this study, the term teacher candidate is used synonymously with the term preservice teacher. Candidates are "individuals admitted to, or enrolled in, programs for the initial or advanced preparation of teachers, teachers continuing their professional development, or other school professionals. Candidates are distinguished from *students* in P-12 schools" (NCATE, 2008, p. 85).

Theoretical Framework

This study is grounded in the well-supported findings in teacher education research that the cooperating teacher has significant impact on the development of the student teacher (Cochran-Smith, 1991; Darling-Hammond, 2006; Joyce & Showers, 1982; Kagan, 1992). Copas (1984) concluded that the demonstrated behaviors of cooperating teachers could greatly affect a successful student teaching experience and teacher candidates' future teaching behaviors. Most teacher candidates have been found to mimic their cooperating teachers in terms of both attitudes and practices (Seperson & Joyce, 1973). Educational leaders agree that interactions between cooperating teachers and student teachers are critical in predicting the evolution of the student teacher into a highly qualified teacher (Hamman, Fives, & Olivarez, 2007). Literature on the role of the cooperating teacher repeatedly refers to the cooperating teacher as "model" (Copas, 1984; Grossman & McDonald, 2008; Olson & Carter, 1989; Sanders, Dowson, & Sinclair, 2005).

Due to the significant impact of cooperating teachers as models for the future demonstrated behaviors of their student teachers, Bandura's social cognitive learning theory was explored to examine the role of both the model (cooperating teacher) and the observer (student teacher) in the learning process. Social Learning Theory posits that

people learn from one another through observation, imitation, and modeling. According to Bandura (1977), "... most human behavior is learned observationally through modeling, from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action" (p. 22). Bandura (1986) referred to modeling as an "information-processing activity in which information about environmental events is transformed into symbolic representations that serve as guides for action (p. 51).

Models and modeling play an essential role in observational learning. At its core, modeling refers to imitation as a function of observation; however, it is much more than simple mimicry (Bandura, 1986). As a process of learning, modeling draws from various theoretical perspectives, including behaviorism (Skinner, 1950), social learning and social cognitive theory (Bandura, 1977, 1986), sociocultural theory (Vygotsky, 1978), and information processing theory (Atkinson & Shiffrin, 1968) to explain how the model, the observer and patterns of reinforcement interact to affect learning and behavior.

Bandura and other early social learning theorists bridged the crucial gap between behavioral theory and cognitive learning theories. Social learning theorists hypothesized that, rather than having to be "conditioned" or "shaped", adults in any society transferred skills and knowledge of that society through a socialization process (Schunk & Zimmerman, 1996). This caused an increasing focus on how models and observers influenced the learning process, especially in Bandura's model of reciprocal determinism (Bandura, 1986).

Theories related to student learning also have application to learning by the student teacher. Vygotsky's sociocultural theory of intellectual development combines

many important aspects of modeling in a way that illustrates the importance of observation in the process of learning. Vygotsky (1978) described a process of intellectual development that begins at the level of observation and eventually moves to the level of internalization. Without actually using the term modeling, Vygotsky suggests real-life models, such as cooperating teachers, are essential in the internalization and integration of skills and knowledge that are first perceived at the level of observation.

With Bandura's reciprocal determinism model of learning, greater attention was paid to how the individual (observer) played a role in the learning processes, especially in how cognitive and motivational processes influenced individual perceptions of observed events. According to Bandura and Walters (1963), reinforcement in modeling operates in one of four ways, three at the level of the observer, and one at the level of the model. At the level of the observer, there is increased probability that an observed behavior will be imitated if: (a) the observer is directly reinforced by the model, such as when the cooperating teacher praises the student teacher for demonstrating good classroom management; (b) the imitated behavior is reinforced by its own consequences, such as students responding positively to the student teacher enforcing classroom procedures; or (c) the observer experiences vicarious reinforcement, such as the student teacher who applies a management technique after observing it being used with success by the cooperating teacher. Reinforcement occurs at the level of the model, when being imitated becomes reinforcing itself, such as the cooperating teacher who observes improvement in the student teachers' management of the classroom as a result of instruction from the cooperating teacher.

Attributes associated with effective models include power, prestige, competence, and warmth or caring. Models who demonstrate one or more of these characteristics are likely to have a stronger influence on the observer (Bandura, 1986). These characteristics are often attributed to cooperating teachers (Anderson, 2007; Beck & Kosnick, 2002; Everston & Smithey, 2000; Glenn, 2006).

Bandura (1986) noted that the greater the cognitive ability and prior knowledge on the part of the observer, the greater the perceptive ability of what is being observed. Information processing theorists have explained how encoding, retrieval, long- and short-term memory, and metacognition processes influence observational learning (Schunk & Zimmerman, 1996). Both cognitive ability and prior knowledge place focus on how observers perceive and process the information they are observing and to a greater degree how capable they will be in reproducing the observed skill or behavior. Teacher candidates participating in a student teaching practicum are assumed to have both the cognitive ability and prior knowledge and skills in order to benefit from and effectively apply the actions they observe.

Darling-Hammond and Bransford (2005) stated, "...teacher education programs can benefit from exploring the degree to which their courses and programs are consistent with what is known about how people learn" (p. 76). While multiple factors interrelate to create a successful student teaching experience, learning theory and research support the strong and lasting influence of the cooperating teacher as model for learning for the student teacher. An important challenge in teacher preparation is to prepare cooperating teachers at all grade levels and content areas to model effective actions and interactions based on professional teacher education standards.

CHAPTER TWO

REVIEW OF THE LITERATURE

Overview

The body of research concerned with teacher education reflects multiple issues related to the process of becoming a teacher. These issues include the goals, the settings, the participants, the political context, and the curricula that shape teacher preparation. The breadth of literature testified to the complexity and wide-ranging nature of teacher education. One finding that consistently emerged is the importance of the student teaching practicum and cooperating teachers in the context of new teacher preparation.

Providing education that is appropriate to 21st-century learners is increasingly important to the success of both individuals and nations, and growing evidence demonstrates that teachers' abilities are especially crucial contributors to student learning (Darling-Hammond, 2006). The over 100,000 beginning teachers who enter United States schools each year vary greatly in the skills and experiences they bring to the job and in the formal preparation they receive to assume the demanding responsibility of educating America's youth (Darling-Hammond & Baratz-Snowden, 2007). In a policy brief on the clinical component of teacher preparation, the American Association of Colleges for Teacher Education (American Association of Colleges of Teacher Education [AACTE], 2010) stated a turning point had been reached in recognizing the importance of high-quality clinical programs in teacher preparation.

Teacher learning is comprised of a complicated complex array of internal and external resources. The process is contextualized, unpredictable, and often idiosyncratic (Darling-Hammond, 2006). Learning to teach is a continuum that only begins with a teacher education program and extends throughout one's career. Necessary to teacher development, the clinical experience component of a teacher education program provides novice teachers structured opportunities to gain experience in authentic settings of actual teaching practice (Grossman, 2010). These experiences allow prospective teachers to construct their own understandings of teaching based on the practical dilemmas they will encounter in the field (Cuenca, 2011). Research pointed to the pivotal role of the cooperating teacher during the time when teacher candidates are learning to teach.

Significance of the Student Teaching Experience

Few dispute the tremendous potential value of the student teaching experience. Even alternate routes to certification provide teaching candidates with at least an abbreviated clinical experience. Eagerly anticipated by preservice candidates, the student teaching experience represents a significant milestone toward becoming an effective teacher (McIntyre et al., 1996). As the capstone event of a new teacher's sequence of formal education, the student teaching practicum shapes his or her entry into the teaching profession and determines recommendation for certification and licensure.

Practicing teachers overwhelmingly and consistently rated their student teaching experiences as the most beneficial and critical component of their teacher education programs (Borko & Mayfield, 1995; Guyton & McIntyre, 1990; Levine, 2010; Valencia et al., 2009). In one study, 75 % of 15,500 education school alumni, graduates from ten to 15 years prior to the study, characterized the student teaching experience as the most

valuable aspect of their education programs even though most reported having one semester or less of field experience (Levine, 2006).

The process of teaching is not without problems, and the student teaching experience is not without critics. Lortie (1975) described the teaching practicum as a setting that provides student teachers with little opportunity to explore their own instructional and management approaches, thereby thwarting experimentation and helping entrench current instructional practices. Criticisms of the student teaching experience have included poorly defined purposes for student teaching (Watts, 1987), disconnects between theory and practice (Levine, 2006), and weak relationships to other components (Guyton & McIntyre, 1990). Negative aspects of the teaching practicum tend to be attributed to institutional constraints inherent in real-world settings, such as the cooperating teacher's responsibility to pupils, and often to characteristics of cooperating teachers who are unable or unwilling to support the needs of an adult learner in the context of learning to teach (Borko & Mayfield, 1995; Guyton & McIntyre, 1990).

Importance of Clinical Experience

Strong clinical preparation of teachers, a key factor in their students' successes, impacts the ability of future graduates, and thus our nation, to participate in a pluralistic democratic society and to compete in the challenging global market (AACTE, 2010). Clinical practice is identified as one of three aspects of teacher preparation, along with content knowledge and quality of teacher candidates, likely to have the highest potential for effects on outcomes for students (National Research Council [NRC], 2010).

Throughout the history of teacher education, expectations of student teachers and the cooperating teachers who work with them have changed significantly. The concept of

practical experience goes back at least to the mid-19th century. It was then that the normal school movement produced four core categories of study for teachers, including *practice teaching*. The term *student teaching* first appeared in the literature at the beginning of the 20th century, with one-third of teachers participating in a practicum experience by 1920 (Veal & Rickard, 1998). Since then, the student teaching practicum has become the standard for teacher education students in the United States. Normal schools were replaced by state teacher colleges, and prior to World War II student teaching placements were primarily in laboratory or demonstration schools on university campuses (Koerner, Baumgartner, & Rust, 2002). The laboratory school provided student teachers a more realistic setting to serve initially as observers, then to prepare lessons, and eventually to assume responsibility for instruction (Mecca, 2010). In the mid-1950s and early 1960s, student teaching placement shifted from campus laboratory schools to the context of the public schools expanding the roles of PK-12 educators in the preparation of new teachers. Today, most university-based teacher education programs associate clinical practice with some type of school-university partnership, such as professional development schools or partner schools, and include multiple field experiences over the length of the program.

Since the 1950s when authentic experiences in teacher education began their transition from campus laboratory school to public school settings, field experiences have been increasingly identified as critical components of teacher preparation (Darling-Hammond, 2006; Schneider, 2008). Although preparation typically included a component labeled observation and practice, in-school practicum, field experience, or more traditionally, "student teaching", the expectations of what student teachers should know and be able to do changed minimally over time. Generally, teacher candidates completed

course work on psychological principles, pedagogy, subject area content, and methodology before beginning an eight to fifteen week culminating student teaching experience that included few connections to course content (AACTE, 2010). The length of the experience, time spent in preceding field work and the level of supervision by the preparation program have all increased, but the fundamentals have remained relatively unchanged according to the National Council on Quality Teaching (National Council on Quality Teaching [NCQT], 2011) in its report on student teaching in the United States.

Present-day public perception is that teacher education is an archaic enterprise out of touch with teachers' real world needs (Wang, Lin, Spalding, Klecka, & Odell, 2011). A persistent criticism of traditional college and university-sponsored teacher education programs has been the lack of connection between campus-based, university-based teacher education courses and field experiences. Minimal collaboration on teaching and planning between university faculty and school-based faculty results in candidates learning theory in isolation from practice and with limited classroom practice dissociated from theory. The disconnect between what teacher candidates are taught in campus courses and their opportunities for learning to enact these practices in their school placements is often great (Zeichner, 2010). Zeichner (2010), citing Darling-Hammond, referred to this lack of connection as the "Achilles heel" of teacher education (p. 91).

It is argued that the old paradigm of university-based teacher education, in which academic knowledge is viewed as the authoritative source of knowledge about teaching, must shift to one where a nonhierarchical relationship among academic, practitioner, and community expertise exists (Zeichner, 2010). Consensus is that much of what teachers

need to learn must be learned in and from practice rather than in preparing for practice (Hammerness, Darling-Hammond, & Bransford, 2005).

The teacher preparation landscape has changed in the past two decades. Increasingly, teaching is recognized as an academically taught clinical practice profession similar to clinical psychology, nursing and medicine (Alter & Coggshall, 2009). Consistently, research showed the benefits of teacher preparation that are directly linked to practice. New and experienced teachers repeatedly cited the opportunities to practice as being the most critical elements of their preparation and professional growth (Ganser, 1996; Guyton & McIntyre, 1990; Levine, 2010; Zeichner, 2002). Research on teaching and learning supports the premise that aspects of what teachers need to learn can be acquired outside the elementary or secondary school classrooms for which they are being prepared, but crucial elements of professional practice can only be learned in the context of the classroom under the guidance of a strong mentor (AACTE, 2010; Ball & Cohen, 1999). The knowledge of teaching emerges directly from the activity of teaching as one learns to teach in context, on site, in collaboration with other teachers or professionals. Fundamentally, one learns to teach and learn with students, their families and communities (Stokes, 1997).

As an integral component of teacher development, the design of high-quality clinical experiences for prospective teachers requires bridging a number of divides: between professional knowledge and skilled practice, between universities and PK-12 schools, and between the setting in which prospective teachers learn and the contexts of their early years of teaching (Grossman, 2010). The design of these experiences must culminate in a set of knowledge, skills, and dispositions that determine what teachers

actually do in the classroom (Darling-Hammond, 2006). Student teaching candidates must be able to synthesize what they have learned about how to plan lessons, select and develop instructional strategies and materials, implement instruction, guide group activities, and establish and maintain effective classroom management.

Consideration of how preparation experiences affect new teachers' future practice and beliefs has always been at least an implicit part of teacher education research (Lortie, 1975; Seperson & Joyce, 1973). Research found that teacher preparation does matter. In a large scale study of teacher preparation in New York state, Boyd et al.(2009) found that the more effective teacher education programs gave their teacher candidates opportunities to learn specific practices, provided student teaching experiences aligned with future teaching assignments (both in terms of content and grade level) and arranged well-constructed and supervised teaching experiences. Teacher candidates were found to be more able to connect theoretical learning to practice, to become more comfortable with the process of learning to teach and to more ably enact what they are learning to practice when a well-supervised clinical experience precedes course work, or is conducted jointly with it (Hammerness et al., 2005).

Although data clarifying the direct impact of teacher preparation on student achievement have been disputed (Koretz, 2008), the importance of a strong clinical education in helping new teachers take up specific practices that will positively impact the learning of their students has been confirmed through years of research (Darling-Hammond & Bransford, 2005). A uniformly strong student teaching experience has the power to significantly improve the vision of teaching excellence. Value-added studies of teacher preparation programs support the premise that differences in teacher preparation

can affect new teacher effectiveness (Gansle et al., 2012), and that the most effective teacher education programs include a well-constructed and supervised student teaching experience (Boyd et al., 2009).

Multiple studies have consistently identified key elements essential to strong clinical preparation for teachers (AACTE, 2010; Boyle-Baise & McIntyre, 2008; Darling-Hammond, 2006; Grossman, 2010; National Research Council, 2010; Zeichner & Conklin, 2005). These include:

- Clinical experience should provide opportunities for teacher candidates to observe, practice, and receive high-quality coaching and assessment related to teaching practices that are known to promote student achievement.
- Clinical experiences in schools and communities should be structured carefully and mediated in a manner that provides teaching experience appropriate for candidates' levels of readiness and careful scaffolding toward full teaching responsibility.
- Joint planning and ongoing evaluation of the curriculum for clinical experiences by the relevant partners responsible for the training, including school, community, and university teacher educators should be a component.
- Clinical placement schools and mentor teachers should be selected based on the quality of teaching they exhibit and on the potential of mentors to provide high-quality coaching on the teaching practices that are emphasized in a teacher education program and that are known to promote student learning.

- Mentor teachers and school-based and university-based field supervisors who work with teacher candidates should be prepared formally for and supported in their work with regard to both coaching and assessment practices.

Professional preparation requires opportunities to master a solid knowledge base along with the opportunities to learn when and how to use knowledge in practice. Clinical practice must provide the opportunity for novice teachers to apply all the knowledge they are learning about teaching and student learning, and to refine it (Levine, 2010) under the guidance of quality teachers and effective mentors.

Importance of the Cooperating Teacher

Over three decades of research documents the influential role of the cooperating teacher in supporting teacher learning. Researchers have pointed to the pivotal role played by experienced teachers during the time when teacher candidates are learning to teach. The cooperating teacher has been found to have high influential impact in areas of personal support, role development, and professional skills (Karmos & Jacko, 1977). Noted to spend the most time and to offer the most daily interactions with student teachers (Clarke, 2007), cooperating teachers guide and support teacher learning and serve as gatekeepers to experiential learning of preservice teachers (Cuenca, 2011). Cooperating teachers can greatly influence teaching context, behaviors, and beliefs of their student teachers in both positive and negative terms (McIntyre et al., 1996).

Several studies indicated the significant influence cooperating teachers have on student teachers' beliefs about the teaching profession (Stanulis, 1994), professional norms (Koerner et al., 2002), and what student teachers decide to teach (McIntyre & Byrd, 1998). Studies have also indicated their impacts on preservice teachers' identity

formations (Gratch, 2000) and classroom management, planning, instructional delivery, efficacy and diversity related practices (Association of Teacher Educators, 1999). Copas (1984) reported that "the value of the direct learning experience in schools seems to depend upon the quality of the teacher with whom the student is placed" (p. 49).

Teacher Quality

Few topics in education have captured as much attention from policy makers and practitioners as the connection between teaching quality and student achievement. The research has clearly shown that quality teaching matters to student learning. A landmark Tennessee study (Sanders & Horn, 1998) using random assignment of teachers and students to classrooms firmly established the advantage for students of having a high-quality teacher over a number of years. The single most important school-level factor associated with student learning is the quality of the classroom teacher (Aaronson et al., 2007; Rivkin et al., 2005). Research demonstrated that the classroom teacher is more significant than the curriculum, students' socio-economic achievement, or the learning community (Darling-Hammond, 2000; Sanders & Horn, 1998; Sanders & Rivers, 1996). Studies indicated that exposure to a strong teacher makes a dramatic difference in student achievement (Gordon et al., 2006; Rivkin et al., 2005; Wright et al., 1997).

The effects of teachers on student achievement are both additive and cumulative. Sanders and Rivers (1996) found that having several effective teachers, in consecutive years, could affect standardized scores by as much as 50 percentile points. Gordon et al. (2006) found students taught by teachers in the top quartile of effectiveness average an advance of approximately five percentile points each year relative to their peers, whereas students taught by teachers in the bottom quartile of effectiveness lose, on average, five

percentile points relative to their peers. The same study indicated that if all African-American students were assigned to four highly effective teachers in a row, this would be sufficient to close the average Black-White achievement gap.

Just how imperative it is to improve the quality of our teacher workforce is underscored in studies signifying the effects of teachers on student achievement gains (Boyd et al., 2009; Cochran-Smith & Zeichner, 2005; Rivkin et al., 2005). Clearly, teacher preparation has a prominent role to play in addressing the challenge of improving the quality of teaching and learning. Providing all P-12 students with a quality education depends upon the capacity of teacher preparation programs to staff schools with highly effective teachers. If the goal of teacher preparation programs is to train effective teachers who impact student achievement positively, it is essential to identify factors that constitute quality teaching.

No firm consensus by educational researchers and policymakers has been reached on what constitutes high-quality teaching or a quality teacher. The federal law No Child Left Behind (NCLB) definition of a *highly qualified teacher* focused on teacher characteristics or qualifications. This federal definition set a minimum base for teacher knowledge and focused on input measures. NCLB (2002) specified qualifications include holding a bachelor's degree, a state teaching certification or a passing score on the state teacher licensing examination, and subject matter knowledge. This legislative definition has been criticized for its narrow focus on content preparation, imprecision of measures and the variability across states to define when a teacher has met criteria. While easily quantified from state databases, these credentials, due to the immense diversity of

certification pathways do not present precise indicators of teacher knowledge or practice (Liston, Barko, & Whitcomb, 2008).

