A CAUSAL-COMPARATIVE STUDY OF STUDENT TEACHERS’ SKILL IN CLASSROOM AND BEHAVIOR MANAGEMENT

by

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Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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Abstract

Because many new teachers leave the field within the first five years of their first teaching job, a looming teacher shortage calls for further examination. An often-cited reason is new teachers’ perception of unpreparedness for handling classroom and behavior management tasks; thus, teacher preparation programs are under national pressure to design programs that produce well-prepared, effective teachers. The purpose of this study was to examine whether there was a difference in the classroom management performance of student teachers who are earning only a general education teacher license and those who are earning dual licensure in general and special education. The result was a longitudinal study using existing evaluative data. The archival data used was synthesized from cooperating teacher evaluations of all student teachers at Northwestern College during five semesters between the fall of 2009 and the spring of 2013. This quantitative study determined that there is a statistically significant relationship between preparation route and evaluation scores.

Keywords: teacher preparation, student teachers, teacher effectiveness, behavior management, special education, standards for teacher education, teacher retention
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List of Abbreviations

Board of Educational Examiners (BOEE)
Council for the Accreditation of Educational Preparation (CAEP)
Educational Testing Service (ETS)
Federal Education Rights and Privacy Act (FERPA)
Grade Point Average (GPA)
Highly Qualified Teachers (HQT)
Interstate New Teacher Assessment and Support Consortium (INTASC)
Measures of Effective Teaching (MET)
National Board for Professional Teaching Standards (NBPTS)
National Council for the Accreditation of Teacher Education (NCATE)
National Council of Teacher Quality (NCTQ)
National Teachers Exam (NTE)
No Child Left Behind (NCLB)
Teacher Education Accrediting Council (TEAC)
Teacher Education Program (TEP)
CHAPTER ONE: INTRODUCTION

In the field of education, many new teachers leave their jobs after their first few years (Shamberger, 2010). A looming teacher shortage calls for more attention to the preparation and retention of new teachers (Ingersoll & Merrill, 2010). Many teachers feel unprepared for the challenges facing them when they enter the field, and those who leave teaching early often cite their own perceptions of unpreparedness for the teacher role as the reason (Shamberger, 2010). As a result, teacher preparation institutions are feeling compelled to examine their programs as it relates to teacher persistence in the field.

Beginning teacher turnover is a significant problem (Shamberger, 2010). Teacher turnover costs districts significant amounts of money both in the new teacher support and the recruitment and hiring of replacement teachers. Teacher preparation programs must study the skills and abilities displayed by the products of their programs in order to inform programs of needed improvements. Of particular interest are the skills and abilities of the classroom teacher to manage classroom procedures and problem behaviors. As the teaching shortage continues to grow, more attention must be payed to the retention of existing teachers (Ingersoll & Merrill, 2010).

The teaching force has ballooned since the 1980s (Ingersoll & Merrill, 2010). Most of this is attributed to general population growth, decreasing class sizes, and changes in special education. In addition, the teaching force has continued to age. According to Ingersoll and Merrill, the number of teachers who are 50 years old or older has increased dramatically. These factors have placed extra pressure on teacher education institutions to prepare more teachers. The combination of the need for more teachers and the early exodus of many teachers led to a teacher shortage.
This research study was an examination of the teacher preparation program at a small liberal arts institution in Iowa. Because the problem of under-preparation in the field of behavior management is a factor related to new teacher attrition (Honawar, 2007), the study examined the final evaluation and examined the behavior management scores of students in two preparation routes: the dual special education and general education certification route and the general education only certification route. In addition, Chapter One contains the background of the problem, the problem statement, the purpose of the study, and the significance of the study. Chapter One contains the research questions, terms/definitions, assumptions and limitations as well as delimitations of the study, nature of the study and the research plan.

**Background**

Teacher education programs use standards to drive programmatic decisions (Roth, 1996). The effect of teacher education programs on candidate skills persist into the early career of professional educators (Scheeler, 2008). Teacher preparation programs use the performance of their student teachers based on the standards to improve their own program (Roth, 1996). Student teachers and beginning teachers report finding classroom discipline particularly difficult (Moore & Sampson, 2008). Students who leave the field early often cite classroom and behavior management of particular difficulty (Moore & Sampson, 2008). Teachers who leave the field early often cite the challenges of classroom and behavior management as the reason for leaving the field (Honowar, 2007).

Teacher quality is currently one of the most pressing concerns expressed by the public (Goodwin & Oyler, 2008). Teacher education continues to question the attributes of a quality teacher while society is calling for teachers to be better prepared and perhaps smarter (Cochran-Smith, 2001). Teacher candidates take more and more standardized tests to raise the quality of
the teaching force. Other inputs such as higher grade point average (GPA) are becoming factors in program requirements. Moreover, teacher candidates are studying a content area as a major rather than majoring in education as a discipline (Ball & Forzani, 2010).

Although most of the attention in teacher reform has been on K-12 education, teacher education and teacher preparation programs have been under increasing pressure. The National Council of Teacher Quality (NCTQ) recently released a report indicating that America’s traditional teacher preparation programs are turning out teachers who have inadequate classroom management skills and inadequate content knowledge (Kantrowitz, 2013). Other measures of teacher quality discussed include work samples, field experience, instructional methods, and greater attention to the candidate’s impact on student learning. All of these are important indicators of teacher quality and describe what the candidates need to know before licensure (Goodwin & Oyler, 2008).

Despite increased attention to teacher quality, many teachers report feeling unprepared as they enter the workforce (Shamberger, 2010). Coupled with such things as pay and working conditions, new teachers often leave the field early, resulting in high and growing turnover rates (Moore Johnson, Kardos, Feiman-Nemser, & McIntyre, 2008). Such turnover costs districts financially because they bear the expenses of teacher recruitment, mentoring and induction of new teachers (Barnes, Crowe, & Schaefer, 2007). Costs to the district are not only financial but also are significant in terms of teacher morale and effectiveness according to Barnes et al (2007).

Studies since 1975 have shown that students are the greatest source of uncertainty for new teachers (Haggar, Mutton & Burns, 2011). Novice educators leave the profession when they find that they cannot achieve success with their students; another factor is that they feel personally unsuccessful when they are not able to manage a classroom (Moore Johnson, Kardos,
Feiman-Nemser, & McIntyre, 2008). Effective teaching and effective learning cannot happen when the classroom is disorderly; therefore, teacher preparation programs must study the skills and abilities displayed by the products of their program in order to inform their programs of needed improvements (Darling-Hammond, 1996). Of particular interest are the skills and abilities of classroom teachers to manage classroom procedures and problem behaviors.

Teacher retention is a problem for both general educators and special educators. According to Corbell, Osbourne, and Reiman (2010), teachers in special education fields leave teaching at an even higher rate than those in general education. A critical shortage of special educators was reported in 98% of America’s school districts as early as 2001 (Bergert & Burnette, 2001). Barnes et al. (2007) reported approximately one third of America’s teachers leave the field in their first three years. Nearly half of new teachers leave within the first five years. The same study shows teacher turnover is almost a third higher in the schools considered the neediest. Barnes et al. (2007) stated the highest turnover rates come from districts that are urban or ones that educate large numbers of low-income students. Teaching in these schools may present challenges for which new teachers are not prepared.

Previous research identified classroom management as the most serious problem for new teachers in the field (Honawar, 2007; Moore & Sampson, 2008). Teacher candidate preparation for issues of classroom management differs by program. State and national teacher accrediting bodies adopted standards that give direction to programs for the preparation of candidates for classroom and behavior management. Accredited programs must integrate and measure those standards (Honawar, 2007). Despite the integration of standards in classroom and behavior management, the problem persists (Corbell et al., 2010).
Behavior management issues often coexist with learning difficulties (Oliver & Reschly, 2010). Children who perform at low levels academically are at risk for behavioral challenges as well. Inappropriate behavior can be the result of, or an escape from, learning difficulties. A cycle of negative reinforcement for behavior difficulties resulting from learning differences can exacerbate the issue for both learning and behavior; thus, teachers skilled in both learning management and behavior management are critical.

Teacher preparation has a critical role to play as K-12 schools struggle to meet the need for highly qualified teachers (Oliver & Reschly, 2010). Key changes in the preparation standards at both the state and the national level will leverage changes in general education teacher preparation (Brownell, Sindelar, Kiely, & Danielson, 2010). Some states require teachers to hold dual certification in general education and special education. Calls for the integration of traditional special education skills into the state and national standards for general education teacher preparation have been prevalent among educators in the field (Darling-Hammond, 2006).

Teacher preparation programs are also under increasing scrutiny to integrate these professional standards for content as well as performance in order to prepare highly qualified teachers (Scheeler, 2008). Accrediting bodies are under increasing pressure to design standards for pre-service teachers affecting programmatic change and to actually focus teacher education programs on the quality outcomes new teachers will need. The skills and techniques teacher candidates learn through their teacher education program must be generalized for practice during their student teaching as well as part of their practice over time (Darling-Hammond, 2006).

Many researchers established the need to prepare teachers through teacher training programs (Scheeler, 2008). The development of standards occurred to assist teacher education programs to identify the skills necessary for effective teaching (Roth, 1996). The function of the
standards is to identify transferrable skills and then to require programs to measure the acquisition of those skills in the candidates exiting the teacher education program. Roth (1996) asserted standards serve to identify the minimum qualifications of the candidates graduating from the program; therefore, it is up to the individual program to focus on the contributions their individual program can make to the profession.

In accredited programs, all teacher candidates must demonstrate standards-based competency to earn an initial license (Ginsberg & Levine, 2013). Teacher educator institutions design assessment programs based on the standards. Most programs used standards-based rubrics to describe quality performance around the standards, and candidate performances are assessed based on these rubrics (Tucker, 2011). Teacher preparation programs, in turn, collect candidate assessment data to look at the quality of their own programs based on the performance of their own candidates (Roth, 1996). Therefore, the rubrics serve both to describe and measure candidate performance and to quantify program performance, based on aggregate data around candidate performance. It is expected that teacher preparation programs must use the data to improve their programs based on the teacher standards.

Student teachers and beginning teachers report finding classroom discipline of particular difficulty (Moore & Sampson, 2008). Weakness in behavior and classroom management skills of student teachers and beginning teachers has been documented in programs across the United States. Currently, the focus on teacher preparation has been to identify a set of core practices that can be measured. The aim of this work is to better support young teachers in learning how to use their knowledge of classroom management and put it to practice. By highlighting specific behaviors, skills, and pedagogies teacher educators may better name and prepare novice teachers (McDonald, Kazemi, & Kavanagh, 2013).
Although all teacher candidates prepared for careers in general education must demonstrate competency in the standards, teacher preparation can differ from candidate to candidate based on the endorsement or licensure areas they choose. In Iowa, those licensure areas are called endorsements (Iowa Board of Educational Examiners, 2013). Candidates preparing to earn an elementary license, for example, can enhance their preparation by choosing to add an endorsement in science, reading, math, or other licensure options to their elementary license. An endorsement in special education is one of those options. Secondary teacher candidates preparing for careers in high school also choose licensure areas as part of their undergraduate education. Candidates choose what their major licensure area will be but can include another endorsement to their license. Although some states are calling for dual licensure for all candidates, programs requiring dual certification are rare (Brownell et al., 2010). In Iowa, only some of these candidates choose to add an endorsement in special education as part of their preparation.

Candidates not earning an additional endorsement within their undergraduate degree program may choose to earn a minor in another content area; still, others simply may take elective courses toward the total credits necessary for graduation (Northwestern College catalog, 2013). An endorsement in special education is one option of many for graduates. All special education teacher candidates complete all the preparation for both general and special education. Teacher candidates earning special education endorsements take courses focusing on methods and materials for working with students who have a variety of special needs or circumstances. All student teachers, regardless of endorsement, must complete a student teaching experience in the general education classroom. Those earning only general education licensure must student teach for a fourteen to sixteen-week semester in one or more general education placements.
Those seeking general education plus special education licensure must complete eight weeks in general education and an additional eight weeks of student teaching in a special education classroom.

The focus of the study was to determine whether the preparation of special educators and general educators differed in their performance in behavior and classroom management based on their general education experience. Comparisons were made between the performance of the student teachers who earned general education licenses and those that earned general education plus special education licenses. In the study, there was an examination of the student teacher evaluation forms completed by cooperating teachers at the end of the initial general education experience. The forms are based on Danielson’s (2007) work on standards; the section of the framework focusing on classroom and behavior management was of particular focus. The findings from the study could be useful to the leadership in higher education institutions as they restructure future programming and might be applicable to other teacher education programs created to prepare general and special education teachers.

**Problem Statement**

Early career teacher attrition is a problem that exists. A review of the literature revealed that new teachers feel unprepared for the role as classroom managers (Ingersoll, 2003). Teacher preparation programs have an interest in preparing new teachers for their roles as new teachers (Roth, 1996). Teacher training institutions must use professional standards to guide their program. All candidates must prove their ability to perform well around the standards in order to earn a license.