A frequently used but less exact term, is the *good* teacher. Good teaching is not simply a matter of personal style, individual commitment or a fondness for children. It requires detailed knowledge of the content area being taught, a great deal of precision and skill in making it learnable, as well as good judgment and a tremendous capacity to relate to a wide range of young people (AACTE, 2010). Shulman (1987) provided a definition of good teaching as one grounded in the moral dimensions of teaching that reflects a complex and holistic understanding of a teacher's interactions with and impact on students. The teaching process is dynamic and reciprocal. Good teachers connect learners with significant ideas, with themselves, and with the world. Good teachers do more than boost achievement; they shape lives.

Critics emphasize the measurement problems with such a definition. How does one assess teachers' abilities to shape students' identities? The definition of a teacher's impact is too expansive to measure, so the belief is that efforts to enhance teacher quality should focus on academic achievement of students (Liston et al., 2008).

The term *effective teacher* commonly refers to a teacher's ability to foster student achievement. Although research on teacher effectiveness dates back for decades, effective teaching is complex and challenging to define. Two categories of effective teaching have typically been analyzed: professional skills such as pedagogy, subject matter knowledge, policy, cultural knowledge, multiple approaches and teaching styles, professional teaching characteristics, and dispositions (Diez, 2007; Freeman, 2007).

Dating back to the 1960s and 70s, research on effective teaching has examined specific teaching practices and correlated them with student learning gains. Later research on teacher effectiveness was grounded in classrooms and often employed classroom assessments (Marzano, Pickering, & Pollack, 2001). More recently, teacher effectiveness has been defined in terms of the teacher's ability to improve student achievement as measured on standardized tests.

The premise of value-added models is that although there is a measurable variation in effectiveness across teachers, this variation is not captured by the common indicators of quality, such as teacher preparation and experience, but is captured in pupil performance scores. Using this approach, researchers are able to isolate the effect of the teacher from other factors related to student performance. Studies using value-added methodologies emphasize developing data systems that allow states and districts to identify teachers who contribute to children's achievement growth each year (Rivkin et al., 2005). The focus on teacher quality has moved from qualifications to achievement outcomes. Hanushek (2002) defined teacher quality as "good teachers are ones who get large gains in student achievement in their classes; bad teachers are just the opposite" (p. 3).

Berliner (2005) wrote that quality teaching consists of both good teaching and effective teaching. *Good* is normative and is what is expected of people in a position. *Good* teaching occurs when the standards of the field are upheld while *effective* teaching is about students learning and reaching academic achievement goals. Fenstermacher and Richardson (2005) also distinguished between "good" teaching, teaching that accords with high standards for subject matter content and methods of practice, and "successful"

teaching, teaching that yields the intended learning. Other definitions reflected a more complex and holistic understanding of how teachers engage learners and affect students' values, commitments, and identities (Loeb, Rouse, & Sharris, 2007).

Characteristics of Effective Teaching

Another approach to identifying teacher quality looks to determine which, if any, characteristics, attributes, and qualifications generally considered indicators of teacher quality are actually linked to student achievement or other outcomes (Darling-Hammond, 2000). Theoretical and empirical research has identified characteristics specifically associated with effective teaching (Cochran-Smith & Zeichner, 2005; Darling-Hammond & Bransford, 2005). These characteristics include:

- Deep knowledge of content and how to teach it;
- Ability to understand and relate to students and their needs;
- Command of a set of pedagogical tools and resources and the ability to use them on demand;
- Ability to affect positive learning outcomes in students; and
- Ability to be a functional member of a team, school faculty, or learning community.

An analysis of teacher characteristics related to teaching effectiveness (Rice, 2003) found five measurable teacher characteristics that reflect teacher quality and impact student achievement: teacher experience, teacher preparation program and degrees, type of teacher certification, specific coursework taken in preparation for the profession, and teacher's own test scores. Wayne and Youngs' (2003) narrative synthesis of 21 studies examined the relationship between teacher characteristics and pupil

achievement and concluded that students learn more from teachers with certain characteristics, including teacher education level.

Instructional and classroom-management-oriented frameworks that are not tied to the teaching of particular subject matter content or grade levels are currently the focus of identifying effective teaching practice (Danielson, 2007; Lampert, 2001; Lemov, 2010; Marzano, 2007; Pianta, 2011). The observational component of teacher evaluations received new focus as states considered multiple ways to assess teacher effectiveness. Several studies have illustrated how teacher evaluations, such as the Framework for Teaching (Danielson, 2007), are related to student achievement and, in some cases, correlated with value-added measures (Kane, Taylor, Tyler, & Wooten, 2010; Kimball, White, Milanowski, & Borman, 2004). Components of effective pedagogy from Danielson's Framework for Teaching (2007) are utilized in many states, including Louisiana, to inform teacher evaluation and professional development.

Characteristics of Effective Cooperating Teachers

While research identifies important characteristics of an effective teacher, one could question whether being an effective teacher necessarily makes one an effective *cooperating* teacher. Zeichner (2002) stated, "Being a good cooperating teacher is important but not synonymous with being a good teacher. Being a good cooperating teacher is more than providing access to a classroom or modeling a particular version of good practice" (p. 59).

The student teaching experience should provide teacher candidates the opportunity to grow as educators, to learn from those who are more knowledgeable, to take risks, and to fail without becoming failures (Glenn, 2006). Distinguishing the

characteristics of an effective cooperating teacher can help ensure that preservice teachers are placed in settings that will benefit and support their first authentic teaching endeavors.

Literature defining the qualities of a good cooperating teacher is derived primarily from qualitative studies of student teachers' satisfaction with their experience, not from studies of cooperating teachers' effectiveness as instructors. Preservice teachers, when asked to identify the most beneficial behaviors and practices demonstrated by their cooperating teachers, noted good classroom organization and planning, positive rapport with students, knowledge of subject matter, establishment of a daily routine, good classroom management, and compassion toward students as important (Osunde,1996).

A two year qualitative study (Connor & Killmer, 2001) examined the responses of elementary and secondary level student teachers and cooperating teachers to questions about characteristics of effective cooperating teachers. Data, analyzed separately for elementary and secondary education levels, showed agreement from both groups on important characteristics: (a) providing helpful feedback and guidance, (b) sharing files and ideas, (c) allowing the freedom to try new things, and (d) providing a positive and supportive environment. Feedback and sharing of files and ideas were noted twice as often by elementary level student teachers. Responses of the cooperating teachers were consistent with those of the student teachers. The importance of professional modeling and a caring attitude were identified by both groups as significant.

In their study of the characteristics of highly effective cooperating teachers Killan and Wilkins (2009) rated supervisory effectiveness. The most powerful association for high effectiveness was graduate level preparation in supervision and included master's degrees in teacher leadership, coursework on systematic observations and feedback,

conferencing skills, ability to articulate beliefs behind practices and uses, and employing practices congruent with those beliefs. Additionally, the study showed three factors consistent in cooperating teachers who were perceived to be effective: (a) a midrange of years of teaching experience, (b) past and multiple experience in supervising student teachers, and (c) close collaboration with the university supervisor. The findings also indicated effective cooperating teachers were more concerned with student achievement than having a student teacher who replicated their teaching methods and practices.

A qualitative study examined the underlying traits cooperating teachers possess that make them effective in meeting the needs of their assigned student teachers. Findings suggested that effective mentors collaborate rather than dictate, relinquish an appropriate level of control, allow for personal relationships, share constructive feedback, and accept differences (Glenn, 2006).

Young and Edwards (2006) studied the perceptions of student teachers on the most important elements of the student teaching experience. Prior to the start of the experience, student teachers rated a positive attitude as the most important element followed by the willingness to be a mentor and clear communication of expectations. At the end of the internship the same student teachers rated communication of clear expectations as the most important element. Being a good mentor, a good role model, and providing frequent evaluation and feedback were tied for the second most important element. A qualitative study of student teachers' perceptions of components of a good practicum placement (Beck & Kosnik, 2002) found student teachers valued emotional support, a peer relationship, collaboration, flexibility in teaching content and methods, and feedback on performance from their cooperating teachers.

Roberts' (2006) model of cooperating teacher effectiveness categorizes 30 explicit characteristics into four major categories. The categories include teaching/instruction, professionalism, relationship, and personal characteristics. Epps (2010) investigated perceptions of cooperating teachers and student teachers on the characteristics of an effective cooperating teacher in a qualitative study based on Roberts' (2006) model. The study showed a lack of alignment in perceptions by student teachers and cooperating teachers. Analysis found that student teachers perceived the construct of teaching/instruction as the most important characteristic of an effective cooperating teacher. Student teachers also indicated the importance of having a good role model during the transition from apprentice to professional educator, but they did not view a relationship with the cooperating teacher as most important.

Conversely, cooperating teachers in the study did not place as much importance on the construct of teaching/instruction but rather placed importance on factors supported by the personal characteristics construct. Cooperating teachers perceived that an effective cooperating teacher was one who was dependable, reliable, respectful, and cooperative. Major differences in perceptions could lead to major frustrations during the student teaching experience (Epps, 2010; Johnston, 2010).

Kahn (2001) also analyzed perceptions of cooperating teachers on the student teaching experience. The common themes that emerged from the qualitative study on what evidences a successful student teaching experience included growth of the student teacher, personal attributes of the cooperating teacher, and the relationship established between the cooperating teacher and student teacher.

Recommendations issued in the 2010 policy brief on the design of clinical practice in teacher preparation by the Partnership for Teacher Quality formed by the National Education Association (NEA) and the American Association of Colleges for Teacher Education (AACTE) asked for additional research focused on characteristics and practices of cooperating teachers (Grossman, 2010). The Blue Ribbon Panel on Clinical Preparation and Partnership for Improved Student Learning convened by the National Council on the Accreditation of Teacher Education (NCATE) also issued recommendations in its 2010 report: *Transforming Teacher Education through Clinical Practice: A National Strategy to Prepare Effective Teachers*. The panel identified ten design principles for clinical-based preparation which included rigorous selection and preparation of clinical educators (NCATE, 2010).

Selection of Cooperating Teachers

Making access for teacher candidates to high-quality cooperating teachers is one of the most important functions of any teacher education program. Teacher candidates have only one chance to experience the best possible placement. Consistently, the success of student teaching has been shown to be dependent on the selection of expert, effective cooperating teachers who can foster positive student teaching experiences for the novice teacher (Cochran-Smith, 1991; Copas, 1984; Cuenca, 2011; Wideen et al., 1998). Literature supported the benefit prospective teachers receive from cooperating teachers who provide both instructional guidance and opportunities for independent teaching (Hamman et al., 2007; Woullard & Coats, 2004) and documents the consequences of a poor match between a prospective and cooperating teacher (Johnston, 2010; Karmos & Jacko, 1977). Anderson (2009) reported that the influence of the cooperating teacher can

significantly and immediately affect and alter how a new teacher performs in the classroom.

A concern frequently voiced is the perceived disregard found in teacher education programs for selecting cooperating teachers who are trained to sanction and legitimize the work of student teachers (Darling-Hammond & Hammerness, 2002; Laboskey & Richert, 2002; NCTQ, 2011). Not all cooperating teachers are highly qualified, and many are ineffective, leading to disappointing experiences for many student teachers (Britzman, 2003). Research acknowledged that recruiting thousands of experienced teachers to train novice teachers leads to difficulty in maintaining standards for the quality of placements (Goodlad, 1990, NCTQ, 2011). However, the success of student teaching has been shown to be dependent upon the selection of expert, effective cooperating teachers who can foster successful student teaching experiences for novice teachers (Cochran-Smith, 1991; Johnston, 2010; Koehler, 1985; McIntyre et al., 1996; Seperson & Joyce, 1973; Wideen et al., 1998).

University teacher preparation programs are criticized for not being held to specific standards in the selection of cooperating teachers. Standards for the National Council for Accreditation of Teacher Education (NCATE), which served for over five decades as the primary accrediting agency for teacher preparation in the United States, did not indicate any specific qualifications that the cooperating teacher should possess (NCATE, 2008). Standards for the newly consolidated accrediting agency, Council for the Accreditation of Educator Preparation (CAEP) define clinical educators as " all education preparation program and P-12 school-based individuals, including classroom

teachers, who assess, support, and develop a candidate's knowledge, skills, or professional dispositions at some stage in the clinical experience" (CAEP, 2013, p. 6).

AACTE (2010) recommended selection of cooperating teachers be determined by outstanding performance on teacher performance assessment with excellent supervisor and peer evaluations. Additionally, the organization advocated clinical teachers have at least three years of teaching experience, be matched to their novice teachers by subject and grade level, and be selected jointly by preparation programs and school faculty on the basis of the clinical teacher's interest in and ability to guide the specific candidate through a clinical practice program. The National Council on Teaching Quality (NCTQ, 2011), an educational policy and reform organization that promotes alternate certification, also identified among its five most critical standards for quality student teaching experience that cooperating teachers have at least three years of teaching experience; that teacher preparation programs select the cooperating teacher for each student teacher placement; and that cooperating teachers have the capacity to mentor an adult, with skills in observation, providing feedback, holding professional conversations and working collaboratively.

State regulations are considered weak in addressing the quality of the cooperating teachers assigned to mentor student teachers. Teacher experience and teacher education level are viewed as important criteria in selecting cooperating teachers, serving as proxy variables for skill level or expertise. Requirements often lacked specificity in definition or articulation of the criteria, and institutions may only comply with those state requirements that are easily measured, such as teaching experience and teacher education (NCTQ, 2011). In Louisiana, requirements for Supervisor of Student Teachers'

certification endorsement in Louisiana Bulletin 746 (Louisiana Department of Education, 2012a) specify holding a Level 2 certification in the field of supervisory area. This requires successfully meeting new state teacher evaluation standards as outlined in Louisiana Bulletin 130 (Louisiana Department of Education, 2012b) for three years and having either a master's degree, National Board certification, a course in supervision of student teachers, or verification of mentor training through the Louisiana Teacher Assistance and Assessment Program (LATAAP).

Schools, colleges, and departments of education have attempted to define both the academic qualifications and the professional experience required for cooperating teachers. While nearly all institutions set some measure for the selection of cooperating teachers, critics point out institutions lack clear, rigorous criteria either on paper or in practice (NCTQ, 2011). Most universities reviewed required cooperating teachers to be experienced; however, fewer specifically required cooperating teachers to be effective or possess the qualities of a good mentor.

School-based cooperating teachers are not necessarily selected on the basis of quality (Hamilton, 2010; NCTQ, 2011). Seldom is the cooperating teacher in practicum placements subject to the same criterion selection as teacher educators. Typically, university teacher education programs select veteran or more experienced teachers to serve as cooperating teachers and mentors based on factors that may include prior collaboration, credentials, and teacher availability or willingness to work with a student teacher. Cooperating teachers are often selected on a volunteer basis, and factors such as availability, location, or grade level are used as selection criteria (Sudzinz, Giebelhaus, & Coolican, 1997).

Cooperating teacher appointments are more often based on subjective judgments than quantified criteria (Hoff, 2010). The selection of cooperating teachers and placement of student teachers is determined by a group of stakeholders whose perspectives on the characteristics of potentially effective cooperating teachers impact their selection and recruitment. Stakeholders typically include university coordinators who initiate requests for student teaching placements with partner districts and school principals, the district administrators who set policy for student teaching arrangements, and the school principals who recruit cooperating teachers at the school site. Teacher educators and district personnel frequently lack consensus about the characteristics needed in cooperating teachers (Levine, 2006).

Research revealed a lack of standardization in selection criteria for cooperating teachers and the need for development of criteria based on training, content and pedagogical knowledge, mentoring skills, and exemplary teaching (Hamilton, 2010). Hoff (2010) analyzed perceptions of district personnel and university administration on the ideal criteria for selecting cooperating teachers. University personnel showed preference to teachers whose beliefs about teaching and learning align with the philosophies set forth by the teacher education faculty and program. Taking a more technical view, school personnel favored teachers who are effective classroom managers, who have positive attitudes, who are cooperative, and who consistently demonstrate instructional strategies reflective of district curricular initiatives.

Preparation of Cooperating Teachers

Schools remain the place where student teachers practice or apply what they learned on campus. Despite the current move toward school-university partnerships in

teacher education, colleges and universities continue to maintain authority over the construction and dissemination of knowledge, and the historically dominant "application of theory" model of preservice teacher education remains prominent in the United States (Zeichner, 2010). While expected to provide a place for student teachers to practice teaching, research indicated school-based teacher educators lack adequate preparation and support for the task (Valencia et al., 2009).

Effective classroom teachers do not automatically become great teachers of teachers without assistance. Even if cooperating teachers are exemplary classroom teachers, that ability does not necessarily qualify them to be competent and at ease with adult learners in the classroom (Heller, 2004; Zeichner & Conklin, 2005). To prepare effective teachers for 21st-century classrooms, teacher education must move to programs that are fully grounded in clinical practice and interwoven with academic content and professional courses (NCATE, 2010). Studies that show the profound influence cooperating teachers have on the professional development of student teachers (Anderson, 2009; Cuenca, 2011; Johnston, 2010; Karmos & Jacko, 1977; Koerner et al., 2002; McIntyre et al., 1996) build the case that it is essential to ensure their effectiveness through careful selection and formal training for their roles as supervisors.

The lack of professional development for cooperating teachers has long been recognized (Goodman, 1988), yet minimal research has been conducted concerning their training or their needs. Evidence supports limitations at the university level in providing professional development for cooperating teachers that supports implementation of a more active conception of mentoring (Carroll, 2007; Margolis, 2007). While many universities' schools of education have designed curriculum for cooperating mentor

teachers and require training of these teachers prior to mentoring a student teacher, this is not the prevailing norm.

One of the only large scale surveys of cooperating teachers (RATE IV, 1990) found that only one-third of the cooperating teachers surveyed reported involvement in professional development relative to preparation for the role. Hall, Draper, Smith, and Bullough (2008) found that only 55 % of study participants had some type of professional development, and only 14 % of those teachers reported preparation that involved more than training on forms and evaluation procedures. Professional development provided for teachers prior to assuming the role of cooperating teachers is usually limited to the provision of a cooperating teacher handbook and the offer to attend an orientation meeting (Spencer, 2007; Zimpher & Sherril, 1996). These orientation meetings typically focus on expectations of the student teacher and management of administrative tasks such as the completion and timely return of evaluation materials.

Research affirmed the inadequacy of current practices for professionally preparing cooperating teachers for their work and a failure to address the most basic issues associated with the supervisory work these teachers undertake with working with student teachers (Clarke, 2001, Valencia et al., 2009). Consequently, student teachers often work with cooperating teachers who are unfamiliar with the teacher education knowledge base and goals, and who are unable to link theory presented in campus courses with classroom practice (Bullough, 2005).

The cooperating teacher and the student teacher pair should enter the teaching partnership with expectations detailed explicitly. Without sufficient preparation, cooperating teachers may have unrealistic expectations for student teaching performance

and may be tentative about the feedback they give to the novice teachers under their guidance (Sudzina, Giebelhaus, & Collican, 1997). Clarke (2001) asserted that student teachers have gained entry to the teaching profession who might not have done so under the guidance of more professionally prepared cooperating teachers. The study found cooperating teachers who had no professional development for the role were least likely to fail poor teacher candidates, while those with more professional preparation for the role were able to discriminate between strong or poor student teachers.

Coordination between university faculty and cooperating teachers during student teaching is frequently non-existent with regard to expectation of how the program's plan is to be carried out in the field setting (McIntyre & Byrd, 1998; Swisher, 2011). A survey of cooperating teachers found their preparation to supervise student teachers involved minimal to no conversation about expectations (Hall et al., 2008) Cooperating teachers' classroom work with student teachers was not found to be cultivated or assessed (Holbert, 2011). Having cooperating teachers move beyond day-to-day supervision to a deeper analysis of links between pedagogy in teacher preparation and field work in classroom should become a goal for the purpose of improvement of the student teaching practicum.