Despite the fact that all teachers are prepared according to standards, some candidates are not successful in student teaching or beginning teaching and do not persist in the field (Scheeler,
Teacher education accrediting bodies are required to examine the performance of their candidates to revise their own program (Roth, 1996). Examining performance differences between candidates taking different routes to licensure could inform the program and in turn inform the profession toward quality teacher preparation.

One of the most cited reasons given for teachers to leave the field is classroom and behavior management (Corbell et al., 2010). New teachers report feeling unprepared for the tasks facing them as educators. Research shows that the quality of teacher preparation programs has a persistent effect on the quality of new teachers (Scheeler, 2008). Although teacher preparation programs are preparing all new teachers according to defined standards of quality, some candidates are successful while others are not. The problem under study was to examine whether the preparation area chosen by the candidate is a factor in the success of student teachers for managing classroom.

**Purpose Statement**

The purpose of the quantitative study was to determine whether student teachers in both general and special education programs were able to address classroom and behavioral management issues based on skills learned in their teacher preparation programs. The selected research method was appropriate to the study because the data available was quantitative in nature and the study sought to examine how variables were related (Glatthorn & Joyner, 2005). The study’s driving impetus was to add to the body of knowledge around teacher effectiveness (Ball & Forzani, 2010; Conderman, Johnston-Rodriguez, Hartman, & Walker, 2012). Understanding the differences in skills based on preparation area could lead to improvement in the particular teacher education program at the small teacher education program under study as well as in the field more broadly, especially in the state of Iowa (Conderman et al., 2012).
A critical theory framework was used to develop this study. Max Horkheimer in Frankfurt (Bronner, 2011) developed critical theory. Bonner stated that the theory was developed between World War I and World War II. It was initially associated with utopian Marxist ideas and oriented to changing society. The concern of the critical theorists was to change society through empowering individuals to create new thought for themselves and for others (Abrahams, 2004). Horkheimer named the theory “Critical Theory” in 1937 (Bronner, 2011). It was developed to describe a political response to the problems in the new society. Critical theory, in its early days, was committed to using theory and practice, which leads to social and personal change. Bronner (2011) stated that critical theory formed a basis for many philosophers who followed and further developed critical theory.

The theory indicates that the schools will shape social and learning experiences to transmit societal values (Abrahams, 2004). Educators then will search, question, and reflect on the individual’s connectedness to school, society and culture. Not only should educators examine their culture’s current values, but seek to change values to better reflect the ideal (Bronner, 2011). In fact, critical theory improves understanding of society and societal problems by integrating social sciences. Critical theory claims that the whole of understanding is bigger than the sum of the elements.

Applying the research on critical theory to the research on teaching classroom and behavior management was the goal of this study. This theory states that schools, or in the case of this study teacher education programs, can shape candidates’ knowledge and classroom behaviors through teacher preparation. Horkheimer stated that critical theory must explain what is wrong with the current conditions, must identify the factors and the people necessary to change it, and must provide goals for the change (Bohman, 2013). Critical theory would also say
that the whole of the learning is more than the sum of the parts of the curricula (Jessup, 2012). Considering critical theory criteria, it may be implied that those teacher candidates who have prepared for careers in special education, with the attention to many different kinds of students and a possible inclination toward serving students with many needs, will have better scores on the classroom and behavior management evaluation (Bronner, 2011).

**Significance of the Study**

The quantitative research was significant because it addressed the important problem of new teacher attrition. The problem is that teachers are leaving the field early. Guarino, Santibañez, and Daley (2006) found teacher attrition is costly for schools and disadvantageous to learners. The researchers also found that teachers who leave the field are more capable, as measured by test scores, than those who persist. In fact, those who are in the group of teachers with the highest test scores are the most likely to leave the field early.

Challenging student behavior is a prominent factor for teacher stress and teacher burnout (Gebbie, Ceglowski, Taylor, & Miels, 2012). Classroom teacher surveys indicated that one of most persistent training needs for new teachers is how to address behavioral challenges. According to Gebbie et al. (2012), a link exists between teacher efficacy in classroom and behavior management when examining learning outcomes for children; when the routine of managing classroom and behavior consumes much of the available instructional time in a classroom, learning outcomes suffer. Thus, the issue of classroom management and behaviors is linked not only to learning outcomes for students; the issue is related also to stress and burnout for teachers.

Colleges of Education are under increased scrutiny to produce highly qualified teachers (Scheeler, 2008). Kantrowitz (2013) asserted Colleges of Education must determine whether
teacher candidates effectively learned the knowledge and skills as well as possess the
dispositions needed for the profession. The public cry for more qualified teachers has led the
charge for teacher preparation programs to be more responsive to the market demands.
According to Kantrowitz (2013), the availability of alternative paths to licensure such as Teach
for America and The New Teacher Project and the like challenges colleges of education to
examine their practices and urge them toward continual program improvement. Honawar (2007)
stated that teacher education programs should heed to the demand for higher quality in their
graduates to staff the very real needs in the nation’s classrooms and to fill the seats in their
programs.

The call for change has propelled a call for the revision of accrediting standards;
however, standards come from various sources. For example, some standards lead to state
approval for the program, and others lead to national accreditation (Roth, 1996). The adoption of
standards-based programs for teacher preparation is driving change efforts in the field. The call
for teacher preparation leading to an increasingly complex knowledge base and repertoire of
instructional practices has pushed teacher preparation agencies to revise standards and teacher
preparation programs to change requirements (Brownell et al., 2010).

Teacher preparation programs could begin program improvements in the teaching of
behavior and classroom management skills as new teachers feel unprepared to address these
issues (Ball & Forzani, 2010; Conderman et al., 2012; Corbell et al., 2010). Difficulties with
classroom and behavior management have been a persistent problem for new teachers over many
decades (Wang, Lin, Spalding, Klecka & Odell, 2011). Although the field has been aware of the
apparent skill deficit in the area of classroom and behavior management, limited research exists
on whether an intentional focus on classroom and behavior management has produced results in new teachers (McDonald et al., 2013).

Special educators leave their teaching assignments in even greater numbers than do general education teachers (Goldhaber et al., 2011). Some leave the field entirely but many special educators transfer to the field of general education. The purpose of this quantitative study was to determine whether student teachers in both general and special education programs at Northwestern College of Iowa are able to address classroom and behavioral management issues based on skills learned in their teacher preparation programs.

**Research Questions**

Two research questions guided the development of the proposed study in relation to the problem of student teachers’ classroom and behavior management skills in general education classrooms. Those questions are:

**RQ1:** What is the difference between student teachers’ performance as measured by the general education cooperating teacher based on whether the student teacher is seeking a general education license or dual licensure on the classroom and behavior management section of their final student teaching evaluation of the general education setting?

**RQ2:** What is the difference between the performance of student teachers preparing to be general educators and those earning dual licensure as measured by the overall score on the final student teaching evaluation of the general education setting.

**Identification of Variables**

The design had one independent variable with two levels. The independent variable was the teacher preparation program. The two levels of the independent variable were: (a) General education teacher preparation, and (b) Dual general education plus special education teacher
preparation. The study had two related dependent variables. The first dependent variable was performance on the classroom and behavior management item on the final evaluation. The second dependent variable was the overall score on the final evaluation.

The causal-comparative design was appropriate for the quantitative research because the data already existed and was archival (Glatthorn & Joyner, 2005). In this type of research design, the researcher has no control over the data or over the assignment to groups. The focus of the study was to determine whether the preparation for special educators and general educators differed in their performance in behavior and classroom management based on performance in their general education student teaching experience. The selected research design helped to determine whether the type of education program chosen by the candidate had a causal relationship with their skill in teaching as measured by the student teaching evaluation.

**Definition of Terms**

For the purpose of clarification in the study, the following terms have been defined:

1. *Board of Educational Examiners (BOEE)* - The BOEE is the governing body for teacher licensure in the state of Iowa (Iowa Board of Educational Examiners, 2013).

2. *Candidate or teacher candidate* - A student in a teacher education program (National Council for the Accreditation of Teacher Education, 2008).

3. *Council for the Accreditation of Educational Preparation (CAEP)* - This group develops standards and evaluates teacher education programs and licensure practices to ensure programs are meeting specified criteria (Council for the Accreditation of Educator Preparation, 2014).
4. **National Board for Professional Teaching Standards (NBPTS)** - A national organization aimed at developing and implementing standards to define professional teaching (National Board for Professional Teaching Standards, n.d.).

5. **National Council for the Accreditation of Teacher Education (NCATE)** - This group is now part of CAEP, referenced above (National Council for the Accreditation of Teacher Education, 2013).

6. **Teacher Education Program (TEP).** Accrediting agencies use the abbreviation TEP when referring to a college or university’s teacher education program.

**Research Plan**

A causal-comparative design was used to determine if the classroom management skills and abilities of student teachers differed based on their teacher preparation route. Causal-comparative research, sometimes called ex post facto (Glatthorn & Joyner, 2005), attempts to establish cause and effect relationships. The researcher in this design had little control over the independent variable and could not create randomly assigned groups. The purpose of a causal-comparative research approach is to examine whether the independent variable, in this case teacher program, had a causal relationship with the dependent variable, or skill level in student teaching.

The data were archival and were based on the final evaluation of the general education experience of the student teachers. Four years of student teacher data was collected, including fall of 2009, spring of 2010, fall of 2010, spring of 2011, fall of 2011, spring of 2012, fall of 2012, and spring of 2013. The data was analyzed using a t-test. A t-test was chosen because this study included one independent variable and two dependent variables (Cohen, 2008). Analyzing each level of the dependent variable at the .05 level would increase the risk of making a Type I
error in the overall study. The research methodology will be further explained in Chapter Three.
CHAPTER 2: LITERATURE REVIEW

Introduction

A persistent problem exists in the field of the preparation of new teachers and their ability to manage student behavior and the classroom instruction (Conderman et al., 2012). Teacher preparation programs all over the country are under increasing pressure to prepare teachers to meet new standards of teacher quality (Steigmeier, 2013). The problem related to the proposed research study is that many new teachers feel unprepared to address classroom and behavioral issues, thereby causing many to leave the profession early in their careers. The purpose of the study was to determine whether student teachers in both general and special education programs were able to address classroom and behavioral management issues based on skills learned in their teacher preparation programs. The Iowa teacher education program at Northwestern College in Orange City, Iowa, was the focus and research site for the study.

A review of literature provides a discussion concerning teacher preparation in the field of classroom and behavior management. The review also focuses on the problem of teacher attrition caused by classroom and behavior management issues. In this chapter, attention is given to recent and future teacher education. Finally, in an effort to understand the requirements of teacher candidates, this literature review examines standards of teacher quality set by accreditation agencies. These standards mark the quality of preparation for teachers; hence, it is important to examine professional standards in the light of preparation in the field of classroom and behavior management for general educators. The research study focused on the measured skills for a limited population of general education teachers. Standards for classroom and behavior management currently exist as a component of the teacher preparation programs for all general education candidates. These standards were examined as part of the study.
The climate around teacher education quality in the state of Iowa has been volatile, similar to other states (Finn, Kanstoroom, Petrilli & Byrd, 1999). Iowa is insisting on reforms in teacher preparation programs, which include guidelines that are more stringent. Chapter Two discusses the match between the literature on preparation and retention and the proposed Iowa reforms.

**Documentation**

A selective review of the literature and research was conducted to provide context to the reader with an overview of information relevant to this study. The search for literature began with a review of teacher preparation and behavior management. Searches of Boolean keywords began through online databases. General search terms such as “teacher preparation” led to a narrowing of results using combinations of search terms. Broad themes began to emerge. The following search terms yielded the best results in combination: *teacher preparation, classroom management; teacher retention, classroom management; teacher quality, professional standards; special education and education reform*. These searches led to additional searches using the articles themselves as a base for future reading. Table 1 details the results of these searches.
The goal of the study was to add to the body of knowledge by conducting a quantitative study to determine if a significant difference existed in the mean student teacher final evaluation scores on the classroom and behavior management items gathered from student teachers in the general education student teaching experience. To ground the proposed student to the existing body of knowledge, a literature search was conducted. Literature around the themes of teacher preparation, teacher retention, behavior management, classroom management, teacher quality, and professional standards were studied. A reoccurring theme emerged as the search yielded much around the issue of teacher reform. Newspapers were especially helpful to frame the teacher education reform climate; it was necessary to examine statewide and local reform efforts. Online databases were less useful for this necessary component of the search. Searches of local

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newspapers were conducted on Iowa newspaper websites using Google and Google Scholar. These searches often led to particular authors lending additional search terms for future searches. In addition, a search for sources detailing research methods, especially the causal-comparative research method, occurred and yielded results aiding in the interpretation of the data.

**Conceptual Framework**

Three theories became the framework to explain the acquisition of classroom and behavior management skills by teacher candidates for the quantitative study: social cognitive theory, social constructivist theory, and constructivism. These three theories formed the underpinning of the study because they are important in the understanding of how new skills are developed and new learning takes place (Andrews, 2012; Bandura, 1989). These theoretical frameworks are relevant to the discussion of the development of the skills necessary to manage a classroom.