Even in situations where the practicum was considered successful by both the cooperating teachers and their student teachers, cooperating teachers acknowledged the need for more substantive preparation (Clarke, 2001). Cooperating teachers' perceived needs regarding training and support included more university engagement, classes, prescreening and selection of practicum partners, and guidelines for pacing during semester with student teacher (Hamilton, 2010). Professional learning offerings that

prepare teachers for work with student teachers, however, are limited. Universities often offer courses in supervision of student teaching. Cooperative teachers in collaborative school-university partnerships gain an in-depth understanding of program goals by working jointly with campus-based faculty, but often professional development experiences for educators are intended for application to P-12 teaching contexts rather than to cooperating teaching. Additionally, professional learning offerings for cooperating teachers focused on improvement of teacher educator effectiveness are absent from P-12 settings (Clarke, 2007; Landt, 2004).

In recent years cooperating teachers have been required to take on greater responsibility for the preparation of preservice teachers and to perform a wider range of tasks (Hamilton, 2010). Literature revealed a lack of organized methods to familiarize cooperating teachers with program expectations and few opportunities for them to enhance their skills and abilities once actual supervision began. Since formal preparation for cooperating teachers in traditional settings is often limited, cooperating teachers must rely on knowledge and expertise that emerge from their own teaching/student teaching experiences and from professional development activities not designed for student teaching contexts (Bullough, 2005; Rajuan, Beijaard, & Verloop, 2007).

Cooperating teachers reported transformation in their own teaching practices during the practicum experience through collaborative interactions and personal relationships with their student teachers and exposure to current educational practices and pedagogy (Hamilton, 2010), but professional learning for cooperating teachers is essential to prepare them for the experience of cooperating teaching rather than a singular dependence on learning being acquired through cooperating teaching (Holbert, 2011).

Given their pivotal role in supporting new teachers, the lack of preparation and support of cooperating teachers for these responsibilities is particularly problematic. Beyond providing a place to teach, cooperating teachers may not understand the critical role they play.

Role of the Cooperating Teacher

Throughout recent changes to teacher education, Dewey's (1933) model of apprenticeship, that one learns by doing and working alongside another more veteran teacher, is still an integral part of teacher preparation programs. In the student teaching context, each teacher candidate is partnered with a more experienced educator who serves as the cooperating, or mentoring, teacher. In Dewey's account of the apprentice model, teacher candidates would learn to respond quickly to classroom situations and to imitate the effective responses modeled by their cooperating teachers (Dewey, 1933).

The history of teacher education research has contributed to the complex sets of expectations for the cooperating teacher. Shaped by research and policy over the past 60 years, the issues, questions, and conditions that frame the examination of teacher education have largely impacted the work of the cooperating teacher (Holbert, 2011). Teacher education research from the 1950s to the early 1980s focused on the preparation of teacher candidates and demonstrated behaviors associated with high pupil test scores. The role and responsibilities of the cooperating teacher at this time were minimally addressed and did not appear to be a recognized component of teacher education imperatives. Cochran-Smith (2004) characterized teacher education during this time as a training problem, so early studies examining cooperating teachers focused on behavioral and psychological views of teacher training (Lindsey, 1969; Sarason, Davidson, & Blatt,

1986). Studies recognized the lack of special training in cooperating teachers' preparation and the tendency of cooperating teachers to focus on concepts and technical aspects familiar from their work rather than the learning process (Sarason, et al., 1986).

Research shifted to more process-based considerations of the role of the cooperating teachers from the 1980s to early 2000s. Researchers investigated how student teachers gained the skills necessary to become successful educators through study of their relationships with cooperating teachers (Cochran-Smith, 2004). Cooperating teachers became more engaged in school-university partnerships (Bullough, 2005) and were asked to assume greater responsibility for teacher preparation during this time. During this time the goal of teacher preparation programs was to create social, organizational, and intellectual contexts that enabled teacher candidates to develop knowledge, skills, and dispositions that would enable them to make productive decisions (Holbert, 2011). Research included a focus on the perception and beliefs of the teacher candidates.

Beginning with the mid-1990s until present, the focus of teacher education has been on identification of elements, controlled by policies enacted by institutions, states, or the federal government, that have positive impacts on student learning. In the face of high-stakes testing and increased legislation demanding achievement gains for all students, attention has shifted to how knowledge is gained of best practices, and how the learning process for both teachers and students can be combined to focus on realizing documentable gains for all children (Cochran-Smith, 2004). Cooperating teachers play a critical role in this process.

As the goals of teacher education have affected the role of cooperating teachers, so have the range of interactions with student teachers about teaching practice and

student learning become broad and varied. Early research into the role of the cooperating teacher described it as setting the affective and intellectual tone (Feiman-Nemser & Buchman, 1987), connecting university coursework with field experiences, embodying what it means to be a teacher (Bowers, 1994), socializing student teachers into the school context, and assisting in the development of survival skills and tricks of the trade (Boudreau, 1999).Some cooperating teachers initiate minimal interaction and act as role model, sounding board and resource (Tannehill & Goc-Karp, 1992), or lead by example without discussion of rationales (Graham, 2006). Others guide student teachers' participation (Colton & Sparks-Langer, 1992). Other cooperating teachers incorporate ongoing inquiry into teaching practices (Wood, 1991) and systematic reflection on alternate strategies (Dunn & Taylor, 1993).

Interactions between teacher pairs are likely to be important mechanisms by which cooperating teachers communicate and convince student teachers about important aspects of working in schools and classrooms (Hamman & Ramano, 2009; Wang, 2001). Granott (1993) developed a framework of collaboration continuum that identified three types of interactions that occur between the cooperating teacher and student teacher candidate. The first level, imitation, describes a low level of collaboration where the cooperating teacher provides little help to the student teacher. During imitation, the cooperating teacher does not directly acknowledge the needs of the student teacher and continues on with "business as usual," leaving the student teacher to figure things out on his or her own. The student teacher, left to her or his own devices, must learn to teach through observation and imitation of the cooperating teacher. Borko and Mayfield (1995)

identified similar interactions in which the cooperating teacher was not actively participating in the learning of the student teacher.

The next level of interaction is characterized by the cooperating teacher guiding the student teacher in an apprenticeship situation. The cooperating teacher engages in periods of active directing of the student teachers' learning, observing and then evaluating student teachers' activities, or demonstrating actions and procedures for the student teacher. The cooperating teacher dominates the interaction by having definite goals and standards for the student teacher and using interaction to help the student teacher approximate the desired outcomes. Cooperating teachers who engage in guidance-types of interaction take an active role in the student teachers' learning, but the student teachers may take a less active role (Granott, 1993).

The highest level of interaction, according to Granott (1993), is characterized by cooperating teachers' scaffolding of student teachers' learning. This type of interaction is characterized by collaboration between the cooperating teacher and the student teacher. Common goals are selected and shared, and they assist one another in achieving an outcome. The cooperating teacher helps the student teacher clarify goals then provides support as needed. Cooperating teachers who engage in scaffolding-type interactions take a more active role in the student teachers' learning, but the degree to which cooperating teachers control the direction or goal selection is less than in guidance situations.

In their qualitative study of elementary cooperating teachers, Beck and Kosnik (2000) identified two separate models for the role of the cooperating teacher. The first model, the practical initiation model, is viewed more as an apprenticeship in which the role of the cooperating teacher is to initiate the student teacher into the field of teaching.

In this model, the cooperating teacher can either take the sympathetic approach or the "sink or swim" approach. In the second model, the critical intervention model, the role of the cooperating teacher is to encourage the student teacher to become more reflective and analytical of the implemented teaching practices.

Clarke (2007) found three conceptions along a continuum of engagement that indicate the various assumptions teachers and teacher education have about the expectations and the work of the practicum experience. One conception is the cooperating teacher as classroom placeholder, or "absentee placeholder." While research suggested this approach is rare in practicum settings today, it usually mirrors the way the cooperating teacher experienced the student teaching practicum. In relinquishing full responsibility to the student teacher for teaching, the cooperating teacher is modeling practice that served as their entry into the profession.

The supervisor of practicum, or "overseer" approach, was found as one most commonly used by cooperating teachers. In this approach, the student teacher acquires experience in teaching in the classroom setting, and the cooperating teacher observes, records, and evaluates the application of knowledge, skills, and dispositions in the practicum setting. The level of engagement between the cooperating teacher and student teacher is greater in this approach, but the cooperating teacher is principally a supervisor (Clarke, 2007).

At the third level of Clarke's (2007) continuum the cooperating teacher as teacher educator, or "coach," demands a greater degree of engagement. The cooperating teacher and student teacher work closely in the immediacy of the setting. Glenn (2006) found effective mentor teachers maintain a balance of control in the amount of independence

they allow the student teacher; they are neither too reluctant to hand their students over to the student teacher, nor too willing to allow the student teacher full classroom responsibility before he or she is ready.

In their study of the roles of the cooperating teacher, Sanders et al. (2005) identified seven different roles of the cooperating teacher: model, observer and evaluator, planner and demonstrator, consultant, professional peer, counselor, and friend. Hamilton (2010) found cooperating teachers perceived their roles in relationship to student teachers were to reflect, encourage, support, observe, evaluate, and provide experiences that bridge pedagogy to practice. Six role relationships that develop over the course of student teaching experiences were identified as clearinghouse, expert/mentor/master teacher, facilitator, mediator, motivator, and friend (Hall & Davis, 1995).

The time-consuming and critical role of cooperating teacher is a balancing act of continuously drawing on abilities to organize, plan, assess, reflect, and model effective teaching strategies for the student teacher while at the same time teaching their classroom pupils (Hoff, 2010). The complexity of their current roles is further increased by high stakes testing, accountability, and value-added evaluations of teacher performance. Lack of collaboration and minimal interaction between the university and campus-based faculty often lead cooperating teachers to frame self-constructed definitions of their roles and responsibilities based on their own experiences as a student teacher and practicing teacher (Koerner, 1992).

Teacher education accreditation organizations view the role of the cooperating teacher as teacher educator (CAEP, 2013; NCATE, 2008). No definition for "cooperating teacher" is given by NCATE (2008) but rather PK-12 teachers are included in the

definition of "clinical faculty" responsible for instruction, supervision, and/or assessment of candidates during field experiences and clinical practice. While teacher education views the role of the cooperating teacher as teacher educator, it remains ambiguous whether cooperating teachers identify with that role and if their student teachers recognize them as teacher educators.

Cooperating Teachers' Beliefs about Their Roles

Cooperating teachers' perceptions of teaching are closely tied to their professional self-image and perspective of what it means to them to be a teacher. These perceptions have implications for the way cooperating teachers view teacher education (Beijaard, Verloop, & Vermunt, 2000) and shape their beliefs about their fit within the context of teacher education. Cooperating teachers have discrepant qualifications for their roles as teacher educators. Assuming various roles requires the cooperating teacher to develop a sense of efficacy as a teacher educator, however, studies indicate cooperating teachers experience difficulty developing identity as teacher educators (Clarke, Triggs & Nielson, 2013; Murray & Male, 2005).

Little specific attention has been given to how cooperating teachers learn to become teacher educators (Murray & Male, 2005). Disconnects with field supervisors (Bullough, 2005) and the university-based teacher educators (Koster, Korthagen & Wubbels, 1998) created challenges for cooperating teachers in assisting student teachers in making meaningful connections between their coursework and their work in the classroom. Zeichner (2002) cited the lack of preparation and support for the work, temporary and marginal status, and lack of incentives and rewards as evidence that

mentoring student teachers is not valued as an important activity either in schools or universities.

Classroom teachers recognize the benefits in serving as a cooperating teacher. Working with student teachers can validate teachers by providing them with opportunities to reflect on professional knowledge and practice (Koerner, 1992). The work can also heighten cooperating teachers' awareness of innovative instructional and management techniques and promote self-reflection. Serving as a cooperating teacher affords teachers an opportunity to contribute to the profession and provides a sense of professional validation and satisfaction (Mecca, 2010).

The task of helping prepare tomorrow's educators is monumental and daunting, but cooperating teachers view their roles as transitional in the professional development of the student teacher (Landt, 2004). Cooperating teachers perceive their main role as guides in practical experiences in the classroom (Rajuan et al., 2007). In a study of cooperating teachers' beliefs about their roles (Koskela & Ganser, 1995), nearly half the participants identified themselves as guides to the student teachers with regard to planning, classroom and behavioral management, content and skill proficiency, and organization in terms of constructing materials and experiences. In the same study, 44 % of the cooperating teachers identified themselves as facilitators, focused on nurturing the self-concept and confidence of their student teachers, while only 17 % of cooperating teachers identified themselves as models for their student teachers.

Student Teachers' Perceptions of the Cooperating Teacher's Role

Literature on student teachers' perceptions of the cooperating teacher's role was minimal. A qualitative study of roles and role perceptions of cooperating teachers,

university supervisors, and student teachers found role perceptions varied among the triad members. The different perceptions of role were attributed to unclear role definitions and a lack of communication (Johnson & Napper-Owen, 2011).

Research showed student teachers do not view their cooperating teachers primarily as teacher educators. Student teachers expect cooperating teachers to make classrooms accessible and work with them in collegial, supportive ways, but they view cooperating teachers as teachers of children first and teacher educators second (Koerner et al., 2002).

In a mixed study of 107 student teachers at the National Institute for Education (NIE) in Singapore, the roles of the cooperating teacher found to be most important by 80% of the participants were related to the evaluation feedback on their teaching, teaching the subject content effectively, and effective classroom management. The findings indicated the first concern of student teachers is related to their final grades and core areas in which they were assessed. Next in importance were the cooperating teacher providing space to innovate and experiment with teaching, guidance with motivating students, and providing information to function effectively in the school (Atputhsamy, 2005).

Cooperating teachers fulfill important roles in the education and preparation of student teachers. The cooperating teacher is viewed as the primary supervisor of the student teacher and clearly the person most in touch with the student teacher's concerns, needs, and professional growth throughout the student teaching placement (Hall et al., 2008; Hamilton, 2010). Literature revealed two important aspects stand out regarding the

cooperating teacher's role: the process and content of feedback they provide to the student teachers as mentors; and the behaviors they exhibit or model.

Cooperating Teacher as Mentor

With recent reform movements to emphasize mentoring, the role of the classroom teacher has shifted from that of a cooperating teacher opening his or her classroom as a site for practical experience to that of a mentor working in close collaboration with the student teacher and the university (Swisher, 2011). Student teachers need to know how to teach, but they also need to know how to reflect on their progress, work effectively, and maintain their passion amidst personal and work-related stresses.

The word *mentor* connotes instruction, intellect, fidelity, and experience. Derived from Greek mythology, Mentor, in fact, was the trusted confidant of Odysseus to whom he entrusted the care of his son, Telemachus. The trusted educator supported and guided Odysseus's son in every facet of his life including physical, intellectual, spiritual, and social development. The word *mentor* has since become synonymous with wise teacher, guide, advisor, sponsor and supporter (Harris, 2003).

The mentorship of the preservice teacher by a cooperating teacher during the student teaching experience is a significant aspect of traditional teacher preparation programs. Interactions between cooperating teachers and student teachers are critical when attempting to predict the evolution of the student teacher into a highly qualified teacher (Feiman-Nemser, 2001; Hamman et al., 2007). In the context of preservice teacher education, mentoring is often defined as a supportive, nurturing process in which a more skilled and experienced person provides varying degrees of mental, emotional, and pedagogical support to one less skilled or experienced for the purpose of promoting

the latter's professional and personal development (Anderson & Shannon, 1988, Iancu-Haddad & Oplatka, 2009). Mentoring is also defined as a nurturing relationship that is based on mutual trust that leads to the development and professional growth of both the mentor and mentee (Halai, 2006).

As mentors, cooperating teachers should aim not only to help student teachers become effective practitioners but also to help them develop as professionals in the field and better prepare them for the increasingly challenging classroom environment. In addition to learning how to provide effective instruction, student teachers must also understand how to monitor their own progress, how to collaborate with other professionals, and how to balance their personal and professional obligations. In this context, mentoring involves using an approach that includes guiding, reflecting, and coaching (Boreen, Johnson, Niday, & Potts, 2000).

Cooperating teachers generally are willing and enthusiastic to facilitate in this supervisory position, but often they are ill-prepared to serve as effective mentors (He, 2010). Just being in a school, even full-time, with a cooperating teacher does not mean that the student teacher will develop expertise. An experience that is essentially an observation apprenticeship, even with built in opportunities to take over some teaching responsibility, does not suffice. What does seem to be required is for the prospective teacher to be embedded in a real setting with highly-trained mentors who can foster the development of the student teacher's ability to analyze a situation, determine possible goals and select from among them, draw on theoretical and conceptual knowledge, and turn all that into action. Such learning is context specific. The student teacher must have real responsibilities, have the opportunity to make decisions, be monitored and get

continuous feedback from mentors, and develop skills to analyze student needs, and adjust practices on the basis of using student performance data (Levine, 2010).

While varying definitions of mentors exist, commonalities are revealed when reviewing research on qualities necessary for effective mentors. Scholars and researchers in the field of mentoring agree that the primary role of the mentor is to provide guidance and emotional support to the student teacher (Halai, 2006). Research on mentoring in the educational setting defined three major categories of the mentor's role: personal support, role modeling, and professional development (Jacobi, 1991). Others characterized the relationship as the mentor providing guidance, support, and advice (Harris, 2003). Ganser (1996) found that in addition to teaching experience, mentors should exhibit willingness, commitment, and enthusiasm, the ability to collaborate with adults; and the perception of teaching as a job they enjoy. Mentoring includes emotional support and professional socialization in addition to pedagogical guidance (Hawkey, 2006; Schwille, 2008). An effective mentoring program not only grooms preservice teachers for classroom instruction but also enhances their self-efficacy and prepares them for the first year of teaching (Fives, Hamman, & Olivarez, 2007; Friedman, 2000). Regardless of the varying definitions and perspectives on what constitutes mentoring, it has been shown that the more experienced mentor is more likely to be effective (Roehrig, Bohn, Turner, & Pressley, 2009).

Cooperating teachers must receive training as mentors, highly skilled in supporting the learning of adult candidates, as well as that of children (AACTE, 2010). Establishing the mentor-mentee relationship is a major component of teacher education programs, yet failure at the university level to adequately support the cooperating teacher

with the skills to be an effective mentor is all too common (Russell & Russell, 2011). Without adequate preparation for mentors, student teachers may have "hit or miss" experiences that do not sufficiently prepare them for the very challenging first years of teaching (He, 2010).

Cooperating Teacher as Model

In addition to recognizing the importance of the cooperating teacher as mentor, it is of equal importance to study the cooperating teacher as a model educator. The significance of cooperating teachers' impact on student teachers' development is found in their roles as models of professional skills. According to Bandura (1977) "... most human behavior is learned observationally through modeling, from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as guide for action" (p. 22). An identified role of the cooperating teacher is to show and demonstrate efficient teaching techniques, evaluation procedures, and useful classroom management techniques, at the same time exemplifying behaviors and beliefs that underlie these techniques, procedures and strategies (Sanders et al, 2005).

There is little question cooperating teachers serve as models for student teachers. Early research confirmed teacher candidates mimic the attitudes and behaviors of their cooperating teachers (Seperson & Joyce, 1973). Student teachers often pattern their behaviors after their cooperating teachers simply because those were the only mental maps they had (Anderson, 2007). Careful selection and preparation of the cooperating teacher is supported by theories of role model influence as they are utilized in research on teacher leadership (York-Barr & Duke, 2004).

Much research on teaching and teacher education over the past two decades has focused on teachers' beliefs, their knowledge of learners, learning, and subject matter, and ways to teach that specific content. Teaching, at its center, is an interactive clinical practice that requires not only knowledge but also craft and skill in practice (Grossman & McDonald, 2008). Cooperating teachers can be supportive, collaborative, flexible, and willing to give feedback, but this is of limited value if they do not have a sound approach to teaching and learning (Beck & Kosnik, 2002). Despite the fact research has found the evolution of teaching styles during student teaching is a direct result of the modeling of individual cooperating teachers, there remained limited research that asks whether cooperating teachers are modeling effective instructional practices (Holbert, 2011; Seperson & Joyce, 1973).

Teacher Behaviors and Standards

According to Bandura (1977), one forms an idea of how new behaviors are performed from observing others and later using this coded information as a guide for action. In light of the critical value of the student teaching experience for teacher candidates and the considerable influence of the cooperating teacher as a primary role model, the challenge remains for teacher educators to ensure cooperating teachers demonstrate positive behaviors based on quality standards.

Successful clinical training experiences require clarity of goals, including the development of standards for guiding performances and practices (Darling-Hammond & Baratz-Snowden, 2007). Development of strong partnerships in which cooperating teachers and student teachers share standards of practice and work collaboratively is needed in teacher education programs. In 1975 Lortie cited the lack of a technical

vocabulary with which to describe the work of teaching, yet almost 40 years later, the field still lacks a common framework for teaching with well-defined terms for describing and analyzing teaching.

Professional organizations recognized the importance of providing an optimal teaching and learning environment and developed standards for cooperating teachers involved with teacher candidates during student teaching (Holbert, 2011). The Association of Teacher Educators (ATE) developed standards to promote effective teacher education (Association of Teacher Educators, 2008). The initial establishment of the ATE Standards for Teacher Educators articulated a framework that could be employed by both university-based teacher educators and field-based faculty, including cooperating teachers. The Standards for Field Experiences in Teacher Education were developed by ATE in 1999 to identify beneficial experiences for teacher candidates (ATE, 1999).

The National Board of Professional Teaching Standards (NBPTS) is an independent, nonprofit, nonpartisan, and nongovernmental organization formed in 1987 to advance the quality of teaching and learning. Formed in response to the 1986 Carnegie report, *A Nation Prepared: Teachers for the 21st Century*, it sought to define what teachers should know and be able to do and supported the creation of a rigorous, valid assessment to see that certified teachers met these standards. NBPTS developed professional standards for accomplished teaching, created a voluntary system to certify teachers who meet these standards, and helped integrate certified teachers in educational reform efforts. More than 82,000 educators in the United States are nationally-board

certified. The NBPTS standards are based on the Five Core Propositions of what all accomplished teachers should know and be able to do (NBPTS, 2002).

In addition to professional standards, multiple instructional and classroom management-oriented frameworks are being implemented that identify effective teaching practice (Danielson, 2007; Lampert, 2001; Lemov, 2010; Marzano, 2007; Pianta, 2011). Other research has urged the identification of a common set of high leverage practices and development of ways to teach them. High-leverage practices are defined as essential activities of teaching which are intimately tied to specific domains that underlie effective teaching and are most likely to affect students' learning (Ball & Forzani, 2009). A student-centered multiple measure assessment of teaching, the edTPA, has been endorsed by AACTE and embraced by many university-based teacher preparation programs. TPA is an acronym for Teacher Performance Assessment. Developed at Stanford University and available nationally fall 2013, edTPA is an assessment process to be used for determining teaching candidates' readiness for the classroom. Numerous states have adopted or are considering edTPA for statewide use to license new teachers or approve teacher preparation programs (AACTE, 2013). As of this study, Louisiana was not part of the edTPA project.

Despite numerous efforts over the years to articulate a shared vision of the dispositions, knowledge, and skills that individuals need to begin teaching, there is still great variation in what is taught to teacher candidates in teacher education programs across the nation (Levine, 2006). Spencer (2007) suggested the "most common challenges to cooperating teachers result from poor communication" (p. 213). Effective implementation of standards as a foundation for professional expectations may improve

communication between field-based and campus-based teacher educators and provide a source of unifying discourse.

Teaching practices that are reviewed, revised, and discussed in light of shared standards about teaching and learning help ground and focus the work (Darling-Hammond & Baratz-Snowden, 2007). A shared vision and common technical vocabulary for teacher education would likely advance unified expectations of cooperating teachers (Holbert, 2011) and would provide a common lens for feedback and supervision and the potential for greater consistency in the development of clinical practice (Grossman, 2010; Grossman & McDonald, 2008).

Summary

Three main themes in the literature emerged as barriers to effective cooperating teaching: appropriate preparation for the cooperating teacher role, limitations to quantity and quality of interactions with university-based faculty which reflect shared beliefs about teacher education, and contextual challenges related to professional collaboration and professional learning opportunities for cooperating teachers.

Every state in the United States requires a student teaching component in teacher preparation programs. Such widespread national commitment is based on the acknowledged benefits of providing opportunities for student teachers to put theory into practice, experience a variety of teaching methods and assessment tools, and implement classroom management techniques and strategies of their own (Chesley & Jordan, 2012). Over the past 50 years, research on teaching has changed its focus from teacher characteristics to investigating other factors, such as teaching behaviors, that influence teacher preparation (Grossman & McDonald, 2008). Changing teacher preparation to

match the expectations of the modern teaching profession requires new methods of collaboration between universities and schools.

Teachers often reflected that their student teaching programs had few or no standard activities or goals; therefore, the quality of their experiences depended entirely on the knowledge and skills of their cooperating, or mentor, teachers. Given the important role of cooperating teachers in the student teaching experience, the skills and commitment of assigned cooperating teachers should be exemplary, and the cooperating teachers themselves should be models of best practice (Chesley & Jordan, 2012). The individual who holds the power to sanction another's access and admission into a community must be considered to be at the top of the community (Davies, 2005).

By placing student teachers with certain cooperating teachers, teacher preparation programs signal the status of cooperating teachers as experts in professional practice. Research, however, showed the most effective teachers are not being recruited for work with student teachers. Findings showed a selection trend indicating the potential impact of the most effective teachers on preservice teachers is underutilized (Hoff, 2010).

The need is not so much a matter of "finding" good student teaching sites but rather "developing" effective placements (Zeichner, 2002). Studies suggested the need to examine more closely the selection, training, and retention of classroom teachers who serve as cooperating teachers and to standardize the cooperating teacher selection and training process (Hamilton, 2010). Strong school-based clinical teachers are essential to the success of the clinical experience and should be selected for their deep expertise, their extensive experience, and their match with candidates' subjects and grades. They should

be trained as mentors and be highly skilled in supporting the learning of adult candidates as well as that of children.

Identifying strategies and interactions that most effectively promote student teacher development has been identified as a challenge and has uncovered professional development and relational needs that when unmet become barriers to effective cooperating teaching (Holbert, 2011). As Grossman and McDonald (2008) observed, there is little formal knowledge about how the work of teaching differs from one subject to the next. Work to synthesize views of teaching and learning across contexts and disciplines may serve to enhance the effectiveness of teacher educators, preservice educators, and ultimately P-12 student learning.

The American Educational Research Association's (AERA) 2006 report on research and teacher education summarized the majority of studies that touched on student teaching. The report looked at how new teachers are socialized into the profession and how beliefs and actions changed, or resisted change, while engaged in methods courses and field experiences (Cochran-Smith & Zeichner, 2005). More research is needed to establish clear connections between cooperating teachers' actions and student teachers' learning in order to identify an appropriate set of expectations for field-based teacher educators. Given the central role that cooperating teachers play in the training of preservice teachers, it is important to examine the perceptions student teachers have of their cooperating teachers' actions, to establish clear connections between cooperating teaching actions and student teacher learning, to identify an appropriate set of expectations for field-based teacher education, and to better provide professional development and support to field-based faculty.

In contrast to the importance of their role, often little or no training or support is made available as preparation, and cooperating teachers are offered minimal, if any, rewards or recognition (Hoff, 2010). Teacher education programs should emphasize the valuable roles cooperating teachers play in the teacher preparation process and their effect on quality teacher education and raise awareness of teacher education goals and standards. It is imperative that these teacher educators have access to appropriately articulated expectations, learning experiences, and support that prepares them to enact cohesive and effective learning experiences for future teachers. These outcomes are unlikely without in-depth inquiry into the elements of quality cooperating teaching and how effective cooperating teachers gain the knowledge and skills in order to model quality instruction and mentoring.

CHAPTER THREE

METHODOLOGY

Purpose

The purpose of this study was to examine the perceptions of student teachers on cooperating teachers' actions to determine the consistency of cooperating teachers' actions across context, specifically certification grade bands. The following research questions emerged to guide the study:

1. Are student teachers' perceptions of cooperating teachers' modeling of Core Propositions in Student Teaching significantly different across certification grade bands?
2. Are student teachers' perceptions of cooperating teachers' modeling of Enactment of Standards for Teacher Education in Student Teaching significantly different across certification grade bands?
3. Are student teachers' perceptions of cooperating teachers' behaviors during the student teaching experience in relation to learning about teaching significantly different across certification grade bands?
4. Are student teachers' perceptions of cooperating teachers' personal teaching efficacy significantly different across certification grade bands?
5. Are student teachers' perceptions of personal teaching efficacy significantly different across certification grade bands?

This chapter includes a detailed description of the processes involved in this study. The selection of population and sample, research design for each hypothesis, development of the survey instruments, and implementation procedures for data collection and analysis are explained. The survey instrument, adapted from an instrument validated in a previous study, successfully gathered data relevant to this study.

Research Design

The design of this study was descriptive and non-experimental. The purpose of descriptive research is to "discover relationships between variables" (Borg & Gall, 1989, p. 573) and identify comparisons between groups. According to Van Dalen (1979), this method is useful to gather practical information that may be relevant for the improvement or justification of an existing situation. Issac and Michael (1997) defined the following purposes of descriptive research: (a) to collect detailed factual information that describes existing phenomenon, (b) to identify problems or justify current conditions and practices, (c) to make comparisons and evaluations, and (d) to determine what others are doing with similar problems or situations and benefit from their experience in making future plans and decisions.

The methodology was quantitative, and data were collected through use of a questionnaire. Data were analyzed using descriptive statistics, one-way ANOVA, and appropriate post hoc tests.

Selection of Sample

The population for this study was teacher education candidates seeking initial licensure and engaged in a student teaching practicum under the guidance of a cooperating teacher through Louisiana universities' initial teacher preparation programs.

Approval from the Institutional Review Board (IRB) from each university was obtained prior to requesting participation in the study. All questionnaire items and invitations to participate were submitted for approval before start of the study.

After IRB approval was received from the universities, faculty responsible for placement and supervision of student teachers at the universities were contacted personally via email and telephone to explain the purpose of the study and request participation. To implement the survey online, university faculty from each participating institution forwarded an email request for participation to their current cohort of student teachers. The request included an electronic link to the *Ohio Student Teachers' Perceptions of Cooperating Teachers' Enactment of National Board Core Propositions and Teacher Educator Standards to Promote Student Teacher Learning* questionnaire.

Neither random selection nor random assignment was employed. All candidates from the participating teacher education programs engaged in student teaching during the 2013 fall term were invited to complete the questionnaire. Participation in the study was completely voluntary and confidential.

The resulting pool of student teachers was considered a non-probability purposive sample. Ary, Jacobs, Rasavieh, and Sorenson (2006) identified purposive sampling as the selection of participants who are judged to be typical or representative of the target population.

Instrumentation

Holbert (2011) developed the *Ohio Student Teachers' Perceptions of Cooperating Teachers' Enactment of National Board Core Propositions and Teacher Educator Standards to Promote Student Teacher Learning* questionnaire (see Appendix A) as a

quantitative survey instrument that enables systematic investigation of the actions and interactions of cooperating teachers during student teaching. Three sets of educational standards were used in the development of the measures: the five Core Propositions of the National Board for Professional Teaching Standards (NBPTS, 2002), Association of Teacher Education Standards for Teacher Educators (ATE, 2008) and the Performance Outcomes from the ATE Standards for Field Experiences in Teacher Education (ATE, 1999).

The survey examined participants' perceptions of how Core Propositions of the National Board for Professional Teaching Standards, Association of Teacher Education (ATE) Standards for Teacher Educators, and the Performance Outcomes from the ATE Standards for Field Experiences in Teacher Education were exhibited by their cooperating teachers. It also explored participants' perceptions of self-efficacy and perceived efficacy of their cooperating teachers. The questionnaire was divided into five sections with a total of 72 Likert scale items. Section 1: *Cooperating Teachers' Modeling of Core Propositions in Student Teaching* consisted of 21 items asking student teachers to respond to each statement "regarding the practice modeled for you by your cooperating teacher as he/she teaches the students." Section 2: *Cooperating Teacher Enactment of Standards for Teacher Education in Student Teaching* contained 24 items asking participants to "consider how your cooperating teacher interacts with you and other adults in education". Statements in Section 3: *Your Student Teacher Experience in Relation to Learning about Teaching* contained 14 items asking participants to reflect on level of agreement or disagreement on how their cooperating teacher "guided them to demonstrate knowledge and skills related to teaching". Section 4: *Cooperating Teacher's*

Personal Teaching Efficacy contained 6 items asking participant's perceptions of their cooperating teachers' beliefs that they are making significant contributions to the academic progress of their students. Section 5: *Your Personal Teaching Efficacy* had 7 statements referring to the student teachers' personal beliefs on their ability to affect student achievement. Demographic information was also collected as part of the survey.

A Likert-scale was used for all items in the five sections of the survey. According to Popham (1983), the Likert scale, developed by R.A. Likert, is a common self-report scale. Likert originally designed this measure with five well-explained choices. Six options are included in Sections 1, 2, and 3 of the instrument to minimize "average" or "middle of the road" responses. Choices included: (1) *very strongly disagree*, (2) *strongly disagree*, (3) *disagree*, (4) *agree*, (5) *strongly agree*, and (6) *very strongly agree*. Sections 4 and 5 addressed efficacy and reverted to the use of a five-point Likert scale: (1) *strongly disagree*, (2) *disagree*, (3) *somewhat agree*, (4) agree, and (5) *strongly agree*.

Permission to use items from the Ohio survey was obtained from its developer, Dr. Romena Holbert (see Appendix B). The survey provided a valid and reliable tool for analysis of student teacher perspectives and examinations of cooperating teacher roles and actions in implementing these standards in the field-based context of student teaching.

The development of the instrument occurred in a series of key phases. An initial pool of items based on each set of standards in education was developed for the instrument. Ten student teachers were then engaged in cognitive interviews which focused revisions to promote the clarity and suitability of the developing instrument. Next, the revised items were sent to panels of experts for feedback. Experts examined the

items and provided feedback that included whether the items accurately represented the standards intended. After revisions based on expert feedback, cognitive interviews were conducted with 13 student teachers to determine whether the items were clear and suitable to student teachers after the revisions based on expert feedback. Student teachers participating in the cognitive interview process identified the items as clear and suitable for student teachers. Each panel of experts identified the items as clear and accurately representative of the Standards intended. After the second round of cognitive interviews, the revised instrument was distributed to teacher preparation programs (Holbert, 2011).

Respondents were 407 student teachers seeking initial teaching licensure through enrollment at one of the eleven participating Ohio institutions of higher education. Each participating student teacher completed items relating to his or her cooperating teacher's modeling of Core Propositions, enactment of ATE Standards for Teacher Educators, and helping him or her learn to demonstrate Performance Outcomes from ATE Standards for Field Experiences in Teacher Education. Student teachers also provided demographic data.

Data relating to item development and revision were analyzed by examination for themes in responses from student teachers and experts in each set of Standards. A Principal Components Analysis (PCA) was used to identify the interpretable underlying structure existing among the variables. Six dimensions, which explained 67.349% of the variance, were identified. The identified dimensions were examined and each identified scale was named. Calculation of Cronbach's alpha coefficients for identified scales was employed to identify the internal consistency of each of the newly developed scales. The scales identified were "Modeling of Quality Classroom Pedagogies with P-12 students"

(α = .952), "Use and promotion of reflection in learning environment accepting of the candidate" (α =.956), "Dedication to cooperating teaching through use of research, collaborations, and professional development" (α =.960), "Promotion of candidate understanding of/effective action involving connections between key components or stakeholders in education" (α = .932), "Modeling of collaboration with others relevant to p-12 student learning" (α =.834) and "Technology Orientation" (α = .620).

Pearson- r correlations between each newly developed scale and two embedded adaptations of an existing measure of teacher efficacy were calculated to provide evidence of validity. In the first adaptation, the items were worded such that the measure reflected the responding teacher candidate's perception of how his or her cooperating teacher would respond to each efficacy item. In the second adaptation, the items were worded such that the measure reflected the responding teacher candidate's perception of his or her own teacher efficacy. At the $p < .01$ level of significance, each new scale is positively correlated with the existing measure that was adapted to reflect the student teacher's perception of his or her cooperating teacher's self-efficacy. At the $p < .01$ level of significance, each of the subscales, except Cooperating Teacher Technology Orientation, has been shown to be positively correlated with the existing scale as adapted to describe the teaching self-efficacy of the responding student teacher. Significant positive correlations to the adaptation of the existing measure, which focused on perceived cooperating teacher efficacy, suggested validity of the newly developed scale (Holbert, 2011).

Data Collection

The questionnaire was administered via Google Docs, a secured online service. Benefits of online surveys include reduction of data entry errors when compiling statistical results and increased efficiencies by reducing the amount of delivery time when compared to surveys administered by mail. Survey administration online allowed a significant degree of security, accuracy, and privacy for participants (Dillman, Smyth, & Christian, 2009).

Upon identification of institutions willing to participate, a date for distribution of the questionnaire was determined by each participating university. Administration of the questionnaire was scheduled after midpoint in each institution's 2013 fall term to ensure sufficient time for student teachers to observe cooperating teachers' actions. The collection of data at this point in the term was intentional. Cooperating teachers and student teacher candidates had the opportunity to work together for at least six to eight weeks before teacher candidates were asked to give their perceptions of specified demonstrated behaviors of their cooperating teachers.

Data collection procedures and rationale followed the survey process execution as outlined in Dillman, et al. (2009). This approach, which can be facilitated with online surveys, relies on personalized, repeated contact to boost response rates. Collaborating faculty from each participating university were contacted personally. A personalized email with a link to the online questionnaire was provided to participating universities and collaborating faculty to distribute to student teachers no sooner than the midpoint of the term. The request to participate explained how responses will help in assessing the effectiveness of current student teaching experiences in supporting teacher candidate

learning. For repeated contact, an introductory email informing institutions of the purpose of the study and requesting participation was sent at the start of the semester or quarter (see Appendix C); an email with the survey link was sent to university at midpoint of student teaching term to be distributed to the student teachers (see Appendix D), and reminder emails and follow-up requests for participation (see Appendix E) were sent to university faculty to forward to student teachers at least two weeks prior to the end of the term. The researcher sought confirmation from university faculty that the email distribution of initial requests for participation and reminders had been forwarded.

To begin the online questionnaire participants entered the link supplied in the request for participation. The opening page of the questionnaire confirmed the questionnaire title and purpose, provided instructions for completion, communicated the confidential nature of responses, and provided an estimated time for completion. The online survey consent served as the consent document, and the process of participants proceeding to and completing the questionnaire also constituted consent.

The opening page of the survey explained that participation was completely voluntary. The second page required explicit participant consent. If the participant gave consent, the survey opened. If the student teacher candidate did not wish to participate in the study, choosing that selection completed the survey. There was no consequence for student teachers who chose not to participate in the study. The researcher's rationale coincided with the Institutional Research Board's insistence that for human subject protection participants must be informed that their response to the questionnaire is voluntary.

For the first three sections of quantitative items on the questionnaire, participants were asked to mark their level of agreement on a 6-point Likert scale: (1) *very strongly disagree*, (2) *strongly disagree*, (3) *disagree*, (4) *agree*, (5) *strongly agree*, and (6) *very strongly agree*. For the remaining two sections that address efficacy, participants marked their level of agreement on a 5-point Likert scale from: (1) *strongly disagree*, (2) *disagree*, (3) *somewhat agree*, (4) agree, (5) *strongly agree*. All questionnaire items required responses, and one open response item was included to provide participants the opportunity to share additional information if desired. The closing page of the online questionnaire expressed appreciation for participation and provided contact information to address respondent inquiries.