The theoretical underpinnings of the field of teacher education continue to evolve (Hollins, 2011). Teacher education is both an art and science, which means that the making of a teacher is a complex and ever-evolving task. Even asking the question of how to best prepare quality teachers assumes the quality of preparation can be defined and the qualities of effective teacher preparation can be named. The study of teacher education is relatively new, evolving in the early twentieth century. In the past 100 years, how best to prepare teachers is still a topic of investigation (Sikula, Buttery, Guyton, 1996). Research comparing the quality of teacher performance assumes quality can be defined and measured. Teacher education accrediting bodies assume to know the skills necessary to teach well and can assign those qualities with authority to the teachers those institutions prepare.
The assumption that quality teaching can be described, teachers can be successfully taught those qualities, and indeed those qualities can be observed and measured comprise the conceptual framework this proposed research will study (McDonald et al., 2013). Teacher education as a profession has turned from a focus on specifying the necessary knowledge for new teachers and toward specifying teaching practices that change knowledge to practice. The research study looked at teacher candidate skills and whether these skills were enhanced by the program path the candidate chose toward licensure. Constructivism, social constructivist, and social cognitive theories helped to frame the discussion.

**Constructivism**

Piaget is generally considered the father of constructivism (Bandura, 1989; Andrews 2012). This theory asserts that children construct their knowledge by building on what they already know. Prior knowledge that is acquired either by real or vicarious experience is the basis for all knowledge, according to Piaget (Perkins, 1999); thus, it can be posited that all humans construct new knowledge based on what they already know about a topic or theme. New skills build upon old skills by reconstructing the old into new knowledge. When learners reflect on these new experiences, they reach new understandings. Vygotsky built on Piaget’s theory of constructivism by adding the theory of proximal development (Perkins, 1999). Vogytsky noted that experiences leading to new understandings must be close to the learner’s current skill set. The acquisition of new knowledge must be adjacent to the target skill so that scaffolding by a teacher will lead the learner to new knowledge (Bandura, 1989; Andrews 2012). For Vygotsky, the learning must be active. The learner must be actively seeking and integrating the new skill or knowledge in order to effectively integrate the new understandings and move the zone of proximal development to a new level.
Constructivism is relevant to this study as it relates to student teachers learning the skill of classroom and behavior management. New teachers learn classroom and behavior management in classes leading to their degree as well as in student teaching experiences. The idea of scaffolding for student teachers while they are in the zone of proximal development is pivotal to creating new understandings. The most likely place for that to occur is during the clinical experience (Darling-Hammond, 2010). Critical to the understanding, however, is whether or not coursework leading to the professional semester plays a role in the development of new skills. Understanding just where the zone of proximal development is for most teacher candidates is critical to understanding effective teacher preparation.

**Social Cognitive Theory**

According to Bandura (1989), author of social cognitive theory, learning must be examined in the context of social environment. Bandura claimed that what is learned is gained through observation and modeling in social contexts. This theory somewhat mirrors constructivism because of its emphasis on real and vicarious experiences. According to the theory, learners must observe new skills in social contexts and then must integrate the new knowledge by using it later. Retention of the new skill happens when learners store that knowledge and then are able to retrieve it when they decide that it will be useful (Harrison, Rainer, Hochwarter, & Thompson, 1997). This idea of the learner having agency in the use of the new knowledge is called self-efficacy (Bandura, 1989).

Bandura (1989) defined self-efficacy as the idea that the learners believe they are capable of acquiring the knowledge and skills that are necessary to do a particular task. When learners believe that they are capable of completing a task and then take action to learn those tasks, they are likely to acquire the skills they are attempting to learn (Harrison et al., 1997). Learners who
have a greater sense of self-efficacy are able to set goals for their own learning. Goals are related to the learner’s outcomes and are a prerequisite for a learner having control or agency over the new knowledge.

Social cognitive theory is relevant to this study because it explains the ways that learners assimilate new knowledge and then are able to use it (Bandura, 1989). The idea of Vygotsky built on Piaget’s theory of constructivism and the way that teacher candidates assimilate skills and knowledge in classroom and behavior management is instructive to teacher preparation programs because it explains that student teachers need to have some level of self-efficacy in order to integrate the new knowledge effectively (Harrison et al., 1997). Self-efficacy is related to goal setting behavior and, in turn, is related to learner outcomes; it seems critical that teacher preparation programs examine candidate acquisition of classroom and behavior management skills in the light of social cognitive theory.

**Social Constructivist Theory**

Social constructivist theory is similar to constructivist theory. The idea of social constructivism is that social interaction is the goal of learning (Andrews, 2012). Whereas Piaget focused on constructivism and individual models of learning, Vygotsky emphasized the social aspects of learning (Ruey, 2010). Ruey stated that social constructivists view knowledge and skills as being created by learners in social contexts. In other words, learners may have different understandings of the subject matter based on previous learning and current social context. Social constructivism emphasizes the social interactions that learners have and the ways that language helps to frame their learning. This is similar to constructivism, though the latter does not place emphasis on language. Socialization, then, becomes one of the most important goals of learning for the social constructivist.
Social constructivist theory underlies this study because of the social nature involved in learning classroom and behavior management skills. Knowledge is set in social situations and constructed by the learner in social constructs (Ruey, 2010). A social constructivist would focus learning on the social implications for the new knowledge and skills and might focus on the collaborative nature of learning. Learning about the “why” and the “how” of the new knowledge or skill would be typical for the social constructivist and important for new teacher candidates.

**Teacher Preparation Reform**

The pressure for improving teacher preparation programs has been intense. Recent calls for reform have come from school districts, policymakers, and even the popular press. Very recently, *US News and World Report* teamed up with the National Council on Teacher Quality (NCTQ) to examine and compare teacher preparation programs (Walsh, 2013). The organization issued a report in June of 2013, which was highly critical of teacher preparation programs. Teacher preparation programs have responded with harsh criticism of the methods NCTQ used to gather data about teacher preparation and teacher preparation programs (Watson, 2013). It remains to be seen whether the protests will have any effect on the views of teacher preparation in the public.

Despite the discussions around measuring teacher quality, programs are responding to the increasing pressure to set higher standards (Wang et al., 2011). Despite new initiatives, changing paradigms and seemingly more responsive teacher preparation models, new teachers continue to report they were ill prepared for the role as classroom teacher (Conderman et al., 2012). The most commonly cited reason for leaving is a lack of preparation in the field of behavior management. Reforms in most states are centered on raising content knowledge standards (Dillon & Silva, 2011). Many teacher education reforms are calling for a more rigorous
academic preparation for teachers. These calls include requiring teacher candidates to have an academic major instead of a pedagogy major, adding content requirements to teacher education programs, raising GPA cut offs, and raising test score requirements. Reform efforts and the preparation deficits cited by new teachers themselves are in conflict (Robson, 2012; Steigmeier, 2012; Tucker, 2011; Wiser, 2013). According to a review of the literature, teachers are leaving the field due to a perceived lack of preparation especially in the field of behavior management (Shamberger, 2010). This presents a problem for the field.

The field of teacher education has recently been inundated with reform plans. At the same time, new teachers have been leaving the field at a high rate. Although reform packages have targeted teacher content knowledge and the raising of standardized test scores, the review of the literature reveals lack of content knowledge is not perceived as the main problem for early career teachers, as described by early career teachers. A persistent problem appears to be the ability of new teachers to manage the classroom and behavior. A review of the literature revealed this is a long-standing problem (Wang, Odell & Schwille, 2008).

**Novice teachers and teacher retention.** A theme within the review of the literature relates to the self-reported feelings of inadequacy within novice teachers (Haggar et al., 2011). Novice teachers have been asked to report perceived problems with their preparation. Over many years, problems associated with classroom and behavior management issues as well as addressing the needs of diverse learners have been reported. Haggar et al. (2011) reported these feelings of inadequacy among new teachers are often attributed to their lack of confidence in their own teacher preparation program. The new teachers report they are unprepared for the challenges of classroom teaching because their teacher education program failed to prepare them for classroom and behavior management issues.
The first years of teaching do present challenges for new educators. Unfortunately, studies indicate new teachers report being inadequately prepared for the challenges. Both special educators and general educators report their preparation was inadequate (Conderman et al., 2012). New teachers report they spend much of their first year in survival mode. Although novice teachers gain many opportunities to understand children and collaborate with other professionals, this period of development is challenging for them.

New teachers are tasked with managing students with both behavioral and academic challenges as well as providing academic instruction (Conderman et al., 2012). Studies indicate these new teachers need assistance in far more areas of instruction than they receive (Haggar et al., 2011). Beginning teachers report having limited access to materials, support for paperwork and support for the wide-ranging responsibilities expected of them. Only about half of the new teachers indicated they planned to remain in teaching (Conderman et al., 2012).

The stress of performance in those first years leads many teachers to leave the field early. The first few years provide many opportunities for new educators to learn, yet teacher preparation programs would do well to look at the follow-up surveys done by their own programs and by teacher preparation programs in general as valuable feedback (Conderman et al., 2012). This survey data can provide information that can inform faculty in the education program to make curricular changes to better prepare new teachers in order to stop the early exodus of new teachers.

The early exodus of new teachers has been a contributing factor in the difficulty of teacher staffing for many schools. Approximately one-third of all beginning teachers are leaving the profession within the first three years of teaching (Corbell et al., 2010). Approximately 50% of new teachers leave the field within the first five years of teaching. Many of these teachers cite
the fact they were unprepared for the roles of classroom and behavior manager. New teachers encounter behavior and classroom management tasks every day. Beginning teachers’ assignment and workload contributes to their satisfaction and the likelihood they will remain in the position. According to Corbell, Osborne, and Reiman (2012), schools spend approximately $2.2 billion on teacher attrition each year. If this teacher exodus could be solved through better and more thorough teacher preparation, much could be gained.

Teacher losses contribute to the problems, which exist in staffing teaching positions both in general education and special education. Teacher shortages exist in several teaching fields. Teacher shortages are especially prevalent in the field of special education (Corbell et al., 2010). General education teacher candidates in Iowa often have no required specific coursework in the field of classroom and behavior management. Special educators typically complete all the coursework necessary for licensure in general education earning a general education license.

**Teacher Quality**

The quality of teacher education is gaining unprecedented attention in the United States. Teacher quality has been linked to educational outcomes for the nation’s elementary and secondary students (Tucker, 2011). The quality of the teaching force is dependent on the quality of the teacher preparation programs. These programs have come under increased scrutiny (Cochran-Smith, 2010). This focus has not been confined to those operating within the field of professional education. The politics of educational change has extended to the nation as a whole.

Secretary of Education, Arne Duncan (2010) laid out the agenda for teacher education in a speech at Columbia University’s Teachers College. Duncan said,

Many, if not most, of the nation’s 1,450 schools, colleges, and departments of education are doing a mediocre job of preparing teachers for the realities of the 21st century
classroom. America’s university-based teacher preparation programs need revolutionary change – not evolutionary tinkering. (p. 1)

Duncan went on to urge teacher education programs to raise the bar for teacher candidates, claiming teachers today must do much more than they have been called to do in the past. In his speech, Duncan recognized that the current environment requires teachers to achieve more academic growth while working with students who have greater needs. The climate in the United States post No Child Left Behind (NCLB) requires teachers to reach for new levels of student success.

Secretary Duncan is correct; teaching is a complex act. Children must do increasingly complex tasks; they must achieve more outcomes, achieve higher test scores, and accomplish more. Moreover, learners have a wider range of needs than ever before (Ball & Forzani, 2011). Not only must teachers teach high-level academic content to learners but they also must manage and maintain increasingly complex classroom environments and student behaviors.

Because there is an assumption that teacher quality plays a major role in the academic performance of students (Wang et al., 2011), there is the assumption that teacher quality is positively shaped by quality teacher education at the pre-service level. This assumption has driven the public perception that teacher education needs reform. Although there continues to be controversy around how and where teachers should be prepared, the evidence does support that teacher quality influences student achievement (Stronge, Ward, & Grant, 2011).

Anchored or perhaps pushed by the 2002 NCLB Act, teacher education programs have been working to define and measure the qualities that make good teaching happen (Scheeler, 2008). For accrediting agencies, states, and especially for teacher education programs, this focus on quality has meant defining and measuring teacher quality through teacher standards. Teacher
accrediting bodies have been heavily involved in the push to create standards of quality (Bollag, 2006). This push for identifiable standards of performance led to the creation of rubrics and other devices meant to measure the teacher behavior described in the standards. These standards and attempts to measure quality will be discussed later in this review.

**Perspectives on Quality Teacher Preparation**

Although the public calls for improvement have recently reached a higher pitch, persistent calls for higher standards for teacher education programs have actually been at the top of the reform agenda for three decades (Darling-Hammond, 1996). Raising the bar for teacher education programs has primarily meant (a) adopting rigorous academic standards, (b) requiring more standardized tests, (c) measuring content and pedagogy, or (d) improving field experiences. Even though the calls for reform have been louder and ubiquitous, there is no unified image of what a quality target for teacher education should be (Wang et al., 2011).