Precautions were taken to ensure anonymity. Participants were not asked to identify institutions, school districts, schools, or cooperating teachers, nor were participants asked to identify themselves other than through demographic questions of gender, age, grade level taught, and area of certification. No personally identifiable information was associated with responses to any reports of these data. The purpose of the study was not to compare institutions but rather to analyze the perceptions of student teachers in Louisiana about the effectiveness of their cooperating teachers based on specific professional standards.

Dillman et al. (2009) described the importance of confidentiality of responses to the survey and described confidentiality as an ethical commitment not to release results in a way that any individual's responses can be identified as his or her own. Therefore, the only way survey responses are anonymous is when the researcher cannot identify each person's response. To assure participants that all responses would remain anonymous,

participants were asked to create a personal identification number (PIN) before beginning the questionnaire. This step additionally demonstrated willingness to participate in the study. All information collected from the survey was held strictly confidential in a password protected database.

The set of responses analyzed represents the perceptions of the student teachers who consented to participate and completed the questionnaire. The 12 participating universities reported a total of 594 student teachers candidates during the fall 2013 term Of the 297 returned questionnaires, 290 questionnaires were completed, seven respondents chose not to participate, and 16 respondents had student teaching placements other that the four specified certification grade bands. The rate of return was 43% for the 257 questionnaires used in the study.

Data Analysis

After questionnaires were completed and downloaded, the data were entered into an Excel spreadsheet and analyzed using the Statistical Package for Social Sciences (SPSS). Data were analyzed using descriptive statistics (item means, standard deviations, and frequencies), analysis of variance (ANOVA), and the Tukey HSD post hoc test.

The total sample of student teachers from initial certification teacher education programs was divided into four sub-samples: (a) early childhood (grades PK-3) certification grade bands, (b) elementary education (grades 1-5) certification grade bands, (c) secondary content (grades 6-12) certification grade bands (English, mathematics, science, social studies), and (d) K-12 certification grade bands. A one-way ANOVA was used to determine if significant differences existed among the groups.

Delimitations and Limitations of Study

Participants in the study were limited to teacher education candidates seeking initial licensure and engaged in a student teaching practicum under the guidance of a cooperating teacher through Louisiana universities that offered initial teacher preparation programs. The scope of this study was limited to student teachers who responded to the questionnaire, and therefore data gathered were not directly generalizable to other populations.

Although it was assumed that submitted responses are truthful based upon respondents' perceptions, the researcher acknowledges that respondents often give answers they believe are desired rather than those they truly believe. To facilitate the respondents' truthful perceptions, anonymity was assured through online submission of responses. Respondents were informed that no data would be reported individually. All data were reported as aggregate data.

CHAPTER FOUR

RESULTS OF THE STUDY

The purpose of this study was to examine the perceptions of student teachers on cooperating teachers' professional behaviors and actions to determine consistency across context, specifically certification grade bands. This purpose was developed into five hypotheses. This chapter presents an analysis of data with respect to the purpose of the study. Descriptive and inferential statistical analysis of data is presented for all hypotheses.

Population and Sample

The population considered for this study consisted of all teacher education candidates seeking initial licensure through teacher preparation programs at Louisiana colleges and universities and engaged in a student teaching practicum under the guidance of a cooperating teacher during the 2013 fall semester. Approval from the Institutional Research Board (IRB) was sought from institutions providing initial teacher preparation programs that included a student teaching experience. Louisiana currently offers initial certification programs at 19 schools of education. Thirteen institutions provided IRB approval.

After receiving final IRB approval (see Appendix F), the researcher contacted faculty responsible for placement and supervision of student teachers at each university via email and telephone to explain the purpose of the study and request participation. Of the 13 universities who gave IRB approval, 12 universities agreed to participate in the study. The researcher spoke personally with faculty from participating institutions to promote support for the survey and to facilitate distribution of the request for participation to their student teachers. Faculty at the participating 12 Louisiana universities forwarded an email request for participation to all education program candidates engaged in student teaching at their university. The request included an electronic link to the *Ohio Student Teachers' Perceptions of Cooperating Teachers' Enactment of National Board Core Propositions and Teacher Educator Standards to Promote Student Teacher Learning* questionnaire. Table 1 shows the number of student teachers at each institution asked to participate.

Table 1

Questionnaire Distribution by Institution

Institution	Questionnaires Distributed
University 1	23
University 2	32
University 3	30
University 4	15
University 5	138
University 6	111
University 7	101
University 8	50
University 9	14
University 10	48
University 11	7
University 12	25
Total Questionnaires Distributed	594

Participants

The resulting pool of participants was considered a non-probability purposive sample judged to be typical or representative of the target population (Ary et al., 2006). The student teaching period was selected because of the extensive interaction between teacher education candidates and cooperating teachers during the culminating field experience. Neither random selection nor random assignment was employed. Student teachers were recruited only from institutions granting IRB approval and teacher education programs agreeing to participation in the study. Candidates in the participating teacher education programs engaged in student teaching during the 2013 fall semester were invited to complete the questionnaire. Participation in the study was completely voluntary. The possibility of all student teachers at each of the institutions responding to the questionnaire was minimal, so the target population was not quantified. Results are generalized only to student teachers who actually participated in the study.

The set of responses represents the perceptions of the student teachers who consented to participate, completed the questionnaire, and had a student teaching placement in one of four certification grade bands: early childhood (grades PK-3), elementary (grades 1-5), secondary content (grades 6-12), and K-12 certification areas. Of the 297 questionnaires returned, 17 respondents chose not to participate, 7 questionnaires were incomplete, and 16 respondents had student teaching placements outside of the four specified certification grade bands. The overall survey return rate was 43%.

Participant Demographics

The gender representation of the sample was approximately 90% female (n=233). The National Center for Education Information (NCEI) in a 2011 profile of teacher demographics reported the national teaching population is 84% female (National Center for Education Information [NCEI], 2011).

A commonly held definition of a traditional undergraduate student is one who enrolls in college immediately after graduation from high school, pursues college studies on a continuous full-time basis and completes a bachelor's degree program in four or five years at the age of 22 or 23. As shown in Table 2, approximately 57% of the responding student teachers were clustered in the 20-23 age range, indicating the majority of participants were considered traditional undergraduate candidates.

Table 2

Age Breakdown of Survey Respondents

Age Range	Number	Percent of Sample
20-23	146	56.81
24-27	37	14.40
28-31	24	9.34
32-40	27	10.50
Other	12	4.67
Not reported	11	4.28
Total	257	100.00

All 12 institutions represented offered initial certification through traditional and alternate certification programs. Participants in both undergraduate and MAT alternate certification programs were seeking initial certification in education and engaged in a student teaching experience. As shown in Table 3, of the respondents, approximately 90% pursued a bachelor's degree.

According to 2013 data (www.nbpts.org/louisiana), 1,864 Louisiana teachers are National Board certified. While this is a small percentage of the approximately 50,000 teachers currently in Louisiana, as shown in Table 4, approximately 45% of respondents to the survey reported that their cooperating teachers were National Board certified. National Board certification is one possible criterion in requirements for eligibility to mentor student teachers (Louisiana State Department, 2012a). This may explain the higher percentage reported for cooperating teachers in this study.

Student teachers who participated in this study sought initial certification across the multiple grade bands offered for licensure in the state of Louisiana. Table 5 shows the grade level certification bands represented in this study.

Survey respondents were seeking certification in 10 different teaching areas. As Table 6 reflects, the largest group, approximately 45% of survey respondents, sought certification in elementary education.

Table 3

Licensure Pathways for Survey Respondents

Pathway	Number	Percent of Sample
Traditional Undergraduate	233	90.66
Master of Arts in Teaching (MAT)	24	9.34
Total	257	100.00

Table 4

Cooperating Teachers' National Board Certification Status as Reported by All Survey Respondents

Reported Status	Number	Percent of Sample
Board Certified	117	45.53
Non-Board Certified	49	19.07
Don't Know	91	35.40
Total	257	100.00

Table 5

Grade Band Certification of Survey Respondents

Grade Band	Number	Percent of Sample
Grades PK-3	37	14.40
Grades 1-5	117	45.53
Grades 6-12	61	23.73
Grades K-12	42	16.34
Total	257	100.00

Table 6

Content Certification Areas of Survey Respondents

Content Certification Area	Number	Percent of Sample
Art	6	2.33
Early Childhood	37	14.40
Elementary	117	45.52
English	26	10.12
Health & Physical Education	14	5.45
Mathematics	21	8.17
Music	19	7.39
Science	4	1.56
Social Studies	10	3.89
Special Education	3	1.17
Total	257	100.00

Results for Hypothesis 1

Hypothesis 1 stated: There is no significant difference in student teachers' perceptions of cooperating teachers' modeling of Core Propositions in Student Teaching across certification grade bands.

The goal of research question 1 was to examine the perceptions of student teachers of their cooperating teachers' modeling of professional behaviors as identified by the National Board of Professional Teaching Standards (2002). Section 1: *Cooperating Teachers' Modeling of Core Propositions in Student Teaching* consisted of 21 items that asked student teachers to respond to each statement "regarding the practice modeled for you by your cooperating teacher as he/she teaches the students." Each response was selected among a 6-point Likert-type rating scale which ranged from 1 (*Very Strongly Disagree*) to 6 (*Very Strongly Agree*). No "neutral" point was provided among the six response categories.

For Section 1, responses indicating levels of strong agreement (*Very Strongly Agree* and *Strongly Agree*) ranged from 61% to 75%. Of the 21 items, Item 9 measured student teachers' agreement that their cooperating teacher models providing multiple examples to help students understand concepts with which they struggle. This item had the highest percentage (77%) of strong agreement and the lowest standard deviation (SD=1.16). With 75% strong agreement and the highest mean (M=5.15), Item 8 measured student teachers' perceptions of cooperating teachers' modeling of how to make subject-specific content make sense to students. The lowest level of strong agreement (61%) and the highest level of disagreement (17%) were shown for Item 7: My cooperating teacher models how to develop lessons that connect different subject areas. The largest standard

deviation (*SD*=1.48) was shown for item 5: My cooperating teacher models equitable treatment of all students (*M*=4.87). Table 7 presents the percentage, means, and standard deviation of responses from the total sample (*N*=257) that indicated strong agreement for each item.

Table 7

Section 1: Cooperating Teachers' Modeling of Core Propositions in Student Teaching

Item: My cooperating teacher models...		Number	Very Strongly Agree/Strongly Agree	Mean	Standard Deviation
1	Recognition of students' individual needs	176	68%	4.96	1.28
2	Adjustment of lessons to enable all learners to meet challenging goals	162	63%	4.85	1.27
3	Understanding of how students learn student-to-student interactions	179	69%	4.93	1.26
4	Understanding of how students learn	187	73%	5.05	1.23
5	Equitable treatment of all students	172	67%	4.87	1.48
6	That his/her mission in working with students extends beyond developing their cognitive abilities	190	74%	5.02	1.29
7	How to develop lessons that connect different subject areas (e.g. science, math, reading)	157	61%	4.73	1.29
8	How to make subject-specific content make sense to students	192	75%	5.15	1.36
9	How to provide multiple examples to help students understand concepts they struggle with	198	77%	5.12	1.16

(table continues)

Item: My cooperating teacher models...		Number	Very Strongly Agree/Strongly Agree	Mean	Standard Deviation
10	Ways to connect what students already know to what they will learn in the future	183	71%	5.04	1.21
11	Use of variety of methods to meet established goals for student learning	182	71%	4.95	1.18
12	Ability to keep all students engaged during whole-group instruction	173	67%	4.87	1.29
13	Commitment to student engagement	182	71%	4.98	1.33
14	How to give student feedback about their progress	168	65%	4.81	1.30
15	Strategies for making difficult instructional decisions	174	68%	4.88	1.36
16	Seeking advice of others to promote student learning	179	70%	4.89	1.30
17	How ongoing teacher learning improves teaching effectiveness	185	72%	4.95	1.43
18	Reflection on the effectiveness of specific lessons	181	70%	4.90	1.40
19	Contributions to the school's effectiveness by collaborating with other professionals	186	72%	5.04	1.35
20	Collaboration with parents to help students learn	169	66%	4.90	1.34
21	Use of community resources to help students learn	160	62%	4.76	1.31

Note: *N*=257

Table 8 shows the four certification grade bands represented in the study and the number of respondents. For purposes of this study, Secondary Content refers to secondary (grades 6-12) certification in the content areas of English, mathematics, science, and social studies. Respondents in the K-12 grade band were seeking certification in art, special education, music education or health and physical education.

Raw scores for Section 1 were determined for participants in the four certification grade bands (N=257) and analyzed using descriptive statistics. Table 9 shows the descriptive statistics for responses for Section 1: Cooperating Teachers' Modeling of Core Propositions in Student Teaching.

Table 8

Grade Band Certification and Number of Student Teacher Respondents

Certification Grade Band	Number
Early Childhood (grades PK-3)	37
Elementary (grades 1-5)	117
Secondary Content (grades 6-12)	61
English, Mathematics, Science, Social Studies	
K-12 certification	42
Art, Special Education, Music, Health & Physical Education	
Total	257

Table 9

Mean, Standard Deviations of Raw Scores for Section 1: Cooperating Teachers' Modeling of Core Propositions in Student Teaching for Certification Grade Bands

Certification Band	Number	Mean	Standard Deviation
Early Childhood (grades PK-3)	37	102.65	26.40
Elementary (grades 1-5)	117	107.74	21.94
Secondary Content (grades 6-12) English, Mathematics, Science, Social Studies	61	102.64	20.11
K-12 Certification Art, Special Education, Music, Health & Physical Education	42	94.71	31.68
Total	257	103.67	24.35

A one-way ANOVA was conducted to compare student teachers' perceptions of cooperating teachers' modeling of Core Propositions in Student Teaching among four certification areas. Table 10 shows results of the analysis.

Statistically significant differences were found among groups at the 0.05 probability level (F=3.115, p = .027). A post hoc Tukey HSD test was administered and statistical difference was found between the elementary (grades 1-5) certification grade band and the K-12 certification grade band as seen in Table 11.

Table 10

ANOVA Results: Hypothesis 1

	Sum of Squares	*df*	Mean Square	*F*	Significance
Between Groups	5405.37	3	1801.79	3.12	.027*
Within Groups	146359.86	253	578.50		
Total	151765.22	256			

Note. *Significant at $p < .05$ level.

Table 11

Tukey HSD Results for Hypothesis 1

Source	Comparison	Mean Difference	Significance
Early Childhood	Elementary	-5.09	.677
(*n*=37)	Secondary	0.01	1.000
	K-12	7.93	.461
Elementary	Early Childhood	5.09	.677
(*n*=117)	Secondary	5.10	.537
	K-12	13.02	.015*
Secondary Content	Early Childhood	-0.01	1.000
(*n*=61)	Elementary	-5.10	.537
	K-12	7.93	.356
K-12 Certification	Early Childhood	-7.93	.461
(*n*=42)	Elementary	-13.02	.015*
	Secondary	-7.93	.356

Note. *N*=257. * Significant at the $p < .05$ level.

Student teachers' perceptions of cooperating teachers' modeling of Core Propositions in Student Teaching differed significantly between the elementary (grades 1-5) certification grade band and the K-12 certification grade band ($p = .015$). Perceptions of student teachers in the early childhood certification grade band and the secondary content certification grade band were not significantly different from the perceptions of those seeking elementary certification and K-12 certification. Student teachers in the

elementary (grades 1-5) certification grade band showed a significantly higher level of agreement regarding their cooperating teachers' modeling of behaviors identified in the Core Propositions of Student Teaching than student teachers in K-12 certification areas. It was found that significant difference existed in student teachers' perceptions of cooperating teachers' modeling of the Core Propositions of Student Teaching among the certification grade bands; therefore Hypothesis 1 was rejected.

Results for Hypothesis 2

Hypothesis 2 stated: There is no significant difference in student teachers' perception of cooperating teachers' modeling of Enactments of Standards for Teacher Education in Student Teaching across certification grade bands.

Section 2: *Cooperating Teacher Enactment of Standards for Teacher Education in Student Teaching* contained 24 items asking participants to "consider how your cooperating teacher interacts with you and other adults in education." Each response was selected among a 6-point Likert-type rating scale. For items in Section 2, percentages indicating levels of strong agreement ranged from 54% to 77%. Agreement with Item 45: My cooperating teacher sees himself/herself as teaching me to be an effective teacher had both the highest percentage of agreement (77%) and the highest mean (M=5.17). Other items showing strong agreement (73%) were Item 39: My cooperating teacher promotes high quality education for all (M=5.08, SD=1.27), and Item 40: My cooperating teacher promotes high quality experiences for me as I learn about teaching (M=4.98, SD=1.43).

Use of action research by the cooperating teacher (Item 34) measured the lowest level of agreement at 54% (M=4.55, SD=1.46). The use of research by the cooperating teacher to improve ability to model effective teaching (Item 25) measured 60% strong

agreement (M=4.70, SD=1.42). Contributing to improvement of teacher education programs measured 62% strong agreement (M=4.76, SD=1.46).

Differences in perceptions of technology use were shown. Item 26: My cooperating teacher uses technology to help me learn about teaching (M=4.78, SD=1.41) measured 61% strong agreement. Encouragement by the cooperating teacher to use technology in instruction (Item 42) showed 75% strong agreement (M=5.06, SD=1.35). The percentage of responses from total sample (N=257) that indicated strong agreement with the item and the means and standard deviation for each item are shown in Table 12.

Table 12

Section 2: Cooperating Teachers' Enactment of Standards for Teacher Education in Student Teaching

Item:	My cooperating teacher...	Number	Very Strongly Agree/Strongly Agree	Mean	Standard Deviation
22	Makes connections to our subject matter clear to me	176	68%	4.97	1.28
23	Understands how I learn	165	64%	4.81	1.38
24	Demonstrates professionalism when helping me learn about teaching	189	74%	5.07	1.33
25	Uses research to improve his or her ability to model effective teaching for me	154	60%	4.70	1.42
26	Uses technology to help me learn about teaching	157	61%	4.78	1.41
27	Assesses my progress in ways that help me learn about teaching	177	69%	4.96	1.35
28	Demonstrates that he or she values cultural diversity	165	63%	4.81	1.36
30	Investigates ways to help me learn about teaching strategies	164	64%	4.77	1.45
31	Shares his/ her understanding of how student teachers learn with others	168	65%	4.83	1.42

(table continues)

	Item: My cooperating teacher...	Number	Very Strongly Agree/Strongly Agree	Mean	Standard Deviation
32	Shares his/her knowledge with others to improve student teaching experiences	176	68%	4.91	1.43
33	Contributes to improvement of teacher education programs	160	62%	4.76	1.46
34	Engages in action research based on his/her own work as a cooperating teacher	139	54%	4.55	1.46
35	Reflects his/her ways of working with me to meet my specific learning needs	169	66%	4.83	1.45
36	Has adjusted his/her ways of working with me to meet my specific learning needs	169	64%	4.82	1.38
37	Demonstrates a commitment to continuous professional development	173	67%	4.95	1.34
38	Collaborates regularly with others who are important to student teachers' learning	159	62%	4.78	1.43
39	Promotes high quality education for all students	187	73%	5.08	1.27
40	Promotes high quality experiences for me as I learn about teaching	187	73%	4.98	1.43
41	Contributes to improving the profession of teaching	178	69%	4.97	1.34
42	Encourages me to use technology in my teaching	193	75%	5.06	1.35
43	Encourages me to consider how experiences I create for student relate to their lives	186	72%	5.04	1.32
45	Sees himself/herself as teaching me to be an effective teacher	197	77%	5.17	1.28

Note. N=257

Raw scores for Section 2 were determined for respondents in the four certification grade bands (N=257) and then analyzed using descriptive statistics. The descriptive

statistics for responses to Section 2: *Cooperating Teachers' Enactment of Standards for Teacher Education in Student Teaching* are shown in Table 13.