The public has assumed teaching quality is an important factor in education quality and academic performance of students in general; it is also assumed quality teaching is necessary but lacking (Wang et al., 2011). These assumptions have been driving reform efforts. Teaching reforms have shaped teacher education reforms. Reform efforts continue to have an effect on program standards for accreditation and teacher education in general.

One might assume there is a unified image of what quality teaching looks like and reform efforts would have a common target (Wang et al., 2011). However, quality teaching is not easy to identify, define, or describe. According to Wang et al. (2011), the ideas of quality teaching are associated with teachers’ cognitive resources, or their knowledge; their performance, or their teaching skills; and their beliefs, attitudes, and dispositions. These ideas have led to reform efforts linked to assessments of all three of those notions. Calls from the public and the
profession to better prepare teachers who have more knowledge, stronger skills, and better disposition seem to be central to the debate surrounding reform.

Over a decade ago, the Secretary of Education issued a report concluding that teacher education was ineffective (Darling-Hammond & Youngs, 2002). The report claimed that teacher education was broken and needed an overhaul. The arguments hinged on the assertions that teacher education and teacher certification was not a connection to teacher effectiveness. In addition, the report stated that verbal ability was a main component of teacher effectiveness and undervalued in teacher preparation programs. The report also stated that teachers were underprepared for their jobs because of a lack of subject matter. All three of these complaints have resulted in reform efforts over the past decade (Dillon & Silva, 2011).

Darling-Hammond argued in actuality significant headway has been made on this agenda (2010). Many teacher preparation programs have reformed, using new standards to redesign programs. More and stronger content requirements were enacted; more and better professional practice and pedagogy requirements were put in place; strengthened coursework around the critical areas of student learning and differentiating instruction for English language learners and special needs students were required. Stronger efforts of well-designed clinical experiences were also included in most programs over the past 20 years (Darling-Hammond, 2010).

Teacher accreditation bodies have responded to the call for stronger teacher education by redesigning standards focusing on teacher quality (Bollag, 2006). NCATE recently had a year moratorium on accreditation visits in order to put in place more rigorous and responsive standards. Teacher Education Accrediting Council (TEAC) emerged as a competitor, pushing NCATE to redefine its standards (Sawchuck, 2009). The two councils have joined forces as of 2013 (Murray, 2012). Many in the field felt it was important to present a more unified structure
to the field of teacher education. The merger has meant a more rigorous bar for teacher education. The new organization, CAEP, has increased membership with the goal of implementing rigorous standards in a language understood and accepted widely.

**Link between teacher reform and student achievement.** Race to the Top, President Obama’s iteration of the NCLB Act of 2002, has brought the term teacher quality to the forefront (Strong, Gargani, & Hacifazlioglu, 2011). Research linking student achievement to high quality teaching has been dominating the public discourse. Strong et al. (2011) collected data to show a high-quality teacher can grow the average student achievement by 1.5 grade level equivalent while a low-quality teacher will only affect a student achievement gain of just 0.5 grade level equivalent. However, the student achievement results are easy to see and measure, measuring what makes for a quality teacher is still debated.

This debate has been ongoing for many years (Stronge et al., 2011). Accountability efforts since the passage of the 2002 NCLB Act have made available large databases of student-achievement records. Schools have been required to complete and report student achievement data in reading, math, and science. This has led to increasing efforts to find and link quality teachers to high achievement. Identifying the knowledge and skills teacher candidates will need has become a focus of attention.

Despite the additional attention, studies of just what highly effective teachers are doing differently from those teachers who produce lower student achievement gains have been rare (Stronge et al., 2011). Even so, a common theme emerged from the data. Teachers do have a measurable impact on student learning. However, defining what an effective teacher is, and then designing programs to teach teacher candidates how to be effective teachers is very difficult (Stronge et al., 2011). No conceptual map for teacher preparation to use in order to design
programs, which teach the skills necessary to develop quality teachers has been designed (Hollins, 2011). The argument exists that prospective teachers need the same skills that quality PK-12 teachers require. Defining the requisite knowledge, skills, and attitudes is an ongoing process.

**Effective teaching skills.** Several important factors emerge from the literature. First, veteran teachers have fewer classroom disruptions and better classroom management skills (Stronge et al., 2011). Highly effective teachers have better relationships with their students than less effective teachers do. Teachers whose students test in the top quartile also have students who disrupt their classroom less frequently. Top quartile teachers have one-half of a disruption per hour, and lower quartile teachers experience five disruptions per hour (Stronge et al., 2011). Teachers who have better success in teaching content also deal more effectively with classroom and behavior management.

Clearly, teaching is a complex act (Wang et al., 2011). Understanding effective teacher education, specifying what it takes to prepare effective teachers, and then working to improve it are also complex. Lampert (2012) asserted that identifying the markers of teacher quality, quantifying teacher quality, and then working to improve preparation in those skills necessary are the work of this generation of reform. Preparing new teachers for the tasks they will encounter as beginning teachers is difficult indeed. Teacher preparation programs are engaging in a work made even more difficult when considering the variety of situations graduates experience in the first years of teaching (Boe, Bobbit, Cook, Whitener, & Weber, 1997). It is difficult to prepare young teachers for greatly diverse students, situations, and conditions.

Researchers agree that the ultimate goal of improving teacher quality should be to shift from measures of teacher performance to the actual result of teacher work (Lampert, 2012).
Over the past 20 or so years, the reform focus has shifted to improving the educational outcomes in PK–12 schools (Hollins, 2011). Teacher preparation programs received criticism for being disconnected from the field. Lack of a cohesive set of standards as well as clear goals and articulated standards have been targets for the reform minded public (Wang et al., 2011). Questions of quality preparation and the measurement of quality remains a question to be explored.

Traditionally, programs have not been built on unified conceptions of quality teaching (Wang et al., 2011). Some teacher education programs have been focused on recruiting smart teachers, assuming teachers who are smart and who score at the top of standardized test scores will be able to transmit knowledge to students. Other programs prefer to challenge teacher education programs to examine alternative ideas and models of teaching. Still, other programs focus on field experiences as the core of the program. These programs engage prospective teachers in large numbers of practicum hours, counting on the school-based partners to develop both knowledge and pedagogical knowledge (Darling-Hammond & Youngs, 2002).

The challenge for teacher educators is to provide a basic education in pedagogy and content and to provide many opportunities for candidates to learn the practices and the conditions they will face as a new teacher (Darling-Hammond & Youngs, 2002). Part of the challenge is identifying the skills needed and then transmitting that knowledge within the context of authentic practice. This is especially difficult because the conditions of teaching will vary tremendously from location to location (Strong et al., 2011). Teaching future teachers to interpret the social context of the classroom, to engage their own students, to meet varied needs of their learners, and to transmit the knowledge they are tasked to teach is an incredibly complex task (Hollins, 2011). It is critically important to identify the skills and abilities needed, to translate those skills
and abilities, to measure them in meaningful ways, and to use these skills to inform teacher education programs as they design methods of delivery.

For teacher educators, the current climate is both exciting and daunting. Many teacher educators have done much work over the past two decades to develop more successful models of teacher education (Darling-Hammond, 2010). Still, the political pressure to change programs and deliver more effective teacher education remains unified and intense because the country, as a whole, has made few real achievement gains and has made little or no progress in closing the achievement gap since the 1980s (Cochran-Smith & Power, 2010). Conversely, many industrial nations have made great gains ahead of the United States in achievement (Hokka & Etalapelto, 2013).

Furthermore, the past two decades have witnessed great policy shifts from the government at all levels (Darling-Hammond, 2010). Policy debates directed at teacher education have become part of the public discourse. The founding of the National Board for Professional Teaching Standards (NBPTS) in 1989 led to a collection of standards and identified skills for teachers. Strengthening teacher preparation began to be seen as critical to education reform in the country. Some states have transformed the requirements, insisting teachers have more content and pedagogical knowledge. Many states have new teacher mentoring requirements and professional development cores. Dramatically reforming teacher education in the United States now seems possible because of the national and state focus.

**Teacher Education Climate in Iowa**

Many states, including Iowa, do not require schools of education to obtain national accreditation from one of the major teacher education accrediting bodies (Iowa Board of Educational Examiners, 2013). The state has no cooperative agreement with NCATE or CAEP
and sets its own standards (Iowa Department of Education, 2013). Increasing and rapidly changing accreditation requirements may create a disincentive for teacher preparation programs to participate, and accreditation through the national accreditors provides no relief from the burdens state accreditation standards place on programs (Bollag, 2006). Although some teacher preparation programs in Iowa do seek national accreditation, there are no offers or incentives for programs to do so, and only 5 of the 31 programs were currently nationally accredited in 2013 (Iowa Department of Education, 2013).

Instead, all teacher preparation institutions in the state are required to earn Iowa State accreditation in order to grant Iowa teacher licensure. All institutions are required to prepare their teacher candidates around standards, which are based on the Interstate Teacher Assessment and Support Consortium (INTASC) standards (CCSSO, 2008). Content requirements for teaching majors and minors are specified in Chapter 79 of the Iowa code. A team from the Iowa Department of Education visits each teacher education program every seven years to assess whether or not it is meeting these guidelines.

Iowa is not alone in requiring only state accreditation. Many states set their own criteria by which teacher education programs are accredited, and fewer than half of the teacher education programs in the nation had obtained national accreditation by 2006 (Bollag, 2006). Traditionally, states have routinely approved all the programs requesting approval in their state (Dillon & Silva, 2011). Examples of states requiring programs to make significant changes or revoking approval to operate in the state are scarce.

Iowa’s teacher education program received an “F” from the Fordham Foundation in a report issued in November of 1999 (Finn et al., 1999). The Foundation cited three specific problems: lack of accountability for teachers, lack of alternative teacher approval programs, and
lack of basic skills or content skills tests for teacher candidates. According to Fuller, (2013), other critics have used Fordham’s report as evidence that the state needs to overhaul its traditional programs.

Iowa also received an “F” from the organization, Students First (Wiser, 2013). Students First is a non-profit group headed by former Washington, D.C. school chancellor, Michelle Rhee. The group cited Iowa’s failure to win a waiver from NCLB requirements as one reason for the low rating. Several other issues ranging from performance evaluations for teachers and principals and compensation plans based on teacher performance were discussed as reasons for the “F.” According to Wiser, Rhee received an invitation to discuss school reform in the state by the governor, Terry Branstad. Rhee’s continuing presence in the state is one indication of the governor’s plans to move reform forward.

Iowa has made significant changes in the nearly 15 years since the Fordham report was issued. New testing requirements for all new teachers were required as of January 1, 2013. New teacher standards were adopted and are under study to be changed again (Krueger & Wilkinson, 2002; Stinly, 2013). Because Iowa is in the unique situation of having had a budget surplus (Steigmeier, 2013), it is likely the governor will continue to push for tighter measures of content knowledge including higher GPA and higher scores on standardized tests for program entry. The governor has also proposed loan forgiveness programs for the teacher candidates in the top quarter of their graduating college classes who choose to teach in Iowa for at least five years (Branstad, 2013). The state has continued to require new and different standardized tests measuring content knowledge.

In the “Condition of the State” address of January 15, 2013, Governor Branstad (2013) laid out a plan for the reform. The plan focuses on teacher quality and offers incentives for top
students to choose teacher education as a career path. In addition, bonuses for high performing teachers and pay tied to student performance are to be part of the reform package in Iowa. No other measures of teacher quality were mentioned in the address. The focus is likely to be on K-12 student performance on tests.

**Tests.** Teacher candidates in every state have had to take and pass standardized content tests (Wiser, 2012). Standardized test cut scores for measuring the content knowledge of teacher candidates are meant to be a deterrent for less academically capable teacher candidates. Candidates who do not pass these content tests are not allowed to continue toward licensure. This use of high-stakes tests is firmly entrenched as a measure of quality for the teacher candidate (Cochran-Smith, 2010).

High-stakes tests for teachers arose out of the accountability movement in the 1980s (Wattras, 2003). By 2002, thirty-five states required teacher candidates to pass some form of a standardized test. The Educational Testing Service (ETS) created the early National Teachers Exam (NTE). The PRAXIS exams currently dominate the teacher testing landscape. Iowa prospective teachers are required to take and pass two PRAXIS exams to qualify for a license (Cochran-Smith & Power, 2010). ETS and other researchers claimed the PRAXIS exam would change teacher preparation by forcing programs to adapt new curriculum and practice (Sawchuck, 2012).

Studies have shown teacher candidates who perform well on PRAXIS exams are those who have more time in content classes and less time in pedagogy classes (Wattras, 2003). The discipline continues to debate the role of teacher testing. ETS admits and defends its role in defining its own ability to measure the qualities necessary for excellent teaching. Clearly, the role of teacher testing will continue to shape the profession (Sawchuck, 2012).
The entrance test, or PRAXIS I, is a test focusing on content knowledge. Test takers must pass this standardized test measuring knowledge in reading, math, and English (Wattras, 2003). PRAXIS II is the exit test. Several types of PRAXIS II tests are in use, but the purpose of those tests is to test content and pedagogical knowledge. Wattras claimed that initially, these tests arose out of a survey asking for the definition of teacher quality. In the article, Wattras explained that ETS surveyed teachers and other educators asking for the definition of teacher quality. The result of this teacher survey has been instrumental in defining the characteristics of quality teachers as it appears on teacher tests ever since. The characteristics used to design the test have woven their way into teacher education programs, teacher education standards, and state and district teacher evaluations.

Currently, teacher candidates are required to take and pass both basic skills tests and professional tests measuring content knowledge and pedagogical knowledge (Wang et al., 2011). In most states, the basic skills tests are taken early in a candidate’s college career. Test score minimums can prevent candidates from moving through to upper level courses or progressing through the program (Gitomer, Brown, & Bonett, 2011). Wang et al. (2011) explained that the field of professional teacher preparation has collectively worried that calls for more testing would unfairly affect candidates, especially candidates of color. Disparity in passing rates does exist among different populations of teacher candidates. According to Wang et al., candidates of color are being disqualified from licensure at a higher rate. Despite the fact that many in the profession worry that groups of potential teachers are being unfairly excluded, test score minimums continue to rise. Rising minimums fuel objections to teacher testing which have centered on the disparate effect teacher testing has had on diverse teacher candidates (Wattras, 2003).
Professional tests are required for licensure in many states. Often these tests measure both content and pedagogical knowledge (Gitomer et al., 2011). Candidates need to meet state standards on tests measuring content in their major or chosen areas of teaching. Still, a different test is designed to measure candidates’ knowledge of the pedagogy relevant to their levels of preparation. Although evidence concerning the relationship of scores on these exams to other measures of teacher effectiveness is limited, test scores continue to dominate the licensure requirements and the reform agenda (Sawchuck, 2012).

In Iowa, there has been a long-standing requirement for teacher candidates to take and pass a basic skills test near the beginning of their program as a prerequisite for continuation (Iowa Board of Educational Examiners, 2013). Individual teacher education programs must set their own cut score. For Iowa candidates, new testing rules were approved in November of 2012. These rules asked all teacher education candidates to take and pass at the 25th percentile on two national standardized tests (Wiser, 2012). Jason Glass, a former director of education in the state and a proponent of teacher testing, assured Iowa candidates these higher test scores would allow all Iowa candidates to precede to licensure given that the scores are evaluated against national norms. Although the new rules were unveiled in November of 2012, the first candidates affected by the change graduated in May of 2013. The state continues with the requirement that requires candidates to take and pass two licensure exams; one in pedagogy and one in content (Stinly, 2013).

The Iowa change is not unique. Nearly all teacher candidates around the country have been asked to take and pass standardized tests (Cochran-Smith, 2010). In Iowa as well as around the country, the results of the tests are being used as a gatekeeper to keep less qualified teacher candidates out of the field. Some would argue using test scores is meaningless. Arthur Levine
(2006), in his book, *Educating School Teachers*, stated this is indicative of the old argument between access and quality. Schools of education insist they cannot raise test score minimums because that will reduce access to some teacher candidates, especially candidates of color. While Levine conceded this can be a problem, he gave examples of programs that have kept admission test score requirements low, but have clearly established standards of excellence for exit. He stated programs having higher access, or lower entrance scores and higher graduation requirements, often have low persistence rates.

Interestingly, studies looking at test scores have found most teacher candidates are on par with their peers in other majors enrolled in the same university (Levine, 2006). In fact, students preparing to become secondary teachers have test scores, which are on par or exceeding their peers studying similar subjects. In other words, those candidates studying to be math educators are likely to have similar or even better test scores than students in the university who are studying the discipline of math without adding the teacher certification.

The same does not happen for elementary candidates (Levine, 2006). Elementary candidates score below their peers in similar institutions on standardized tests. Schools of education that are admitting and graduating elementary teacher candidates are less academically qualified than their peers studying other subjects, at least as measured by test scores. Levine stated that ACT scores, SAT scores, PRAXIS I scores, and GRE scores all show similar results. Elementary candidates score below national averages (Walsh, 2013).

Schools of education argue test scores are just one measure of quality (Levine, 2006). Colleges of education express worry that test scores will be used to keep poor test takers, who may otherwise be qualified candidates, out of the field. Levine (2006) argued that although there may in fact be other and better indicators of quality, the field has not produced any studies to
delineate those qualities. In addition, schools of education worry test scores will be used for purposes other than what they are intended to do.

Many teacher educators worry higher test minimums will reduce enrollment and will lead to revenue loss for teacher education programs, which are often seen as “cash cows” for their universities (Levine, 2006). Raising test score minimums would be detrimental to the university’s bottom line. Levine further claimed the reason that so few candidates are screened out of programs due to the test score minimums is because universities are using the education departments to pay for other academic programs on campus.

Philosophical issues with standardized tests are not the only reason they are not embraced by the profession. Teacher education programs are concerned the public will use the results of tests to sort and rate teacher preparation programs (Dillon & Silva, 2011). Additional uses of the test are to rank and sort teacher preparation programs as a way of protecting not only the consumer, or potential client, but also the user, or the schools who eventually hire graduates (Walsh, 2013).

In January of 2011, the NCTQ announced it would be ranking all teacher preparation programs (Dillon & Silva, 2011). Although test scores were not to be the only criteria used, the results of standardized tests would play a prominent role. Schools of education reacted negatively to the news of the ranking and the heavy-handed use of test scores to rank schools of education. The NCTQ president, Kate Walsh, insisted the ratings are a necessary component of insuring there is a quality teacher in every classroom. Teacher educators’ fear without better mechanisms for proving teacher quality, teacher tests will become the easy default for those who push for teacher reform (Levine, 2006).
Nonetheless, NCTQ believes a public rating system will force teacher preparation to reform (Dillon & Silva, 2011). Although teacher educators may distrust NCTQ’s methods and their use of standardized test scores, the results of this and other studies will and have garnered much attention around the country and the state of Iowa. NCTQ announced in 2010 the organization would be rating teacher preparation programs. According to Dillon and Silva (2011), NCTQ said that teacher education programs had never been done and resolved to do it right. The organization partnered with US News and World Report. Many teacher preparation institutions refused to participate willingly because of objections to methodology as well as the plans to publish and rate organizations. Universities and other institutions were forced to participate due to open records laws.

In order to bypass the reluctant teacher preparation organizations, NCTQ pursued data in less traditional ways (Sawchuck, 2013). The organization sent emails to teacher preparation students, professors, and other interested parties. NCTQ paid current teacher education students to send copies of syllabi and other artifacts. Test scores and survey data, as well as examinations of syllabi and standards, were collected. The results were released to great fanfare during the summer of 2013 with promises of more information to be released soon (Greenberg, McKee, & Walsh, 2013).

NCTQ supported its methodology by stating its study used a consensus of educational experts as well as pilot studies looking at teacher skills and the demands of the Common Core Standards (Greenberg et al., 2013). The report is prefaced by stating the organization has unveiled clear and convincing evidence that the nation’s schools of education have become an industry of mediocrity. Greenberg et al. (2013) claimed that admission standards for teacher education programs are far too low. These claims are dependent on entrance test cut-scores as
reported by institutions. The organization vowed to continue to gather test scores and compare them by institution and by state. NCTQ also claimed content requirements are not rigorous enough to prepare the candidates to teach the Common Core Standards which are now required in 45 states.

Iowa institutions were ranked by NCTQ as well. The University of Iowa program actually earned a respectable 3.5 of 4 stars (Sheehy, 2013). Other Iowa institutions did not fare as well as the University of Iowa. Many Iowa private institutions entered into an informal agreement not to use the controversial ratings in promotional materials in an effort to minimize the role of the organization in teacher preparation in the state. The three regent’s universities in the state have less flexibility with their information flow because of their public funding and open records access laws.

The American Association of Colleges for Teacher Education had urged its members to boycott participation in the study because of the methodology (Sawchuck, 2013). Iowa member institutions complied, for the most part; releasing only what was already public information. NCTQ countered, however, by using social media and public lists of students in order to gain access to syllabi and other course materials. These materials were used as part of the rating process.

Colleges and universities responded by decrying the methodology and motives of NCTQ (Gillette, 2013). Not all the responses from the various states and organizations have reduced interest in the report, showing clearly that reports such as this do matter. Because NCTQ has dominated the conversation around teacher quality, attention and resources have been diverted from teacher education programs toward dealing with the NCTQ conversation.
The state of Iowa has been focusing attention on teacher quality as part of the reform since the election of Governor Terry Branstad (Wiser, 2012). The state recently announced it is exploring using aggregate PRAXIS test scores in order to rate teacher preparation programs (Steigmeier, 2012). All Iowa institutions are currently required to use an entrance-standardized test. In the past, institutions were able to set their own entrance minimum scores. In addition, candidates seeking Iowa licensure were required to take and pass PRAXIS II exams, and score minimums were set by the state at the 25th percentile (Steigmeier, 2013). This data was made available in 2014. Other states have made this test data public in aggregate. The state of Iowa has announced it, too, will continue to release aggregate teacher test data (Robson, 2013).

There continues to be resistance from private colleges as well as the public universities to ranking teacher preparation programs by test scores or by NCTQ and other similar organizations. However, Governor Branstad insisted that the test scores will be released and the public will have access to the scores in order to use them to make consumer decisions (Wiser, 2012). Newspapers and other news organizations continue to push for the release of test scores in aggregate form. Both universities and teacher education programs fear the public shaming that may result from the release of this aggregate test score data and the ranking of teacher education programs (Pallas, 2012). The scores so far have not been released to the public.

Yet to be seen is whether Iowa or other states will see a rise in student performance because of raising test score minimums. The use of these high-stakes tests as a gatekeeper has not substantially raised the academic ability of new teachers as measured by the tests themselves (Wiser, 2012). In fact, the academic scores of teachers are virtually unchanged over the past two decades (Ingersol & Merrill, 2010). The new testing requirements and reporting requirements have not raised future teacher performance on the tests. Limited research is available to
determine the relationship between the new teachers’ academic ability and their effectiveness as
teachers. Raising the academic bar or increasing content knowledge among the teaching force
has not seemed to make much difference in this category.

Despite the focus NCTQ and other organizations have placed on test scores, the literature
so far shows very little correlation between test scores and future teaching performance
(D’Agostino & Powers, 2009). In fact, D’Agostino and Powers concluded licensure tests reveal
very little about future teacher performance. Conventional wisdom holds teacher education
programs are accountable for the content knowledge held by their teachers with standardized
tests. However, a large body of evidence has so far shown little relationship between teaching
performance and GPA.

**GPA.** Another indication of successfully meeting the requirements for licensure is the
undergraduate GPA (Gitomer et al., 2011). Many states have put in place minimum GPAs for
admission to teacher education programs. In 2001, Kate Walsh, the president of the NCTQ,
released a report claiming that education coursework had little or no effect on teacher
effectiveness, but GPAs in science and math classes correlated to effective teaching (Darling-
Hammond & Youngs, 2002). Evidence exists that there is a relationship between GPA and
teacher candidates passing basic skills tests (Darling-Hammond & Youngs, 2002). Therefore,
calls for higher GPA for entry to teacher education programs have been plentiful.

Teacher education programs in the U.S. have a reputation of being very easy to get into.
That is not the case in other countries (Tucker, 2011). Many top performing countries have
raised their admissions and graduation standards over the past decades (Hokka & Etalapelto,
2013; Tucker, 2011). Additionally, they have centralized teacher preparation in the top tier of
higher education institutions and have uniformity of standards. Conversely, in the United States,
teacher education is highly decentralized (Darling-Hammond & Youngs, 2002). For example, admissions processes have little oversight, allowing states and institutions to set their own standards for entry.

In Finland, only one in ten applicants enrolled in teacher education programs where high GPA standards were only one part of the admissions standards (Sahlberg, 2013). Finnish high school students who aspire to be teachers must survive a long admissions process into teacher preparation programs (Hokka & Etelapelto, 2013). In addition to solid GPAs, they must score very high on the national college entrance test. Other requirements include interviews and a transcript of non-school-related accomplishments. After admission, Finnish teacher candidates must continue to earn a GPA within the top 20% of their class in their respective programs (Sahlberg, 2013). On the other side of the world, high school students in Singapore must score at the top of their class to enroll in a teacher education program (Hokka & Etelapelto, 2014). They then must stay at the top of their class in college for formal admission into the institution’s education program.

Singapore admits only the top 30% of high school graduates, and Finland admits only the top 20% into their teacher education programs (Hokka & Etalapelto, 2013; Tucker, 2011). By contrast, teacher preparation programs in the United States have lowered admissions standards in the decades since the baby-boom generation (Darling-Hammond & Youngs, 2002). In the past, American women had few career choices available to them; thus, bright women chose to become teachers. As more career opportunities became available to them, highly qualified women chose more selective career paths of study. Currently, there are more women than men choosing to major in the most selective disciplines in American universities (Tucker, 2011). Because fewer of the top women candidates are choosing to study education, teacher education programs in the
United States have had to drop their admissions standards in order to fill available seats in their programs.