Student teachers' perceptions were compared using a one-way ANOVA. As presented in Table 14, statistically significant differences were found among groups at the .05 probability level (F=3.902, p =.009). Tukey HSD post hoc comparisons test indicated that the mean score of the elementary (grades 1-5) certification grade band was significantly different than the K-12 certification grade band as shown in Table 15.

Table 13

Mean, Standard Deviations of Raw Scores for Section 2: Cooperating Teachers' Enactment of Standards for Teacher Education in Student Teaching

Certification Band	Number	Mean	Standard Deviation
Early Childhood (grades PK-3)	37	117.57	29.81
Elementary (grades 1-5)	117	122.34	25.82
Secondary Content (grades 6-12) English, Mathematics, Science, Social Studies	61	117.12	27.40
K-12 certification Art, Special Education, Music, Health & Physical Education	42	104.62	36.86
Total	257	117.52	29.30

Table 14

ANOVA Results: Hypothesis 2

	Sum of Squares	*df*	Mean Square	*F*	Significance
Between Groups	9720.66	3	3240.22	3.90	.009*

(table continues)

	Sum of Squares	*df*	Mean Square	*F*	Significance
Within Groups	210089.51	253	830.39		
Total	219810.17	256			

Note. *Significant at $p < .05$ level.

Table 15

Tukey HSD Results for Hypothesis 2

Source	Comparison	Mean Difference	Significance
Early Childhood	Elementary	-4.77	.816
	Secondary	0.45	1.000
	K-12	12.95	.193
Elementary	Early Childhood	4.77	.816
	Secondary	5.23	.660
	K-12	17.72	.004*
Secondary Content	Early Childhood	-0.45	1.000
	Elementary	-5.23	.660
	K-12	12.50	.137
K-12 Certification	Early Childhood	-12.95	.193
	Elementary	-17.723	.004*
	Secondary	-12.50	.137

Note. N=257. * Significant at the $p < .05$ level.

The perceptions of student teachers seeking elementary certification and student teachers in K-12 certification areas of their cooperating teachers' modeling of Standards for Teacher Education in Student Teaching differed significantly at the $p < .05$ level (p =.004). However, the perceptions of student teachers in the early childhood certification grade band and secondary content certification grade band did not significantly differ from the perceptions of elementary certification grade bands and K-12 certification grade bands. Student teachers in the elementary (grades 1-5) certification grade band again showed a significantly higher level of agreement concerning their cooperating teachers' modeling of behaviors identified in the Standards for Teacher Education in Student Teaching than student teachers in K-12 certification areas. As significant difference existed in student teachers' perceptions of cooperating teachers'

modeling of the Standards for Teacher Education in Student Teaching among the certification grade bands; Hypothesis 2 was rejected.

Results for Hypothesis 3

Hypothesis 3 stated: There is no significant difference in the student teachers' perception of cooperating teachers' behaviors during the student teaching experience in relation to learning about teaching across certification grade bands.

Statements in Section 3: *Your Student Teacher Experience in Relation to Learning about Teaching* contained 14 items asking participants to reflect on level of agreement or disagreement on how their cooperating teacher "guided them to demonstrate knowledge and skills related to teaching. Each response was selected among a 6-point Likert-type rating scale. Levels of strong agreement with this section of the questionnaire ranged from 79% to 92%. The lowest measure of strong agreement (79%) was for Item 46: Student teaching with my cooperating teacher helped me to learn to use theories to plan effective lessons (M=4.82, SD=1.42). Relating theory and practice to instructional decision making (Item 57) also showed a relative low measure of strong agreement at 84% (M=5.03, SD=1.40).

Items that addressed learning to make appropriate decisions to complex situations (Item 54, 92%) and sound educational decisions (Item 48, 90%) had high measures of strong agreement. Item 54 had the lowest standard deviation of all items in Section 3 (SD=1.15). Student teachers showed strong agreement (91%) that the cooperating teacher helped them to learn how to reflect on the impact of their teaching on students (Item 47, M=5.25, SD=1.24) and provided feedback on the student teachers' instruction to make changes that improve student learning (Item 51, M=5.30, SD=1.24). Table 16 shows the

percentage of responses from total sample (N=257) that indicated strong agreement with the item and the means and standard deviation for each item.

Raw scores for Section 3 were determined for respondents in the four certification grade bands (N=257) and then analyzed using descriptive statistics. The descriptive statistics for responses to Section 3: *Your Student Teaching Experience in Relation to Learning About Teaching* are shown in Table 17.

Table 16

Section 3: Your Student Teaching Experience in Relation to Learning About Teaching

Item: Student teaching with my cooperating teacher helped me to learn to…		Number	Very Strongly Agree/Strongly Agree	Mean	Standard Deviation
46	Use theories to plan effective lessons	203	79%	4.82	1.42
48	Make sound educational decisions	232	90%	5.27	1.21
49	Connect what I learn in my teacher education program to what occurs in a real classroom	222	86%	5.20	1.31
50	Demonstrate increased professional learning	224	87%	5.19	1.30
51	Use feedback on my teaching to make changes that improve student learning	233	91%	5.30	1.24
52	Assess my own teaching on a regular basis	229	89%	5.26	1.25
53	Become more confident in my communication skills	224	87%	5.32	1.23
54	Make appropriate decisions to complex situations	236	92%	5.31	1.15
55	Collaborate with others to meet classroom challenges	235	91%	5.29	1.24
56	Use varied form of data to make effective decisions	220	86%	5.05	1.33
57	Relate theory and practice to instructional decision making	215	84%	5.03	1.40

(table continues)

Item: Student teaching with my cooperating teacher helped me to learn to...		Number	Very Strongly Agree/Strongly Agree	Mean	Standard Deviation
58	Effectively participate in the improvement of the school as a member of a learning community	225	88%	5.16	1.32
59	Work effectively in a variety of settings with diverse students	230	89%	5.27	1.17

Note. N=257.

Table 17

Mean, Standard Deviations of Raw Scores for Section 3: Your Student Teaching Experience in Relation to Learning About Teaching

Certification Band	Number	Mean	Standard Deviation
Early Childhood (grades PK-3)	37	74.38	14.43
Elementary (grades 1-5)	117	75.41	12.98
Secondary Content (grades 6-12) English, Mathematics, Science, Social Studies	61	71.82	13.42
K-12 certification Art, Special Education, Music, Health & Physical Education	42	66.17	21.21
Total	257	72.90	15.19

The results of analysis conducted to compare the student teachers' perceptions of cooperating teachers' behaviors during the student teaching experience in relation to learning about teaching across certification grade bands are shown in Table 18.

When analyzed using ANOVA, statistically significant differences were found among groups at the .05 probability level (F=4.184, p =.006). Further analysis of data using the post hoc Tukey HSD test found statistical significance between the elementary (grades 1-5) certification grade band and the K-12 certification grade band at the 0.05 probability level. Table 19 presents results from the post hoc analysis.

Table 18

ANOVA Results: Hypothesis 3

	Sum of Squares	*df*	Mean Square	*F*	Significance
Between Groups	2793.51	3	931.17	4.18	.006*
Within Groups	56299.86	253	222.53		
Total	59093.37	256			

Note. *Significant at $p < .05$ level.

Table 19

Tukey HSD Results for Hypothesis 3

Source	Comparison	Mean Difference	Significance
Early Childhood	Elementary	-1.03	.983
	Secondary	2.56	.843
	K-12	8.21	.072
Elementary	Early Childhood	1.03	.983
	Secondary	3.51	.425
	K-12	5.65	.004*
Secondary Content	Early Childhood	-2.56	.843
	Elementary	-3.59	.425
	K-12	5.65	.235
K-12 Certification	Early Childhood	-8.21	.072
	Elementary	-9.24	.004*
	Secondary	-5.65	.235

Note. N=257. * Significant at the $p < .05$ level.

Student teachers' perceptions of cooperating teachers' behaviors during the student teaching experience in relation to learning about teaching differed significantly between student teachers seeking elementary certification and student teachers in K-12 certification areas (p =.004). No significant difference was found in the perceptions of student teachers in the early childhood certification grade band and the secondary content certification grade band from perceptions of student teachers in elementary certification

grade bands and K-12 certification grade bands. A significantly higher level of agreement concerning their cooperating teachers' modeling of behaviors identified in relation to learning about teaching was found in perceptions of elementary (grades 1-5) certification grade band student teachers and student teachers in K-12 certification grade bands. It was found that significant difference existed in student teachers' perceptions of cooperating teachers' modeling of behaviors during the student teaching experience in relation to among the certification grade bands; therefore Hypothesis 3 was rejected.

Results for Hypothesis 4

Hypothesis 4 stated: There is no significant difference in the student teachers' perception of cooperating teachers' personal teaching efficacy across certification grade bands.

Section 4: *Cooperating Teacher's Personal Teaching Efficacy* contained 6 items asking participant's perceptions of their cooperating teachers' beliefs that they are making significant contributions to the academic progress of their students. Each response was selected among a 5-point Likert-type rating scale which ranged from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*).

Items 61 and 63 were not reversed coded. Lower numbers correspond to level of agreement with the actual wording of the statements. A majority of the student teachers surveyed (51%, n=130) responded that their cooperating teacher would agree that factors beyond his or her control have a greater influence on the students' achievement than he or she does. Of the remaining responses, 24% (n=62) disagreed or strongly disagreed, and 25% (n= 65) chose "somewhat agree."

For Item 63, 42% (n=109) of the respondents strongly believed that their cooperating teacher would agree that some students are not going to make much progress this year, no matter what he or she does. For the same item, 20% (n= 50) of respondents agreed somewhat to the statement, and 38% (n=98) disagreed or strongly disagreed.

The highest measure of agreement (86%) showed respondents believed that their cooperating teacher would agree that he or she is effective at helping all students make significant improvement (Item 62) and was certain he or she is making a difference in the lives of students (Item 64). Table 20 presents the percentage of responses from total sample (N=257) that indicated agreement with the item and the means and standard deviation for each item.

Table 20

Section 4: Cooperating Teachers' Personal Teaching Efficacy

Item: Indicate the level to which you believe your cooperating teacher would agree with each statement.		Number	Very Strongly Agree/Strongly Agree	Mean	Standard Deviation
60	If he/she tries really hard, he or she can get through to the most difficult student	203	79%	4.20	1.03
61	Factors beyond his/her control have a greater influence on the students' achievement than he/she does	130	51%	3.50	1.22
62	He/She is good at helping all the students in his/her classes make significant improvement	222	86%	4.32	0.90
63	Some students are not going to make a lot of progress this year, no matter what he/she does	109	42%	3.15	1.39
64	He/She is certain that he/she is making a difference in the lives of the students	222	86%	4.33	0.89
65	He/She can deal with almost any learning problem	201	78%	4.14	0.94

Note. N=257.

Raw scores for Section 4 were determined for respondents in the four certification grade bands (N=257) and then analyzed using descriptive statistics. The descriptive statistics for responses to Section 4: *Cooperating Teachers' Personal Teaching Efficacy* are shown in Table 21. When analyzed using ANOVA, no statistically significant difference was found among student teachers' perceptions of cooperating teachers' personal teaching efficacy across the four certification grade bands (F=1.488). Table 22 shows the results of the analysis of variance.

Table 21

Mean, Standard Deviations of Raw Scores for Section 4: Cooperating Teachers' Personal Teaching Efficacy

Certification Band	Number	Mean	Standard Deviation
Early Childhood (grades PK-3)	37	24.46	4.66
Elementary (grades 1-5)	117	23.93	4.19
Secondary Content (grades 6-12) English, Mathematics, Science, Social Studies	61	23.31	3.06
K-12 Certification Art, Special Education, Music, Health & Physical Education	42	22.57	6.65
Total	257	23.64	4.55

Table 22

ANOVA Results: Hypothesis 4

	Sum of Squares	*df*	Mean Square	*F*	Significance
Between Groups	89.34	3	29.78	1.45	.229
Within Groups	5202.01	253	20.56		
Total	5291.35	256			

Additional analysis among groups was unnecessary. No statistical significance was reported in student teachers' perceptions of cooperating teachers' personal teaching efficacy across certification grade bands, and Hypothesis 4 was accepted.

Results for Hypothesis 5

Hypothesis 5 stated: There is no significant difference in student teachers' perceptions of personal teaching efficacy across certification grade bands.

Section 5: *Your Personal Teaching Efficacy* had 7 statements referring to the student teachers' personal beliefs on their ability to affect student achievement. Each response was selected among a 5-point Likert-type rating scale.

In responding to Item 70: I am certain that I am making a difference in the lives of my students, 92% (n=237) of the student teachers either agreed or strongly agreed to the statement (M=4.47, SD=0.77). Responses to Item 68: I am good at helping all students in the classes make significant improvement were also strongly positive with 83% agreement (M= 4.16, SD=0.82)

Items 67, 69, and 71 were not reversed coded. Lower numbers correspond to level of agreement to the actual wording of the statements. Only 21% (n=54) agreed with Item 71: There is little I can do to ensure that all my students make significant progress during my time with them. Of the respondents, 48% (n=124) disagreed or strongly disagreed with that item. Student teachers also strongly disagreed (51%, n=132) with Item 69: Students are not going to make much progress during my time with them, no matter what I do. Just 29% of respondents (n=75) strongly agreed or agreed with the statement. For Item 67: Factors beyond my control have a greater influence on the students'

achievement than I do, 36% (n=93) of the student teachers agreed, 29% (n=74) disagreed or strongly disagreed, and 35% (n=90) somewhat agreed with the statement.

Table 23 presents the percentage of responses from total sample (N=257) that indicated agreement to the item and the means and standard deviation for each item.

Table 23

Section 5: Your Personal Teaching Efficacy

Item: Indicate the level to which you agree with each statement.		Number	Strongly Agree/Agree	Mean	Standard Deviation
66	If I try really hard, I can get through to the most difficult student.	220	86%	4.26	0.87
67	Factors beyond my control have a greater influence on the students' achievement than I do.	93	36%	3.16	1.15
68	I am good at helping all the students in the classes make significant improvement.	214	83%	4.16	0.82
69	Some students are not going to make a lot of progress during my time with them, no matter what I do.	75	29%	2.67	1.27
70	I am certain that I am making a difference in the lives of my students	237	92%	4.47	0.77
71	There is little I can do to ensure that all my students make significant progress during my time with them.	54	21%	2.20	1.32
72	I can deal with almost any learning problem.	191	74%	3.96	0.95

Note. N=257.

Raw scores for Section 5 were determined for respondents in the four certification grade bands (N=257) and then analyzed using descriptive statistics. Table 24 summarizes the descriptive statistics for responses to Section 5: *Your Personal Teaching Efficacy.*

An ANOVA was utilized to compare student teachers' personal teaching efficacy among certification grade bands. No statistically significant differences were found among the four certification grade bands at the .05 probability level as seen in Table 25.

Table 24

Mean, Standard Deviations of Raw Scores for Section 5: Your Personal Teaching Efficacy

Certification Band	Number	Mean	Standard Deviation
Early Childhood (grades PK-3)	37	25.27	4.95
Elementary (grades 1-5)	117	25.31	4.10
Secondary Content (grades 6-12) English, Mathematics, Science, Social Studies	61	24.30	2.83
K-12 Certification Art, Special Education, Music, Health & Physical Education	42	24.19	7.31
Total	257	24.88	4.67

Table 25

ANOVA Results: Hypothesis 5

	Sum of Squares	*df*	Mean Square	*F*	Significance
Between Groups	67.88	3	22.63	1.04	.376
Within Groups	5509.39	253	21.78		
Total	5577.26	256			

No statistical significance was found in student teachers' personal teaching efficacy across certification grade bands. Further analysis among groups was unnecessary. Hypothesis 5, there is no significant difference in student teachers' perceptions of personal teaching efficacy across certification grade bands, was accepted.

Summary

In summary, this research examined student teachers' responses to the five sections of the *Ohio Student Teachers' Perceptions of Cooperating Teachers' Enactment of National Board Core Propositions and Teacher Educator Standards to Promote Student Teacher Learning* questionnaire. Five hypotheses were developed to compare student teachers' perceptions of cooperating teachers' professional behaviors and actions across certification grade bands. Descriptive statistics, analysis of variance (ANOVA), and the Tukey HSD post hoc test were used to analyze the data.

Hypotheses 1, 2 and 3 tested student teachers' perceptions of their cooperating teachers' modeling of best practices based on national professional standards. The hypotheses examined perceptions of cooperating teachers' modeling of the NBPTS Core Propositions of Student Teaching, the ATE Standards for Teacher Educators, and the Performance Outcomes from ATE Standards for Field Experiences in Teacher Education. An analysis of the data revealed that for all three hypotheses, student teachers in the elementary (grades 1-5) certification grade band showed statistically significant higher levels of agreement that their cooperating teacher modeled these professional behaviors than student teachers in the K-12 grade band certification areas of art, special education, music, and health and physical education. A significant statistical difference was found in

student teachers' perceptions of cooperating teachers' behaviors among the certification grade bands; therefore hypotheses 1, 2 and 3 were rejected.

Hypothesis 4 examined cooperating teachers' teaching efficacy as perceived by the student teachers, and hypothesis 5 examined the student teachers' personal teaching efficacy. Analysis of data for hypotheses 4 and 5 found no statistical significance among certification grade bands, and both hypotheses 4 and 5 were accepted.

To conclude, this study was based on survey data and is subject to all the limitations of self-report instruments. Taken together, the results suggest significant differences do exist in student teachers' perceptions of cooperating teachers' modeling of best practice among certification grade bands. It appears from the quantitative data collected that significant differences exist between perceptions of cooperating teachers as models of best practice between student teachers in elementary (grades 1-5) certification grade bands and student teachers in K-12 certification areas of art, special education, music education, and health and physical education.

CHAPTER FIVE

DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

Discussion

The purpose of this study was to examine student teachers' perceptions of their cooperating teachers' actions to determine consistency across context, specifically certification grade bands. The student teaching experience is a critical juncture for teacher candidates in acquiring and applying knowledge, skills, and professional dispositions (Guyton & McIntyre, 1990; Valencia et al., 2009). Research has shown that demonstrated behaviors of cooperating teachers can affect the success of student teaching experiences and teacher candidates' future teaching behaviors (Anderson, 2009; Copas, 1984; Cuenca, 2011; Johnston, 2010). Since teacher educators rely on cooperating teachers as the primary resources of modeled behavior during student teaching, research-based information about the perceptions of teacher candidates concerning cooperating teachers' behaviors and actions in the classroom is central to the preparation and professional development of cooperating teachers for their work with student teachers.

This study analyzed data collected on the perceptions of cooperating teachers' actions provided by teacher education candidates participating in student teaching placements across four certification grade bands: (a) early childhood certification (grades PK-3), (b) elementary certification (grades 1-5), (c) secondary content (grades 6-12) certification in English, mathematics, science, and social studies, and

(d) K-12 certification in art, special education, music education, and health and physical education.

Data for this study were collected using the *Ohio Student Teachers' Perceptions of Cooperating Teachers' Enactment of National Board Core Propositions and Teacher Educator Standards to Promote Student Teacher Learning* questionnaire. The questionnaire aligns with best practices outlined in the NBPTS Core Propositions of Student Teaching, the ATE Standards for Teacher Educators, and the Performance Outcomes from ATE Standards for Field Experiences in Teacher Education. Five hypotheses evolved through identification of variables studied. Interval and categorical data were collected and analyzed using descriptive statistics, one-way ANOVA, and the Tukey HSD post hoc tests.

Characteristics of effective cooperating teachers have been derived mainly from studies of student teachers' satisfaction with their experiences rather than examination of the cooperating teachers' practices based on professional standards (Connor & Killmer, 2001). Studies of cooperating teachers and their work with student teachers have been based largely on qualitative examinations of small numbers of cooperating teachers (Beck & Kosnik, 2002; Glenn, 2006; Roberts, 2006; Young & Edwards, 2006).