Overall, however, teacher education has traditionally drawn many students to universities and colleges in the United States; therefore, revenue, which is dependent on enrollment, is an incentive to keep the major accessible to higher numbers of students while also keeping admissions standards low for all entering students (Ginsberg & Levine, 2013; Tucker, 2011). Teacher education is often the bread and butter of lower tier institutions, allowing the revenue it generates to subsidize the lower enrollment programs on campus. Moreover, teacher education is frequently a low status program at lower tier universities and colleges; even when part of the offerings in high tier colleges, the teacher education programs often have the lowest required GPAs admitted (Sawchuck, 2013).

Reform agendas across the country have included raising required GPAs (Gitomer et al., 2011). Federal policies have required states and institutions report aggregate GPA data for all teacher candidates. GPA upon entrance to college, entrance to the teacher education program, and graduation from teacher education programs have been discussed. Accreditation processes have been set up to discourage less academically qualified candidates to persist in the major. Alternative teacher education programs have recruited teachers with higher GPAs into the field from upper tier institutions.

With many reform agendas focused on raising the GPA requirements for admissions, former Iowa Governor Branstad proposed all teacher education candidates be required to carry a 3.0 average (Editorial Board, Daily Iowan, 2011). The requirement of Iowa’s reform agenda was not upheld by the Iowa Board of Educational Examiner during the 2013 sessions, the first time it was proposed. The issue has not appeared on the final agenda since then, but is likely to
reappear in future sessions. This proposed teacher education reform targeted a perceived lack of content knowledge among teacher education candidates.

Previous research has shown a correlation between test scores on GPAs and teacher test passing rates (Gitomer et al., 2011). Therefore, raising test scores and raising GPA requirements for program entry often go hand-in-hand. As states and institutions move forward with reform agendas, both GPA and minimum test scores are likely to rise (Sawchuck, 2013). Interestingly, independent of national and state reform efforts, school districts in the nation have lobbied to raise their own minimum GPA requirements for hiring purposes. For the 2012-2013 academic year, the Sioux City School District in Iowa considered a GPA minimum requirement of 3.0 as a hiring requirement for new teachers (Robson, 2012). Board members argued for the measure by stating teacher candidates who earn a 3.0 have demonstrated a mastery of content knowledge and, therefore, an ability to inspire their students to learn. Other board members argued such a requirement might reduce the pool of applicants in math and science.

Researchers interested in teacher quality have focused on GPA as a measure of new teacher quality (Sawchuck, 2013; Tucker, 2011). A meta-analysis of studies examining correlations between teacher tests and college GPA with teacher performance did indeed find a correlation between GPA and successful teaching (D’Agostino & Powers, 2009). The study showed the correlation between GPA and teacher performance appears to be stronger than the correlation between teacher test scores and teacher performance. D’Agostino and Powers argued that although the studies show GPA is a better measure of future teacher performance than teacher content tests, GPA should not replace tests as a single measure of content knowledge.

Ironically, tests can serve as an encouragement to pre-service teacher education programs to provide teacher candidates a broad liberal arts education, which in turn will be tested as part of
the licensure process (D’Agostino & Powers). Raising the two content measures together could prevent the incentive to make courses easier, so a high GPA would be achievable for more students. However, D’Agostino and Powers concluded teacher preparation instructors would be much more inclined to maintain high academic standards if tests measuring content and a broad academic base are included as part of the licensure process.

**Content major.** Not surprisingly, students who major in some content subject matters have stronger academic abilities as measured by basic skills tests than others (Gitomer et al., 2011). Reform agendas have included a push for teacher candidates to be required to major in those degree areas, traditionally considered more academically challenging than others have. Reform agendas have looked to decrease the focus on pedagogy and increase the focus on content (Darling-Hammond & Youngs, 2002; Ginsberg & Levine, 2013; Walsh, 2013). Teacher education programs are under increasing pressure to prove that their graduates are more effective teachers than college graduates who received bachelor’s degrees but no certification track (Ginsberg & Levine, 2013).

The call for Highly Qualified Teachers (HQT) would mandate all teachers who are teaching a specific discipline must demonstrate expertise in its content (Darling-Hammond & Youngs, 2002; Gitomer et al., 2011). Teachers preparing to teach math, for instance, would have a content major in math. Similarly, those preparing to teach English, a foreign language, and music should carry a major in a content area. Elementary teachers, however, have been unaffected by the content area mandate because the elementary major was pedagogical. Elementary teachers typically teach many subjects in self-contained classrooms. Most current reform agendas call for elimination of the education major in favor of all teacher candidates carrying a content major (Tucker, 2011; Wang, Lin, Spalding, Klecka, & Odell, 2008).
There has been a long-standing debate that liberal arts education would be most valuable to teacher education (Shulman, 1986). Although what content knowledge is important for teachers to know and what liberal arts major is most critical for teacher candidates to study have been much questioned, the literature simply has not made clear what the impact of a liberal arts education on any professional education is (Tucker, 2011; Weiland, 2008). Shulman looked at the issue of content preparation for teachers during the last half of the twentieth century. As education became more vocational, teacher education shifted toward a curriculum more focused on teaching methods. Shulman argued conversely that a liberal arts education should be the prerequisite for the study of teaching. This work, which defined the pedagogical content knowledge, is often cited as a basis for the strengthening of content knowledge for teachers and the de-emphasizing of pedagogical knowledge (Shulman, 1998). Shulman advocated for enlisting the entire college faculty in teacher education.

Reformers often begin with Schulman’s work when they shift focus on the need for teachers who have more and greater content knowledge. Weiland (2008) stated there is “frequent recognition of teaching as a peculiarly complex activity” and called, along with others, for a return to content rather than pedagogical knowledge for teachers (p. 1223). Weiland (2008) named teacher education as the place to inspire “enduring intellectual interests” and stated that “Working within teacher education to move it toward liberal education is a pragmatic strategy for adding to what is necessarily practical in the minds of students learning to teach” (p. 1223). Many teacher education institutions have already changed content requirements for their candidates (Darling-Hammond, 2010). In fact, in response to shifting accreditation standards and reform efforts at the state level, institutions have focused on increasing content requirements for elementary, middle school, and high school teaching candidates. Reinforced by the threats of
punishment by accreditation agencies or states, institutions have become intentional about the required knowledge base for teachers (Grumet, 2010).

The debate over the mix of content knowledge and pedagogical knowledge and its relation to teacher effectiveness has not subsided. In fact, just as institutions have shifted in favor of a greater emphasis on content knowledge, calls for more attention to practice and clinical models of preparation have also increased (Darling-Hammond, 2010). Rod Paige, former U.S. Secretary of Education, has argued teacher-licensing systems are broken and impose unduly harsh requirements for education coursework, crowding out content (Maranto & Paige, 2012). According to Sawchuck (2013), many fast track, low quality teaching programs emerged to fill teacher shortage areas. These candidates do have a content area major but only complete short-term teacher preparation programs consisting of a few weeks in the summer in order to be ready to teach (Sawchuck, 2013).

A lack of consensus in the profession on the value of a content major or clinical emphasis has made the problem worse (Darling-Hammond, 2010). The profession simply has not united on paths to licensure. Unlike other professions such as medicine and law, accreditation is not required for most teacher-preparation programs. States approve the programs in their respective states. Approval processes are often weak (Ginsberg & Levine, 2013). Improvement is voluntary and accreditation is not mandatory in most states; therefore, it is difficult to institute reforms on a wide-scale basis. Despite efforts to articulate a shared vision of the knowledge base, which should be required of new teachers, Levine (2006) found huge variation in teacher preparation programs across the nation. Progress has been made over the last 50 years to identify the content knowledge new teachers would need, but there has been a tremendous lack of will to implement that knowledge (Ball & Forzani, 2009). The lack of a centralized system
for the distribution of knowledge and requirements for teachers has made improvements in delivery uneven at best. In addition, discovering the relationship between the teacher’s knowledge and the students’ academic achievement is still a work in progress (Goodwin & Oyler, 2008).

Ball and Forzani (2009) held that requiring teacher candidates to have challenging content majors, rather than majoring in education, is simply another method to increase content knowledge among teacher candidates. Ball and Forzani emphasized the fact that requiring higher scores on teacher tests, requiring a higher GPA, and requiring content majors are all attempts to produce smarter teachers. A review of the literature concerning teacher perceptions of preparedness revealed no similar focus on content knowledge (Boe, Shin, & Cook, 2007). Moreover, new teachers do not express a desire for more content knowledge as part of their teacher preparation program (Clark, 2009).

In Iowa and in the nation as a whole, reform efforts have centered on content knowledge. It is clear the issue of teacher quality is a pressing one nationally and in the states (Goodwin & Oyler, 2008). Policymakers, the public, and educators themselves see the need for reform. Public officials and education professionals have been immersed in debates about what teachers should know and of what quality preparation should consist. A widespread perception exists that teaching is an art and not a science; this has led to the idea that America needs smarter teachers—ones who are studying challenging majors, earning higher test scores, and achieving higher GPAs (Dillon & Silva, 2011).

The focus on improving measures of content knowledge is only part of the picture in educational reform. Teacher educators have a major role in reshaping the quality of the teacher workforce (Darling-Hammond, 2010). The focus on higher GPAs and higher test scores have
had an effect on curricular requirements for teacher candidates (Dillon & Silva, 2011). There is evidence that significant headway is being made on the agenda of providing teachers who have a stronger grasp on content knowledge; however, there is work left to do (Ball & Forzani, 2011; Dillon & Silva, 2011; Pallas, 2012).

Teacher content knowledge is certainly not the only marker of quality teaching desired by the public (Pallas, 2012). Evidence exists that graduates of teacher education programs with strong clinical practice components perform better in their early years of teaching than those graduates who have strong content knowledge but weaker clinical components (Darling-Hammond, 2010). Alternative certification programs such as Teach for America have been able to recruit graduates from the high end of top universities’ classes; however, evidence suggests teachers certified through such programs were underprepared for the roles facing them as new educators (Pallas, 2012). Additionally, retention of new teachers prepared through alternative education models has been weak (Darling-Hammond, 2010). Novice teachers, products of these programs, often report having little idea how to manage classroom and behaviors of students. According to surveys, new recruits often leave the field early, blaming the students for their own lack of training (Oliver & Reschly, 2010).

Factoring in measurement of content knowledge by GPA and test scores is likely to remain part of the teacher reform agenda (Darling-Hammond, 2010). However, content knowledge is not the major factor in early teacher attrition (Corbell et al., 2010). These authors point out the fact that major enforced reforms serving to standardize delivery and consolidate programs into fewer and more highly regulated teacher preparation programs is the likely result if teacher education programs do not produce better teachers. Currently, teacher education is
highly decentralized and unfocused. If it is to survive in its current form, it is clear the field must examine the deficits and figure out how to do teacher education better (Tucker, 2011).

Content knowledge does not appear in survey data to be a factor in early teacher attrition (Corbell et al., 2010), yet it is likely to remain a focus in reform efforts (Darling-Hammond, 2010). Although, content knowledge rarely surfaces as an issue in survey results of new teachers; nevertheless, one persistent weakness as measured by those same surveys is a lack of perceived and real skill in behavior management (Condeman et al., 2012). Examining new teacher skills in classroom and behavior management and linking those skills to preparation type is a worthy exercise. Measuring teacher perceptions of preparedness in content knowledge and classroom and behavior management can be a part of program improvement for teacher preparation programs (Darling-Hammond, 2010).

**Teacher Perceptions of Preparedness**

Despite the focus on quality teacher preparation and the efforts to raise the bar, many new teachers testify to being unprepared for the challenges of teaching (Shamberger, 2010). The most frequently cited difficulty for new teachers was the issue of classroom management, a skill not effectively measured by standardized tests. In fact, the most cited reason new teachers leave the field in the first three years of teaching has nothing to do with academic preparedness or their ability to teach content knowledge. Honawar (2007) found the reason most often cited by teachers was the difficulty they have dealing with classroom discipline issues.

Traditionally, teacher candidates have had little or no coursework dealing exclusively with classroom management and behavior management issues (Shamberger, 2010). Candidates preparing for positions in special education may have been required to take this type of coursework but not those preparing to teach in the general education classroom (Oliver &
Reschly, 2010). Although state and national accrediting agencies require candidates, demonstrate competency in skills related to classroom and behavior management, no formal requirements for classes or measures of management skill have been required of accredited teacher preparation programs (Murray, 2012).

The lack of classroom and behavior management requirements is especially concerning because the teacher force in the nation is poised to need many new teachers. According to Ingersoll and Merrill (2010), the 2007–2008 school-year modal ages were 55. With an aging teaching force, the field will open to many new teachers in the next few years. In order to keep school staffing stable, the profession will have to retain the novice teachers who have been leaving the field in droves.

In addition to aging of the teaching force, the field also loses new teachers. Ingersoll and Merrill (2010) reported that 30% leave the profession within five years; even higher numbers leave when their positions are in disadvantaged districts (Darling-Hammond, 2001). An even higher percentage of teachers who are trained through alternative routes leave the profession (Darling-Hammond, 2010; Ingersoll & Merrill, 2010). Traditional programs produce a huge variety of teacher skill levels. However, early research is showing traditional college-based teacher preparation programs do better in terms of preparation perceptions, effectiveness as measured by principals, and retention in the field (Darling-Hammond, 2010). Teacher preparation matters because initial performance in the field is linked to the quality of the program. In addition, retention in the field is linked to performance (Ingersoll & Merrill, 2010). Clearly, the field of teacher preparation must step in to better prepare new teachers for the challenges they will face in the first five years, especially in classroom and behavior management.
Classroom and behavior management skills. Managing the classroom and children is daunting both for experienced teachers as well as for novice teachers (Allen, 2010). Although school reform has promoted high stakes testing and other measures of content knowledge, a recurring theme appears in the literature: Teachers are often underprepared for the tasks facing them in the classroom. New teachers reported feeling unprepared when it comes to classroom management skills (Marzano, Marzano, & Pickering, 2009). Student misbehavior is a factor in teacher burnout and the decision of new teachers to leave the classroom. Even though school reform has focused on academic achievement and high stakes testing, the profession has underestimated the need for successful classroom management skills (Garrett, 2013).

Defining classroom management. Classroom management is a skill critical to a beginning teacher’s success. Effective management sets the stage for learning, whereas chaotic classrooms are not conducive to learning (Marzano et al., 2009; Ponitz, Rimm-Kaufman, Grimm, & Curby, 2009). Teacher educators simply must abandon the idea that effective classroom management is a skill that cannot be taught to undergraduates. Undergraduates must learn to develop a substantive index of classroom management skills as well as a deep understanding of the value of an effective classroom management as a tool for teaching (Robbins, 2010). Unfortunately, survey data indicate managing classroom and student behavior is the greatest challenge facing novice classroom teachers. Nearly half of new teachers are choosing to leave the teaching profession with classroom and behavior management the primary reason cited (Billingsley & Cross, 1992; Ingersoll & Merrill, 2010). At the same time, few preparation programs are systematically integrating classroom and behavior management programs that nurture and encourage students as well as manage classroom procedures in an evidence-based, practice-based way (Allen, 2010).
Grasping this problem necessitates a clear definition of classroom management. It is more than controlling the classroom and student behavior. Classroom management is the practices necessary to set up a positive, supportive classroom environment (Allen, 2010). Classroom management is both thoughtful and purposeful. The term describes the actions teachers take to create an environment conducive to learning. According to Garrett (2013), effective classroom management skills consist of developing an organized classroom physical space; developing clear rules and routines for the classroom; developing relationships with students which are positive and caring; delivering engaging instruction; and creating a discipline plan to address individual issues as they arise. Garrett also addressed the misconception that classroom management is a skill, which cannot be taught.

Although novice teachers have long been reporting a lack of skill in classroom management, teacher educators have not universally responded with more instruction on the topic (Allen, 2010; Marzano et al., 2009). Rather, teacher educators have responded that classroom management is not a skill to be taught but instead one needing to be learned through experience. Another misconception addressed by Garrett (2013) was that classroom management is simply a bag of tricks all educators must have. Rewards-based classroom management plans are, indeed, a bag of tricks, but it is debated how effective those tricks are without an overarching plan (Witt, VanDerHeyden, & Gilbertson, 2004).

Many researchers advocate for a repertoire of research-based effective strategies for a beginning teacher (Garret, 2013; Robbins, 2010). Clearly, pre-service teachers can and, in fact, must learn effective classroom management techniques, but different opinions exist about how this is best accomplished (Oliver & Reschly, 2010; Robbins, 2010). Interestingly, teacher candidates develop their first skills and ideas about classroom management from their own
experience as students in the elementary and secondary classroom (Allen, 2010). As can be expected, those experiences have both negative as well as positive effects on the future management skills and confidence of the new teacher.

Teacher candidates also learn classroom management techniques during the clinical portion of the teacher education program (Allen, 2010). Many in the field of education have been calling for collaboration and increased field-based education for new teachers; however, it can safely be assumed the quality of the skills of the cooperating teachers as well as the school policies could have a variety of effects on the skills of the developing teacher. Field-based education may enhance the quality of the pre-service teacher’s preparation as a classroom manager, but standardizing and delivering a set of skills to teacher candidates at the pre-service level has proven to be difficult (Allen, 2010; Moore et al., 2008).

Complicating the issues is the fact that new teachers today are often not well prepared to handle the increasingly complex students and situations they faced in the classroom (Webster-Stratton, Reinke, Herman, & Newcomer, 2011). Although more students who have complex behavior problems are integrated in the general education classroom, many teacher candidates have not been required to take any classes in behavior management. Then, when new teachers face situations for which they have no little or no training, it is not surprising that they lack the skills to manage.

Research designed to identify teacher behaviors associated with positive student behavior has been ongoing (Honawar, 2007; Marzano et al., 2009; Oliver & Reschley, 2010; Shockley, Guglielmino, & Watlington, 2006). Teacher preparation institutions and teacher preparation accrediting bodies have been working to create a body of standards that will shape teacher skills (Ginsberg & Levine, 2013). Over the past decade, schools of education have made many
changes. More attention is focusing to help teacher candidates develop a reflective, problem-solving approach to teaching. Performance-based standards for teacher licensing as well as more authentic assessments for teacher skills are being developed. Leading these national efforts over the past few decades are NBPTS, INTASC, and NCATE (Darling-Hammond, 1996).

These organizations have had and will continue to have an impact on the skills expected of teacher candidates (Ginsberg & Levine, 2013; Plecki, Elfers, & Nakumura, 2012). Examining these standards and expecting all teacher candidates to demonstrate competency with them could pave the way to more teacher retention. In response to public pressure, accrediting agencies have made their standards increasingly rigorous. Two of the largest accrediting agencies, NCATE and TEAC, have merged, and the new joint standards will require programs to provide more and better education for teacher candidates. Ginsberg and Levine (2013) stated that the new standards would force teacher education institutions continually to improve by examining the performance of their own candidates and graduates.

National Standards for Classroom and Behavior Management

National Council for Accreditation of Teacher Education. The nation’s largest teacher preparation programs accrediting body, NCATE, requires teacher education programs to provide evidence for teacher candidate performance around each NCATE standard (NCATE, 2014). In 1990, NCATE overhauled its accreditation program to focus heavily on candidate performance. When NCATE emerged, the emphasis was on ensuring quality by the coursework the institution was offering. By 1995, NCATE was measuring quality by putting more emphasis on the candidate’s ability to perform the tasks of a teacher. A major overhaul of the NCATE program
happened again in 2009 (Sawchuck, 2009). The accreditation body has combined with TEAC to become the Council for the Accreditation of Teacher Preparation or CAEP.

NCATE currently accredits approximately half of the nation’s teacher preparation institutions (Sawchuck, 2009). The accredited programs run the gamut from small, private institutions, to master’s degree programs, to large research universities. Currently, all NCATE institution are held to the same standards. This can be problematic when the programs vary so widely. The new NCATE standards promise more flexibility while emphasizing teacher candidate and teacher effect on K-12 student learning. NCATE has had and will continue to have a large influence on the direction of teacher education as it transitions to CAEP.

There are six NCATE standards. Only one of the current standards discusses candidate skill in classroom management: Standard 1: Candidate knowledge, skills, and dispositions (NCATE 2014). The assessment of this standard is measured in a variety of ways. Candidate knowledge is typically measured by a standardized test; indeed, NCATE programs are required to use standardized tests to measure content knowledge (NCATE, 2013). Iowa, like many states, uses a standardized test and GPA as part of the assessment of content knowledge (Iowa Board of Educational Examiners, 2013).

Candidate skills, on the other hand, are measured in many different ways. NCATE accredited programs must both measure candidate skills and report the measurements to NCATE. NCATE requires accredited programs to design a self-study describing how they have used state and national standards to design, teach, and assess candidates. Data must be recorded and used to improve the program over time (National Council for the Accreditation of Teacher Education, 2008).
In addition, these institutions must use the results of the candidate assessment in aggregate to inform and improve their own program (Darling-Hammond, 2010; Iowa Board of Educational Examiners, 2013). Skills in classroom management are included in this standard. The actual content of the classroom and behavior management tasks is left to the individual programs. Programs may choose to incorporate particular models of management or could present a range of management options. In reality, programs may choose not to include management at all, relying on the clinical instructors to teach those skills in context (Sikula et al., 1996). Classroom management skills are also specified under NCATE Standard 3: field experiences and clinical practice. In this standard, the programs are required to specify the teacher skills to be demonstrated in the clinical setting. The actual teacher behaviors to be displayed are not explicitly defined (NCATE, 2014).

NCATE has a partnership with INTASC (Hollins, 2011). During their field experiences, teacher candidates are expected to demonstrate the quality performances specified by the INTASC standards. These standards are used by many colleges and universities to shape teacher education programs (Walsh, 2013). The applicable INTASC standards will be addressed in the next section.

**Interstate Teacher Assessment and Support Consortium.** The INTASC standards have recently undergone a major overhaul as well and have recently undergone review (Darling-Hammond, Amrein-Beardsley, Haertel, & Rothstein, 2012). The original standards were created in 1992. New standards were released in 2011 and were the first major change of the standards since then. The original standards were adopted by over 40 states for initial teacher licensing. The revised standards are aligned with the Common Core Standards to better reflect the
knowledge, skills, and understanding that teachers need to teach to the Common Core (Darling-Hammond et al., 2012).

The new standards are grouped into four broad categories. The first of these, The Learner and Learning, contains the standards on classroom and behavior management. The most applicable standard is Standard 3 (CCCSO, 2008). INTASC Standard 3 categorizes the skills of behavior management into more specific subcategories. The subcategories require beginning teachers to show that they can demonstrate the following skills that lead to classroom and behavior management: (a) Develop learning experiences that are engaging; (b) Collaborate with students to create a positive learning climate, and (c) Organize, allocate and manage resources (CCCSO, 2008).

The INTASC standards are broad (Walsh, 2013); for example, the most applicable principle under Standard 1 states: The teacher organizes, allocates, and manages the resources of time, space, and attention to actively and equitably engage students in learning (INTASC, 2010). This standard integrates that the teacher’s ability to manage classroom resources is in fact related to student learning (Darling-Hammond et al., 2012). The standards do stabilize and identify the language that will define beginning teacher performance quality.

Teacher preparation institutions are tasked with further defining the standard teaching the skills delineated in the standard, as well as designing the assessments to measure standards (Walsh, 2013). The assessments vary according to the desires and capabilities of the accredited institution. One method often used is a classroom observation rubric. Rubrics, planned around the institution and used during field and student teaching experiences, are designed by the individual institutions to further describe quality teacher behavior driven by the standard
(Hollins, 2011). The rubrics serve to narrow the description of the skill set to more observable behaviors.

The INTASC standards have had a major impact on the field of teacher education. In a short time, the standards have been adapted by more than 30 states (Darling-Hammond, 2006). The INTASC standards and the accreditation standards from NCATE do present a unified list of teacher education outcomes. The standards are broad, leaving further descriptions of quality to the individual programs.

**National Board for Professional Teaching Standards (NBPTS).** NBPTS was organized to recognize advanced teacher practice. In 1987, the National Board was created primarily of classroom teachers (National Board for Professional Teaching Standards, n.d.). Its task was to define and organize standards of what accomplished teachers ought to know and be able to do. These standards differ from INTASC because they are designed for advanced practice, but they do play a role in defining the foundation teacher preparation institutions ought to be providing for candidates (Barone, 2002).

The NBPTS standards are also broad (Darling-Hammond et al., 2012). The standard most closely tied to classroom management is Proposition 3, which states that teachers are responsible for managing and monitoring student learning. The proposition is further defined by descriptors. These descriptors include the fact that quality teachers deliver engaging instruction and ensure a disciplined learning environment. NCATE is further influenced by NBPTS in the creation of its programs for advanced teaching practice (Barone, 2002). INTASC Standards, NBPTS proposition, and NCATE, which is transitioning to CAEP, continue to have a strong impact on teacher quality through the development and implementation of standards (Darling-Hammond, 2012).
Charlotte Danielson and the Danielson Group. Charlotte Danielson (2007) developed a framework for teaching to frame effective teaching practice and the conversations about teaching. The framework identifies the aspects of a teacher’s responsibility that have been identified through studies and research as promoting improved student learning (Danielson, 2007). The four components of professional practice for a teacher are related to one another, yet are distinct and recognized by the profession. The four components described by Danielson are: Planning and Preparation, Classroom Environment, Instruction, and Professional Responsibilities.

Danielson is an expert on teaching (Griffin, 2013). She created her framework in 1996 and since then it has been further developed through study and research (Danielson, 2015). The latest framework is from 2013 (Danielson, 2015). It retains the same architecture as the original framework, but has been refined and changed. Initially, the framework was an instrument to be used for teacher evaluation. The framework provided principals and other teacher evaluator’s language to use to distinguish effective teacher performance. It provided a common language to talk about professional teaching (Griffin, 2013).

The framework provides teacher evaluators a way to have conversations with teachers about quality teaching (Danielson, 2015). Shared understanding of what constitutes good teaching is important when this language is used to evaluated teacher performance. The framework has been used to create rubrics and teacher evaluation instruments since 1996. These instruments have been used for both in-service evaluations as well as pre-service teacher evaluations (Griffin, 2013).