Results of this study contributed quantitative data to the literature and reported perceived differences in cooperating teachers' actions across certification grade bands. Statistically significant differences were found among certification grade bands regarding student teachers' perceptions of cooperating teachers' modeling of professional standards. Further analysis revealed that student teachers seeking certification in elementary (grades 1-5) certification had more positive perceptions regarding their

cooperating teachers' modeling of professional standards as compared to student teachers in the K-12 certification grade band areas of art, special education, music, and health and physical education. No statistically significant differences were found among the four certification grade bands concerning cooperating teachers' personal teaching efficacy or student teachers' personal teaching efficacy.

Evolution of teaching styles during student teaching is a direct result of modeling of the individual cooperating teachers' actions (Hoff, 2010), but research was limited on cooperating teachers' modeling of effective instructional practice. Based on the results of this study, additional research, not initially addressed in the literature review, was examined and included to determine how findings informed, confirmed, or disconfirmed current research. Findings from this study are discussed in terms of the statistical significance found among the certification grade bands and in the consistency of student teachers' perceptions of cooperating teachers' actions across grade bands.

Cooperating teachers' modeling of Core Propositions in student teaching. This study found significant differences in student teachers' perceptions of cooperating teachers' modeling of Core Propositions in student teaching across certification grade bands. Elementary student teachers were found to have significantly higher positive perceptions of their cooperating teachers' modeling of the Core Propositions than student teachers seeking K-12 certification in art, special education, music, and health and physical education.

Findings were consistent with Hamman and Romano's (2009) examination of characteristics preservice teachers desired in their future cooperating teachers, and the manner in which they anticipated interacting with them in order to learn how to teach.

Hamman and Romano (2009) found that elementary teacher candidates wanted more opportunities to imitate their cooperating teachers, to receive guidance from them, and to engage in more collaborative, scaffolded interactions than secondary teacher candidates. Elementary candidates differed from secondary candidates in the degree to which they desired to receive supervision; however, they did not differ in terms of desired disposition or degree of professional knowledge about teaching (Hamman & Romano, 2009). The results of this study also suggested elementary candidates are more likely to view their cooperating teachers as models of best practice and have an expectation for high levels of interactions and supervision during the student teaching experience.

Student teachers' perceptions of their cooperating teachers' modeling of the NBPST Core Propositions were analyzed for all participants in this study. The highest positive perceptions were related to cooperating teachers' modeling of quality classroom pedagogies with P-12 students (Holbert, 2011). Similarly, Epps (2010) found student teachers perceived the construct of teaching and instruction as the most important characteristic of an effective cooperating teacher. Participants in this study agreed strongly that their cooperating teachers modeled understanding of how students learn, how to help students understand concepts by providing multiple examples, and how to make subject-specific content make sense to students. These findings were consistent with research showing cooperating teachers perceived their role as guiding practical experiences in the classroom (Rajuan et al., 2007) and providing experiences that bridge pedagogy to practice (Hamilton, 2010).

Descriptive analysis of responses from participants related to the modeling of Core Propositions by their cooperating teachers suggested that the knowledge, skills, and

dispositions that characterize accomplished teachers were being modeled for the student teachers in this study. This can be attributed in part to the report by participants that over 45% of the cooperating teachers observed in this study were National Board Certified teachers. National Board Certified teachers have demonstrated the ability to model effective teaching practices, describe these practices, analyze their impacts on student learning, reflect on what they did, and how they might improve their work. These skills and abilities are likely to contribute to preservice learning when enacted in cooperating teacher roles (NBPST, 2002).

Cooperating teachers' enactment of Standards for Teacher Education in student teaching. In this study, elementary student teachers were found to have significantly higher positive perceptions of cooperating teachers' enactment of Standards of Teacher Education in student teaching than student teachers in K-12 certification areas. Perceptions of cooperating teachers' dedication to cooperating teaching through use of research, collaboration, and professional development (Holbert, 2011) were analyzed. Participants were asked to consider how cooperating teachers interacted with student teachers and other adults in education. Findings from this study supported Sanderson's (2003) study that showed elementary cooperating teachers believed communicating with other professionals in the same grade, in the building, or in the district, plus working with parents and other caregivers was critical for student teachers' success in the classroom. The differences found in this study may be attributed to the high level of collaboration required at the elementary level among educational professionals. Another plausible explanation is that K-12 certification areas are not

traditionally considered core subjects, and scheduling may prevent active participation in learning communities.

This study found student teachers' held less positive perceptions across certification bands of cooperating teachers' regular collaboration with others who are important to student teachers' learning. Findings support the National Center for Literacy Education (National Center for Literacy Education [NCLE], 2013) survey of educators across all fields that found the amount of time educators have for collaboration is small and shrinking. Most schools are not structured to facilitate educators working together (NCLE, 2013), nor is there sufficient expectation or support for regular, high levels of collaborative involvement (Leonard & Leonard, 2003). Research found only 40% of educators have opportunity to co-plan with colleagues more than once a month, and that 54% of educators have less than one hour during the school week to work with team members (NCLE, 2013).

The findings of this study reflected on the perceived collaborative efforts between the university and the cooperating teacher. The extent to which cooperating teachers are perceived to engage in collaboration related to teacher education may hinge on the extent to which they are perceived to be integral and valued components of the teacher education community (Holbert, 2011). Ballantyne and Packer (2004), and Robbins and Stein (2005) highlighted the need for university faculty and cooperating teachers to work collaboratively to assist preservice music teachers in understanding their roles and tasks.

The student teachers in this study did not have high positive perceptions regarding their cooperating teachers' contributions to the improvement of teacher education programs. Findings from this study supported the research of Koerner et al. (2002) that

revealed student teachers do not view their cooperating teachers primarily as teacher educators, but rather they consider them teachers of children first and as teacher educators second. Other research has found cooperating teachers also see themselves first and foremost as teachers of children (Clarke, Triggs & Nielson, 2013; Rajuan et al., 2007). Teacher education views the role of the cooperating teacher as one of teacher educator; however, cooperating teachers experience difficulty developing identity as teacher educators (Murray & Male, 2005). Studies specific to K-12 certification found a need for additional preparation and training for music cooperating teachers as teacher educators (Berthelotte, 2007; Cannon, 2002; Draves, 2008; Morin, 2000), and the need for adequate professional development and specific training of cooperating teachers for art education (Silverstein, 2006).

Teacher research is increasingly described as an important aspect of professional development for both experienced and preservice teachers (Cochran-Smith et al., 2009), yet, only 54% of respondents agreed strongly that their cooperating teachers were engaged in action research. Additionally, only 60% of the student teachers perceived their cooperating teachers used research to improve his or her ability to model effective teaching. Low agreement across all certification grade bands may be attributed to varying action research requirements by the participating universities during the student teaching experience. Additionally, practice-based research for student teachers may be a required part of their teacher education program, but for the cooperating teacher, it is a voluntary professional learning activity.

Student teachers in this study had predominantly positive perceptions of their cooperating teachers' interactions with their student teachers and others in the

professional community. Findings from this study showed cooperating teachers were viewed as being professional in their work with student teachers, but they were not seen as strongly in the role of a teacher educator making contributions to the field through collaboration and research.

The student teacher experience in relation to learning about teaching.

Student teachers in K-12 certification areas in this study were found to hold significantly less positive perceptions of their cooperating teachers' modeling of behaviors related to learning about teaching than did elementary student teachers. The differences found may result from the more specific pedagogy and relatively smaller grade band for elementary education compared to the pedagogy and skills necessary for encompassing the K-12 grade span in other certification areas. Special education teachers work with students who have a wide range of learning, mental, emotional, and physical disabilities. They must adapt general education lessons and teach various subjects, as well as teach basic skills, such as literacy and communication skills. In their study of general music teacher preparation, Valerio et al. (2012) cited the demanding task of working with a wide range of age groups. They also found that cooperating teachers showed a lack of agreement on the optimum approach to general music education based on the multiple approaches to general music methods (Valerio et al., 2012).

This study found student teachers across certification grade bands were consistently positive in their view of cooperating teachers' use and promotion of reflection to promote a learning environment accepting of a student teaching candidate. By virtue of their position in relation to student teachers, cooperating teachers are expected to be providers of feedback (Clarke et al., 2013). Student teachers' responses

from this study were highly positive that feedback on their instruction from cooperating teachers had helped them make changes that improved student learning.

Findings that cooperating teachers give ample feedback to their student teachers (Clarke et al., 2013) were supported by this research. This study indicated student teachers found their cooperating teachers' feedback beneficial in improving their work with students, yet other studies indicated inconsistency as to the quality of the feedback provided to student teachers. Feedback has been shown to be more confirmatory than reflective (Kahan, Sinclair, Saucier, & Caiozzi, 2003), narrow and technical (Kagan, 1992), and perceived to allow student teachers develop their own style and ability rather than imposing a particular form of practice (Kwan & Lopez-Real, 2005). Regarding differences perceived in K-12 certification areas, a study of cooperating art teachers' feedback to student teachers (Silverstein, 2006) noted a lack of support regarding appropriate time for feedback conferences. Rikard and Veal (1996) found that feedback delivery by cooperating physical education teachers varied widely. The most common feedback was posed in positive terms as to not discourage; others shared positive and negative aspects, while little feedback was shown to be collected through systematic observations and scripting (Rikard & Veal, 1996).

Standards correlated with candidates' understanding of effective action involving connections between key components or stakeholders in education (Holbert, 2011) were positively perceived in this study. Participants strongly agreed that student teaching with their cooperating teachers helped them learn to make appropriate decisions to complex situations. This is contrary to other findings, that in a practical orientation, student teachers are not adequately prepared for the complex and unpredictable interactions that

characterize teaching. If cooperating teachers assume mentoring is complete once student teachers demonstrate practical competence that may hinder critical thinking and impede student teachers' more complex understanding of teaching (Clarke et al., 2013). The discrepancy may be attributed to perceptions of this study's participants as to the meaning of complex situations and to which areas of teaching it relates.

In response to how cooperating teachers facilitated student teachers' learning, the lowest levels of agreement in this study related to theory and practice: learning to use theories to plan lesson plans and relating theory and practice to instructional decision-making. Minimal collaboration between university faculty and school-based faculty has been shown to result in candidates learning theory in isolation from practice and classroom practice dissociated from theory (Levine, 2006; Zeichner, 2010). However, student teachers in this study held high positive beliefs that their cooperating teachers helped them connect what was learned in their teacher education programs to what occurred in a real classroom. A possible reason for this inconsistency may be student teachers in this study viewed the statement as meaning implementing methodology and strategies into instruction rather than educational theories. It may also reflect cooperating teachers' concerns that university coursework is too theoretical and that by modeling practice they are providing the necessary balance between academic theory and practical experience (Clarke, et al., 2013).

Another inconsistency found in participants' responses concerned student teachers' perceptions of cooperating teachers' collaboration with others to meet classroom challenges. In this context, perceptions about collaboration were higher than in the context of cooperating teachers 'collaboration with others important to student

teachers' learning. Responses indicated the recognition by participants of the difference in the cooperating teachers' work with classroom students and their work as mentors to student teachers.

Positive perceptions concerning cooperating teachers' behaviors in this study were highest in the context of learning about teaching. The findings indicated cooperating teachers had effectually guided student teachers in this study in their understanding and application of knowledge and skills related to teaching.

Cooperating teachers' personal teaching efficacy. This study found no significant differences in student teachers' perceptions among certification grade bands concerning cooperating teachers' personal teaching efficacy. While significant statistical differences were found between elementary and K-12 certification in other contexts, descriptive analysis showed consistently positive perceptions of cooperating teachers' modeled behaviors across certification grade bands.

Investigations of pedagogical interactions between student teachers and cooperating teachers revealed that cooperating teachers' teaching efficacy was related to the extent to which they collaborated with student teachers (Hamman et al., 2007). This study found perceptions of cooperating teachers' personal teaching efficacy were generally similar to student teachers' perceptions of their own personal teaching efficacy. While student teachers held high positive perceptions (86%) that their cooperating teachers believed they were making a difference in their students' lives, participants held higher positive perceptions (92%) of their own influence. Since the previous three contexts of the questionnaire (Holbert, 2011) explored cooperating teachers' actions in support of

student teacher learning, it would be expected that these measures would align with cooperating teachers' overall efficacy in regard to teaching.

Student teachers' personal teaching efficacy. No significant differences in student teachers' perceptions of their personal teaching efficacy were found among certification grade bands. Based on responses to Holbert's (2011) instrument, student teachers across all certification grade bands showed a high positive level of agreement (92%) that they were making a difference in the lives of their students. Student teachers also had high positive perceptions (86%) of their ability to reach the most difficult students. Findings from this study are consistent with those of Woolfolk-Hoy and Burke-Spero (2005) that teaching efficacy is higher during student teaching than during the first year of teaching.

The construct of self-efficacy is grounded in social learning theory and consists of two dimensions of the construct related to teaching: personal teaching efficacy, one's belief in one's personal ability to achieve results, and outcome expectancy, a belief in the power of teaching to achieve results in the classroom. Bandura (1997) identified successes with mastery experiences as a significant source of efficacy building. Smolleck and Morgan's (2011) study of elementary student teacher experiences supported the notion that self-efficacy can be enhanced as a result of experience, particularly positive experiences. Research also found student teachers who experienced greater collaboration with their cooperating teachers reported greater teaching efficacy (Hamman, et al, 2007). The greater the self-efficacy, the more likely the participant will be to carry on when complications arise (Bandura, 1997). Participants in this study showed high positive

personal teaching efficacy indicating their student teaching practicum included strong collaborations and positive experiences.

Recommendations

This study was designed to determine the consistency of cooperating teachers' professional actions and behaviors across programs of study and certification areas. The critical value of the student teaching experience for teacher candidates and the significant influence of the cooperating teacher as a primary role model require that cooperating teachers in all certification areas demonstrate the necessary knowledge and skills to promote quality in teacher education. Previous research has been mainly small, qualitative studies, so a key contribution of this study was the quantitative examination of a larger representative sample concerning the work of cooperating teachers from the perspective of student teachers.

Data from this study found student teachers' perceptions of the current pool of Louisiana's cooperating teachers as models of professional standards and best practice to be positive. The significant differences found between K-12 certification and elementary are consistent with previous research that showed a lack of preparation specific for cooperating teachers in K-12 areas, the work with a wide range of age groups, and a lack of consensus on pedagogical approach as possible explanations. Further analysis of responses among the K-12 certification areas is warranted to determine if specific patterns of practice exist in these areas.

This research revealed elements of quality cooperating teaching were not perceived to be represented strongly across all certification areas. Findings from this study indicated less positive perceptions of cooperating teachers as teacher educators and

contributors to the improvement of teacher education programs. Perceptions that cooperating teachers worked collaboratively with others important to student teaching learning were not strongly positive. Cooperating teachers were perceived to model pedagogy and knowledge of the daily workings of a classroom, but findings suggested they did not connect the theoretical to the practical. Cooperating teachers' engagement in action research and use of research to improve their ability to model effective teaching were perceived least positively by student teachers in this study.

For teacher educators and program faculty who facilitate student teaching practicums, these findings can serve to focus efforts specifically on the identified knowledge, skills, and dispositions to enhance cooperating teachers' effectiveness as teacher educators. Integration of clinical faculty into the mainstream of programs and development of new forms of association with teacher education programs that offer opportunities to cooperating teachers to expand and enrich their senses of self as teacher educators is recommended.

Effective collaborative professional development for cooperating teachers would be beneficial across all certification areas. The significant differences found between K-12 certification student teachers' perceptions may be attributed to the distinctive and dynamic practices of the K-12 disciplines. Intentional collaboration between university faculty and cooperating teachers should be fostered, especially in K-12 certification areas, to address expectations unique to the disciplines and promote improvements and alignment of programmatic efforts.

Findings of this study indicated the need for improved preparation of cooperating teachers in regard to modeling the use theory and research during the student teaching

practicum. Training cooperating teachers to move beyond day-to-day supervision of teaching to a deeper analysis of links between pedagogy and theory could improve student teachers' understanding and application of theory in their teaching. Inclusion of more substantive engagement with inquiry-based action research during the student teaching practicum may offer richer possibilities for student teachers and provide reciprocal learning opportunities for cooperating teachers. As an extension of observations and evaluations of instruction by the cooperating teacher, inclusion of action research would give student teachers an opportunity to gain deeper understanding of their subject area, their own teaching style, and their areas of strengths and weaknesses.

Related to the consideration of cooperating teachers as a critical personnel resource, findings are pertinent not only to the analysis of current cooperating teachers but also to the meaningful selection of future cooperating teachers. Used in conjunction with professional development records, coursework, and other placement data, consideration of the findings can guide the selection of new cooperating teachers.

Teacher education programs are required to focus on integrated, cohesive frameworks for what institutions, education programs, and teacher candidates should know and be able to do (CAEP, 2013; NBPTS, 2002). Results from this study could serve not only as assessment and reflection of student teachers' perceptions but also as a point of discourse on alignment of existing standards and frameworks. Existing studies related to these standards examined the actions of university-based teacher educators. This work contributed the addition of student teachers' perspectives and examinations of cooperating teacher roles to what is known about the implementation of the ATE Standards for Teacher Education.

Findings from this research have implications for future research. In this study a purposive sample was used as representative of the student teacher population. The use of a stratified sample of student teachers from each certification grade band is suggested in future study. Another recommendation for further research would be to focus on K-12 certification student teachers to examine if perceived differences exist among the various disciplines and to identify if patterns occur among cooperating teachers' behaviors.

Perceptions of all student teachers seeking initial certification in teaching through both traditional undergraduate programs and Master of Arts in Teaching programs were examined in this study. Based on the growing numbers of teachers entering the field through alternative certification routes, future research could focus solely on the perceptions of student teachers prepared through alternate certification programs.

Findings of this study suggested that programmatic differences likely play a role in shaping candidate's ability to recognize and reflect on specific aspects of teaching quality. What candidates at different stages in teacher preparation programs perceive about teacher quality could be extended for further study of the learning process of teacher candidates across certification grade bands.

While this study did not disaggregate by schools, colleges, or departments of education, future research could disaggregate data by individual teacher preparation programs. Additional study could allow for collection of data over multiple terms to determine the extent to which patterns related to cooperating teachers' enacted teacher education roles exist. Identified professional development needs could be addressed clearly and consistently based on aggregate data as well as individual program needs.

Conclusions

The selection and training of expert, effective cooperating teachers to serve as primary role models and to foster positive classroom experiences for teacher candidates are vital to the success of student teaching. Research has shown the lack of sufficient preparation for cooperating teachers often results in unclear expectations and understandings of roles and responsibilities for both student teachers and cooperating teachers. Concerns specific to student teaching can be addressed through improved effectiveness of cooperating teachers as field-based teacher educators.

This study gave voice to student teachers in the evaluation of the effectiveness of their cooperating teachers and student teaching experiences. Quantitative findings from the study were added to the wealth of qualitative literature related to cooperating teachers' participation in teacher education. This study, consistent with other research, indicated the need for continued professional development for cooperating teachers, specifically as it relates to their identity as teacher educators. Findings suggested the need for more collaborative and specific preparation of cooperating teachers for K-12 certification areas of art, special education, music education, and health and physical education. Findings on the consistency of cooperating teachers' actions can be used by teacher educators to reflect, discuss, and plan for improvements to existing measures for selection and training of cooperating teachers.

Preparing 21st-century educators requires the development of effective teaching skills and deep expertise necessary for the academic success of children in today's classroom. Given the important role of cooperating teachers during the student teaching experience, teacher preparation programs must ensure that cooperating teachers'

knowledge, skills and commitment are exemplary. Every cooperating teacher should be a model of best practice.

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APPENDIX A

DATA COLLECTION INSTRUMENT

Student Teachers' Perceptions of Cooperating Teachers' Enactment of National Board Core Propositions and Teacher Educator Standards to Promote Student Learning

Adapted from Holbert (2011) *Ohio Student Teachers' Perceptions of Cooperating Teachers Enactment of National Board Core Propositions and Teacher educator Standards to Promote Student Teacher Learning.*

The purpose of the study that accompanies this survey is to better understand how cooperating teachers' actions relate to how they help their student teachers learn about teaching. As a student teacher preparing for initial teacher licensure, you are invited to participate in a research project designed to identify how cooperating teacher actions are related to your learning from the student teacher experience. Your responses to this survey will help in assessing the effectiveness of current student teaching experiences in supporting teacher candidate learning.

The survey is brief and should take about 15 minutes to complete. It is divided into five sections.

Your participation in the survey is completely voluntary and all of your responses will be kept confidential. If you do not wish to participate in the survey, choose that option and the questionnaire will be complete. No personally identifiable information will be associated with your responses to any reports of these data. Your refusal to participate will have no negative consequences with regard to your student teaching semester or with regard to current or future employment.

Continue to next page.

Participant Consent

I understand that Louisiana Tech University is not able to offer financial compensation nor to absorb the costs of medical treatment should you be injured as a result of participating in this research.

The following disclaimer applies to all participants using online server tools: This server may collect information and your IP address indirectly and automatically via "cookies".

The purpose of the study that accompanies this survey is to better understand how cooperating teachers' actions relate to how they help their student teachers learn about teaching. As a student teacher preparing for initial teacher licensure, you are invited to participate in a research project designed to identify how cooperating teacher actions are related to your learning from the student teaching experience. Your responses to this survey will help in assessing the effectiveness of current student teaching experience in supporting teacher candidate learning.

I attest that I have read and understood the description of the study:

Cooperating Teachers as Models of Best Practice: Student Teacher Perceptions and its purposes and methods. I understand that my participation in the research is strictly voluntary. Further I understand that I may withdraw at any time or refuse to answer any questions without penalty. Upon the completion of the study, I understand that the results will be freely available to me upon request. I understand that the results of my survey will be confidential, accessible only to the principal investigators, myself, or a legally appointed representative. I have not been requested to waive nor do I waive any of my rights related to participating in this study.

CONTACT INFORMATION: The principal experimenters listed below may be reached to answer questions about the research, subjects' rights, or related matters.

Connie Melder
melderc@nsula.edu or 318-729-1717

Pauline Leonard
pleonard@latech.edu or 318-257-2960
Members of the Human Research Committee may also be contacted if a problem cannot be discussed with the experimenters:

Louisiana Tech University:
Dr. Les Guice (318-257-3056)
Dr. Mary M. Livingston (318-257-2292 or 318-257-5066)

Continue to next page.

I understand that my choice below signifies my voluntary consent or refusal to participate in this study.

◯ Yes, I agree to participate in this study.

◯ No, I do not wish to participate in this study. (Note: Your submission will be complete by selecting this response.

Enter a Personal Identification Number

Select and enter a number with four to ten digits that only you will know. The number should not be a typical sequence (1234, 9876, etc.) This number cannot in any way be associated with your name or your university. If at any point you chose to withdraw from the study, you will be asked to provide this number so your survey responses may be deleted. [ ]

Directions

If you had more than one cooperating teacher, please consider only one of them when responding.

The questionnaire should take about 15 minutes to complete. Your individual responses will be anonymous. Please respond as you really believe. Your individual responses will not be shared with anyone including your cooperating teacher or program faculty. Thank you for your time.

Please respond to the questions below. If your response to either question is "No", then you have completed the necessary questions.

Are you currently enrolled in a program that provides initial certification?	◯ YES	◯ NO Questionnaire completed. Thank you.
Are you currently student teaching through the program	◯ YES	◯ NO Questionnaire completed. Thank you.

Continue to next page.

Cooperating Teachers' Modeling of Core Propositions in Student Teaching

If you had more than one cooperating teacher, please consider only one when responding.

Please respond to each statement based on your level of agreement or disagreement regarding the practices modeled for you by your cooperating teachers as he or she teaches the students.

My cooperating teacher models...	Very Strongly Disagree	Strongly Disagree	Disagree	Agree	Strongly Agree	Very Strongly Agree
Recognition of student's individual needs	○	○	○	○	○	○
Adjustments of lessons to enable all learners to meet challenging goals	○	○	○	○	○	○
Understanding of how students learn student-to student interactions	○	○	○	○	○	○
Understanding of how students learn	○	○	○	○	○	○
Equitable treatment of all students	○	○	○	○	○	○
That his/her mission in working with students extends beyond developing their cognitive abilities	○	○	○	○	○	○
How do develop lessons that connect different subject areas (e.g. science, math, reading)	○	○	○	○	○	○
How to make subject-specific content make sense to students	○	○	○	○	○	○
How to provide multiple examples to help students understand concepts they struggle with	○	○	○	○	○	○
Ways to connect what students already know to what they will learn in the future	○	○	○	○	○	○
Use of variety of methods to meet established goals for student teaching	○	○	○	○	○	○
Ability to keep all students engaged during whole-group instruction	○	○	○	○	○	○
Commitment to student engagement	○	○	○	○	○	○
How to give student feedback about their progress	○	○	○	○	○	○
Strategies for making difficult instructional decisions	○	○	○	○	○	○
Seeking advice of others to promote student learning	○	○	○	○	○	○
How ongoing teacher learning improves teaching effectiveness	○	○	○	○	○	○
Reflection on the effectiveness of specific lessons	○	○	○	○	○	○
Contributions to the school's effectiveness by collaborating with other professionals	○	○	○	○	○	○
Collaboration with parents to help students learn	○	○	○	○	○	○
Use of community resources to help students learn	○	○	○	○	○	○

Continue to next page.

Cooperating Teachers' Enactment of Standards for Teacher Education in Student Teaching

Consider how your cooperating teacher interacts with you or with other adults in education. Select the heading the best reflects your level of agreement or disagreement with each statement.

My cooperating teacher...	Very Strongly Disagree	Strongly Disagree	Disagree	Agree	Strongly Agree	Very Strongly Agree
Makes connections to our subject matter clear to me	○	○	○	○	○	○
Understands how I learn	○	○	○	○	○	○
Demonstrates professionalism when helping me learn about teaching	○	○	○	○	○	○
Uses research to improve his or her ability to model effective teaching for me	○	○	○	○	○	○
Uses technology to help me learn about teaching	○	○	○	○	○	○
Assesses my progress in ways that help me learn about teaching	○	○	○	○	○	○
Demonstrates that he or she values cultural diversity	○	○	○	○	○	○
Creates a learning environment in which my uniqueness is accepted	○	○	○	○	○	○
Investigates ways to help me learn about teaching strategies	○	○	○	○	○	○
Shares his or her understanding of how student teachers learn with others	○	○	○	○	○	○
Shares his or her knowledge with others to improve student teaching experiences	○	○	○	○	○	○
Contributes to improvement of teacher education programs	○	○	○	○	○	○
Engages in action research based on his or her own work as a cooperating teacher	○	○	○	○	○	○
Reflects his or her strategies for helping me learn about teaching	○	○	○	○	○	○
Has adjusted his or her ways of working with me to meet my specific learning needs	○	○	○	○	○	○
Demonstrates a commitment to continuous professional development	○	○	○	○	○	○
Collaborates regularly with other who are important to student teachers' learning	○	○	○	○	○	○
Promotes high quality education for all students	○	○	○	○	○	○
Contributes to improving the profession of teaching	○	○	○	○	○	○

Continue to next page.

My cooperating teacher...	Very Strongly Disagree	Strongly Disagree	Disagree	Agree	Strongly Agree	Very Strongly Agree
Encourages me to use technology in my teaching	○	○	○	○	○	○
Encourages me to consider how experiences I create for student relate to their lives	○	○	○	○	○	○
Encourages me to consider how my teaching may be interpreted by families	○	○	○	○	○	○
See himself or herself as teaching me to be an effective teacher	○	○	○	○	○	○

Your Student Teaching Experience in Relation to Learning about Teaching

Consider how your student teaching experience, as guided by your cooperating teacher, helped you learn to demonstrate knowledge and skills related to teaching. Select the heading that best reflects your level of agreement or disagreement with each statement.

Student teaching with my cooperating teacher helped me learn to...	Very Strongly Disagree	Strongly Disagree	Disagree	Agree	Strongly Agree	Very Strongly Agree
Use theories to plan effective lessons	○	○	○	○	○	○
Reflects on how my teaching impacts students	○	○	○	○	○	○
Make sound educational decisions	○	○	○	○	○	○
Connect what I learn in my teacher education program to what occurs in a real classroom	○	○	○	○	○	○
Demonstrate increased professional learning	○	○	○	○	○	○
Use feedback on my teaching to make changes that improve student learning	○	○	○	○	○	○
Assess my own teaching on a regular basis	○	○	○	○	○	○
Become more confident in my communication skills	○	○	○	○	○	○
Make appropriate decisions to complex situations	○	○	○	○	○	○
Collaborate with others to meet classroom challenges	○	○	○	○	○	○
Use varied form of data to make effective decisions	○	○	○	○	○	○
Relate theory and practice to instructional decision making	○	○	○	○	○	○

Continue to next page.

Student teaching with my cooperating teacher helped me learn to...	Very Strongly Disagree	Strongly Disagree	Disagree	Agree	Strongly Agree	Very Strongly Agree
Effectively participate in the improvement of the school as a member of a learning community	○	○	○	○	○	○
Work effectively in a variety of setting with diverse students	○	○	○	○	○	○

Cooperating Teacher's Personal Teaching Efficacy

This refers to teachers' beliefs that they are contributing significantly to the academic progress of their students and can effectively teach all students.

Indicate the level to which you believe your cooperating teacher would agree with each statement.	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
If he/she tries really hard, he or she can get through to the most difficult student	○	○	○	○	○
Factors beyond his/her control have a greater influence on the students' achievement than he/she does	○	○	○	○	○
He/She is good at helping all the students in his/her classes make significant improvement	○	○	○	○	○
Some students are not going to make a lot of progress this year, no matter what he/she does	○	○	○	○	○
He/She is certain that he/she is making a difference in the lives of students	○	○	○	○	○
He/She can deal with almost any learning problem	○	○	○	○	○

Continue to next page.

Your Personal Teaching Efficacy

This refers to your beliefs that you are contributing significantly to the academic progress of your students and can effectively teach all students.

Indicate the level to which you agree with each statement.	Strongly Disagree	Disagree	Somewhat Agree	Agree	Strongly Agree
If I try really hard, I can get through to the most difficult student	◯	◯	◯	◯	◯
Factors beyond my control have a greater influence on the students' achievement than I do	◯	◯	◯	◯	◯
I am good at helping all the students in his/her classes make significant improvement	◯	◯	◯	◯	◯
Some students are not going to make a lot of progress this year, no matter what I do	◯	◯	◯	◯	◯
I am certain that I am making a difference in the lives of students	◯	◯	◯	◯	◯
There is little I can do to ensure that all my students make significant progress during my time with them.	◯	◯	◯	◯	◯
I can deal with almost any learning problem	◯	◯	◯	◯	◯

If other actions relating to your student teaching experience, cooperating teacher or teacher preparation program are relevant to your learning about teaching but were not addressed in this questionnaires, share your insights in the space below.

Continue to next page.

Demographic Information

Your responses are anonymous and cannot be connected to you as an individual. No individual responses will be shared with anyone, including your cooperating teachers, school district, or university. Fill in the circle or blank that corresponds to your answer.

What is the Louisiana licensure you will obtain?

- ◯ Early Childhood Education
- ◯ Elementary Education
- ◯ Middle Level Education
- ◯ Secondary Education
- ◯ Music Education
- ◯ Health & Physical Education
- ◯ SPED or SPED/Merged
- ◯ Other

What is the grade level range for the licensure you will obtain?

- ◯ Grades P-3
- ◯ Grades 1-5
- ◯ Grades 4-8
- ◯ Grades 6-12
- ◯ Grades K-12
- ◯ Other

What is the primary subject area(s) of licensure you will obtain?

- ◯ All subjects
- ◯ Agriculture
- ◯ Business
- ◯ English
- ◯ Health & Physical Education
- ◯ Math
- ◯ Music (vocal or instrumental)
- ◯ Science
- ◯ Social Studies
- ◯ Other

Continue to next page.

What degree are you currently pursuing?

- ◯ Bachelors
- ◯ Master of Arts in Teaching

Is your cooperating teacher a National Board Certified Teacher?

- ◯ Yes
- ◯ No
- ◯ Don't Know

Gender

- ◯ Male
- ◯ Female

Age

[ ]

Your responses have been recorded. Thank you for your participation.

APPENDIX B

PERMISSION TO USE SURVEY QUESTIONNAIRE

-----Original Message-----
From: Holbert, Romena Marie Garrett [mailto:romena.holbert@wright.edu]
Sent: Friday, April 12, 2013 12:39 PM
To: Connie Melder
Cc: Holbert, Romena Marie Garrett
Subject: RE: Request for use of survey

Sure, it would be fine for you to use the instrument. Please just cite it.
Glad to be in touch and to help in any way I can.

Romena M. Garrett Holbert Ph.D., NBCT

Assistant Professor - Teacher Education
AYA Science Education Program Director
Wright State University
351 Allyn Hall 3640 Colonel Glenn Hwy
Dayton, OH 45435
(937)775-4471
romena.holbert@wright.edu

From: Connie Melder [melderc@nsula.edu]
Sent: Thursday, March 07, 2013 8:43 PM
To: Holbert, Romena Marie Garrett
Subject: Request for use of survey

Dr. Holbert,
Last spring I contacted you about the possibility of using the survey from your distinguished work on student teachers' perceptions of cooperating teachers in collecting data for my dissertation. My research topic stems from recommendations made in your study as to the benefit of the data in the selection and professional development of cooperating teachers. The topic has been approved by my major professor, and I am hoping to defend my proposal later this spring.

I would most appreciate your consent. A formal request is attached. If you have questions, please contact me by email or at my office: 318-357-6278 or my cell: 318-729-1717.

Sincerely,
Connie B. Melder
Director, Office of Field Experience & Clinical Practice Gallaspy College of Education & Human Development Northwestern State University
melderc@nsula.edu<mailto:melderc@nsula.edu><mailto:melderc@nsula.edu>
318.357.6278

APPENDIX C

INSTITUTION INVITATION TO PARTICIPATE EMAIL

I am a doctoral student through the Louisiana Education Consortium at Louisiana Tech University. With the permission of my major professor, I am contacting you as a representative of McNeese State University. Since you are key to the placements of student teaching candidates at McNeese State University, your assistance will be required.

The research is to explore relationships between enactment of standards in student teaching contexts and teacher candidates' perceptions of their student teaching placement as helpful to their learning about teaching. In particular, I am interested in perceived differences across certification areas and grade bands. With the permission and assistance of MSU, the questionnaire would be distributed electronically to the teacher candidates at your institution who are engaged in student teaching fall 2013.

The intent is for the link to the electronic questionnaire to be distributed to McNeese State University student teachers during their student teaching experience. I am requesting the questionnaire be distributed during October or early November, so each student teacher will have sufficient interactions with his or her cooperating teacher before completing the questionnaire. If given the approval, I need to gather the data before the end of the fall semester.

Data will be collected electronically and will in no way identify the institution. All candidate responses to the questionnaire will be collected such that each candidate and the institution remain anonymous. The purpose is not to compare universities but rather to analyze the perceptions of student teachers in Louisiana have about the effectiveness of their cooperating teachers based on specific standards.

Data collected as a result of this questionnaire could lend valuable insights concerning the current pool of cooperating teachers in Louisiana. It could also provide data to support decisions regarding selection of cooperating teachers, placements of student teachers, and the strengthening of connections between campus and field-based learning experiences for teacher candidates.

If McNeese State University is interested in participating in the study, I will forward an email with the questionnaire link that can be sent out to your student teaching candidates. Please indicate the number of student teaching candidates you have for Fall Semester 2013.

I can be reached to discuss any questions or concerns by phone at 318-357-6278 (office) or 318-727-1717 (cell) or by email at melderc@nsula.edu .

I appreciate your consideration.

Sincerely,

Connie B. Melder
Director, Office of Field Experience & Clinical Practice
Gallaspy College of Education & Human Development
Northwestern State University

APPENDIX D

STUDENT TEACHER PARTICIPATION REQUEST EMAIL

Thank you for your assistance in forwarding this information to your student teachers.

Student Teachers Fall 2013:

As a student teacher preparing for initial teacher licensure, you are invited to participate in a research project designed to identify how cooperating teachers' actions are related to your learning during the student teaching experience. Your responses to this survey will help in assessing the effectiveness of current student teaching experiences in supporting teacher candidate learning.

The survey will take about 15 minutes to complete and is divided into five brief sections. Your participation in the survey is completely voluntary and all of your responses will be kept confidential. Responses to the questionnaire will be collected such that each candidate and the institution remain anonymous. No personally identifiable information will be associated with your responses in any reports of these data. Should you have any comments or questions, please feel free to contact me at melderc@nsula.edu or 318-357-4549.

Thank you very much for your time and cooperation. Your insights will contribute to the improvement of clinical practice for future teacher candidates and foster improved preparation of cooperating teachers.

Access the survey at: http://tinyurl.com/melder2013

Sincerely,
Connie B. Melder
Director, Office of Field Experience & Clinical Practice
Gallaspy College of Education & Human Development
Northwestern State University

APPENDIX E

STUDENT TEACHER FOLLOW-UP AND REMINDER EMAIL

Thank you for your assistance in forwarding this information to your student teachers. I appreciate the feedback I have already received from student teachers and encourage those who have not yet responded to provide their insights about their clinical practice experience.

Student Teachers Fall 2013:

As a student teacher preparing for initial teacher licensure, you are invited to participate in a research project designed to identify how cooperating teachers' actions are related to your learning during the student teaching experience. Your responses to this survey will help in assessing the effectiveness of current student teaching experiences in supporting teacher candidate learning.

The survey will take about 15 minutes to complete and is divided into five brief sections. Your participation in the survey is completely voluntary and all of your responses will be kept confidential. Responses to the questionnaire will be collected such that each candidate and the institution remain anonymous. No personally identifiable information will be associated with your responses in any reports of these data. Should you have any comments or questions, please feel free to contact me at melderc@nsula.edu or 318-357-4549.

Thank you very much for your time and cooperation. Your insights will contribute to the improvement of clinical practice for future teacher candidates and foster improved preparation of cooperating teachers.

Access the survey at: http://tinyurl.com/melder2013

Sincerely,
Connie B. Melder
Director, Office of Field Experience & Clinical Practice
Gallaspy College of Education & Human Development
Northwestern State University

APPENDIX F

APPROVED HUMAN USE REVIEW FORM

LOUISIANA TECH
UNIVERSITY
MEMORANDUM

OFFICE OF UNIVERSITY RESEARCH

TO: Ms. Connie Melder and Dr. Pauline Leonard

FROM: Barbara Talbot, University Research

SUBJECT: HUMAN USE COMMITTEE REVIEW

DATE: October 10, 2013

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

"Cooperating Teachers as Models of Best Practice: Student Teacher Perceptions"

HUC 1093 REVISED

The proposed study's revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

Projects should be renewed annually. ***This approval was finalized on October 10, 2013 and this project will need to receive a continuation review by the IRB if the project, including data analysis, continues beyond October 10, 2014.*** Any discrepancies in procedure or changes that have been made including approved changes should be noted in the review application. Projects involving NIH funds require annual education training to be documented. For more information regarding this, contact the Office of University Research.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study. If changes occur in recruiting of subjects, informed consent process or in your research protocol, or if unanticipated problems should arise it is the Researchers responsibility to notify the Office of Research or IRB in writing. The project should be discontinued until modifications can be reviewed and approved.

If you have any questions, please contact Dr. Mary Livingston at 257-2292 or 257-5066.