The framework for teaching has been validated through large independent research studies (Griffin, 2013). The Measures of Effective teaching (MET study) which was funded by
the Gates Foundation concluded that the Danielson Framework had predictive validity (Cantrell & Kane, 2013). This study showed that teachers who were evaluated using the Danielson Framework had students who performed better and learned more than students in the classrooms of teachers who did not perform as well in the classroom (Griffin, 2013).

The MET study concluded that short and more frequent observations were effective and increased the reliability of the instrument (Cantrell & Kane, 2013). The research showed that reliability increased when the results were based on more than one observation. Additional observations, even when the observations were short, increased the reliability. The Danielson instrument provided reliable data for teachers and principals to use as they examined teacher effectiveness (Griffin, 2013).

The work of Danielson (2015) has shown that teaching is a skill and it can be observed. The language of teacher effectiveness can be used to describe this skill, to evaluate teachers and to move teachers forward in their own thinking about teaching practice (Cantrell & Kane, 2013). The reliability is enhanced when the observers are trained using the instrument (Danielson, 2015). Virtually every state requires teacher observations of teaching. Virtually every teacher preparation program also uses student teacher observation of teaching as a part of their mentoring process. Danielson (2015) has shown that it is possible to design high quality instruments and procedures that seek to unify the discussion around effective teacher practice.

**Institutional Context**

Each institution interprets the standards and translates them to programming. In Iowa, each program must gain state approval before it can recommend candidates for licensure (Iowa Board of Educational Examiners, 2013). Programs approve courses and syllabi that address the standards required by the state by sending them to the state. Every five to seven years, the state
sends an accreditation team to the institution to exam the programs. Originally approved in 1965 (R. Juffer, personal communication, January 30, 2014), the institution involved in this study was last visited and approved in 2009 (L. Daily, personal communication, January 30, 2014). As state and national standards have changed, the institution has continued to seek and be granted approval. Teacher candidates seeking licensure must complete the program that has been approved by the state. The institution then recommends the candidate to the state for licensure.

All elementary candidates must major in elementary education (Northwestern College catalog, 2013). Laurie Daily, the education department chairperson, was interviewed to explain how state program approval is gained. The professional core and the professional standards contained in the core are part of the elementary education major (L. Daily, personal communication, January 30, 2014). Candidates must take all classes specified by the major and then may choose to add a minor or an endorsement as part of their degree.

Table 2 indicates the general and special education courses leading to certification in each area. All candidates must take the classes on the left. Those who add a special education endorsement in elementary also take the courses on the right side of the table. Table 3 lists the courses necessary for general elementary education and the unified early childhood education. Table 4 lists the courses necessary for secondary education and the courses necessary for a special education endorsement in secondary education. This institution has three routes leading to licensure in special education. These routes include elementary, or kindergarten through sixth grade (K-6 Instructional strategist); secondary special education or grades five through twelve (5–12 Instructional strategist); unified, or early childhood special education integrated settings for prekindergarten through grade three (PK-3) (Northwestern College catalog, 2013).
Candidates who do not add an endorsement or license in special education add courses as electives, or they add endorsements in content areas, or other endorsement areas (L. Daily, personal communication, January 30, 2014). Special Education, called K-6 Instructional Strategist in Iowa, is one endorsement option for Northwestern teacher candidates (Iowa Board of Educational Examiners, 2013). Elementary candidates must complete the elementary degree requirements and must the additional courses into their graduation requirements in order to earn licensure in kindergarten through sixth grade special education (Northwestern College catalog, 2013).
Table 2

*Elementary General and Special Education Curriculum*

<table>
<thead>
<tr>
<th>General Ed Course Number</th>
<th>General Ed Course Name</th>
<th>Special Ed Course Number</th>
<th>Special Ed Course Name</th>
</tr>
</thead>
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<tr>
<td>*EDU102</td>
<td>Foundations of Education</td>
<td>EDU 235</td>
<td>Characteristics of Learners with Mild and Moderate Disabilities</td>
</tr>
<tr>
<td>*EDU202</td>
<td>Early Field Experience</td>
<td>EDU314</td>
<td>Working with Parents Behavior Management and Classroom Instruction</td>
</tr>
<tr>
<td>*EDU206</td>
<td>Survey of Exceptional Individuals</td>
<td>EDU315</td>
<td>Diagnostic Assessment, Teaching and Evaluation of Special Education Students</td>
</tr>
<tr>
<td>*EDU227</td>
<td>Instructional Technology</td>
<td>EDU318</td>
<td>Communication and Collaborative Partnerships for Special Educators</td>
</tr>
<tr>
<td>*EDU228</td>
<td>Children's Literature</td>
<td>EDU319</td>
<td>Methods and Strategies for Learners with Mild and Moderate Disabilities (Elementary)</td>
</tr>
<tr>
<td>*EDU304</td>
<td>Educational Psychology</td>
<td>EDU336</td>
<td>Language Learning and Reading Disabilities</td>
</tr>
<tr>
<td>*EDU323</td>
<td>Teaching Mathematics</td>
<td>EDU345</td>
<td>Elementary Special Education Student Teaching</td>
</tr>
<tr>
<td>*EDU325</td>
<td>Teaching Science and Social Studies</td>
<td>EDU426</td>
<td></td>
</tr>
<tr>
<td>*EDU326</td>
<td>Teaching Reading and Language Arts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*EDU340</td>
<td>Human Relations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*EDU343</td>
<td>Diagnosis and Correction of Reading Problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*EDU409</td>
<td>Philosophy of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*EDU413</td>
<td>Elementary Student Teaching</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* *class is also required for the elementary special education endorsement.
### Table 3

**Elementary General and Early Childhood Special Education Curriculum**

<table>
<thead>
<tr>
<th>General Ed Course Number</th>
<th>General Ed Course Name</th>
<th>Special Ed Course Number</th>
<th>Special Ed Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>*EDU102</td>
<td>Foundations of Education</td>
<td>EDU229</td>
<td>Introduction to Early Childhood</td>
</tr>
<tr>
<td>*EDU202</td>
<td>Early Field Experience</td>
<td>EDU230</td>
<td>Organization and Administration of Early Childhood Programs</td>
</tr>
<tr>
<td>*EDU206</td>
<td>Survey of Exceptional Individuals</td>
<td>EDU235</td>
<td>Characteristics of Learners with Mild and Moderate Disabilities</td>
</tr>
<tr>
<td>*EDU227</td>
<td>Instructional Technology</td>
<td>EDU300</td>
<td>Characteristics of Young Children with Diverse Needs</td>
</tr>
<tr>
<td>*EDU228</td>
<td>Children's Literature</td>
<td>EDU301</td>
<td>Methods for Working with Young Children with Diverse Needs</td>
</tr>
<tr>
<td>*EDU304</td>
<td>Educational Psychology</td>
<td>EDU314</td>
<td>Working with Parents</td>
</tr>
<tr>
<td>*EDU323</td>
<td>Teaching Mathematics</td>
<td>EDU345</td>
<td>Language Learning and Reading Disabilities</td>
</tr>
<tr>
<td>*EDU325</td>
<td>Teaching Science and Social Studies</td>
<td>EDU429</td>
<td>Unified Early Childhood Student Teaching</td>
</tr>
<tr>
<td>*EDU326</td>
<td>Teaching Reading and Language Arts</td>
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<td></td>
</tr>
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<td>*EDU340</td>
<td>Human Relations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*EDU343</td>
<td>Diagnosis and Correction of Reading Problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*EDU409</td>
<td>Philosophy of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*EDU413</td>
<td>Elementary Student Teaching</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* *class is also required for the Unified Early Childhood Special Education Endorsement.
Table 4

*Secondary General Special Education Curriculum*

<table>
<thead>
<tr>
<th>General Ed Course Number</th>
<th>General Ed Course Name</th>
<th>Special Ed Course Number</th>
<th>Special Ed Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>*EDU102</td>
<td>Foundations of Education</td>
<td>EDU235</td>
<td>Characteristics of Learners with Mild and Moderate Disabilities</td>
</tr>
<tr>
<td>*EDU202</td>
<td>Early Field Experience</td>
<td>EDU309</td>
<td>Transition for Students with Mild to Moderate Disabilities</td>
</tr>
<tr>
<td>*EDU206</td>
<td>Survey of Exceptional Individuals</td>
<td>EDU314</td>
<td>Working with Parents</td>
</tr>
<tr>
<td>*EDU227</td>
<td>Instructional Technology</td>
<td>EDU315</td>
<td>Behavior Management and Classroom Instruction</td>
</tr>
<tr>
<td>*EDU304</td>
<td>Educational Psychology</td>
<td>EDU318</td>
<td>Diagnostic Assessment, Teaching and Evaluation of Special Education Students</td>
</tr>
<tr>
<td>*EDU307</td>
<td>General Methods iSecondary Education</td>
<td>EDU319</td>
<td>Communication and Collaborative Partnerships for Special Educators</td>
</tr>
<tr>
<td>*EDU308</td>
<td>Special Methods in the major</td>
<td>EDU336</td>
<td>Methods and Strategies for Learners with Mild and Moderate Disabilities (Elementary)</td>
</tr>
<tr>
<td>*EDU340</td>
<td>Human Relations</td>
<td>EDU337</td>
<td>Methods of Working with Students with Mild/Moderate Disabilities at the Secondary Level</td>
</tr>
<tr>
<td>*EDU347</td>
<td>Reading in the Content Area</td>
<td>EDU343</td>
<td>Diagnosis and Correction of Reading Problems</td>
</tr>
<tr>
<td>*EDU409</td>
<td>Philosophy of Education</td>
<td>EDU345</td>
<td>Language Learning and Reading Disabilities</td>
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<td>*EDU415</td>
<td>Secondary Student Teaching</td>
<td>EDU428</td>
<td>Secondary Special Education Student Teaching</td>
</tr>
</tbody>
</table>

*Note.* *class is also required for the secondary special education endorsement.
An additional endorsement leading to licensure for special education is the unified early childhood endorsement. This endorsement is called Early Childhood Integrated Settings, or ECIS at Northwestern (Northwestern College catalog, 2013). Other Iowa institutions refer to this endorsement as the unified endorsement (Iowa Board of Educational Examiners, 2013). No institution in the state is approved to offer a special education only endorsement. All candidates in the state must complete a general education endorsement and then add a special education license.

Teacher candidates seeking secondary licenses must major in a field of study (R. Juffer, personal communication, January 30, 2014). They must add a secondary general education endorsement in order to seek licensure. They may also choose to add a special education endorsement. Some of these courses are offered on alternate years, thus, the number of candidates who complete both is small at the secondary level.

Special education licenses could be considered add-ons since they are not part of the degree (Northwestern College catalog, 2013). However, candidates who choose to add the endorsement are required to take no more credits than those seeking general education-only licenses. All Northwestern College graduates must earn 124 credits. Candidates not completing a special education endorsement fill their credit requirements with classes preparing them for a special education licenses as well as general education licenses.

The program under study offers a variety of teacher endorsements. The licenses and endorsements are listed in Table 5. Most teacher candidates earn a license and at least one endorsement (Wallinga, 2013). Some earn special education; others choose a different endorsement. This study focuses on those teacher candidates who choose a general education license comparing the results of the behavior and classroom management section with those
candidates who choose a general education endorsement and a special education endorsement. The list of endorsements and numbers of the candidates receiving each endorsement are included for context in Table 5.

**Summary**

The new challenges facing teachers today call for greater need for qualified teachers. The United States could lose a third of the teachers and school leaders to retirement and attrition in the next few years. The U.S. Department of Education projects up to one million new teaching positions will be filled by new teachers in 2014 (Duncan, 2010). If we continue to lose teachers due to the lack of skill in classroom and behavior management, the nation’s schools will have a crisis in staffing.

Teacher education programs must recruit, educate, and retain new, talented teachers to meet the new challenges (Boe et al., 2007; Haggar et al., 2011). This means further attention must be given to the area of preparation shown to be one of the most challenging aspects of teaching (Marzano et al., 2009). The three most influential standard setting organizations in teacher education must more clearly define that the body of knowledge and the teacher behaviors are related to positive classroom and student behavior management (Sawchuck, 2013). As Walsh (2013) asserted, the nation’s teacher preparation programs must go further in defining the paths of teacher training leading to success in the field. Further investigations into the marks of quality preparation and whether its effects persist into the professional life of the teacher are necessary. This study could help one particular preparation program to generalize the marks of quality training in classroom and behavior management. It is possible this training could be generalized to other teacher preparation programs.
Table 5

*Total Teaching Endorsements Earned During a Five-Year Period*

<table>
<thead>
<tr>
<th>Alternative Endorsements</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>1</td>
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<td>1</td>
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<td>Certifications</td>
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<td>Elementary &amp; Secondary</td>
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<td>29</td>
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<td>148</td>
<td>137</td>
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<td>Secondary</td>
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<td>2011</td>
<td>2012</td>
<td>2013</td>
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<td>2010</td>
<td>2011</td>
<td>2012</td>
</tr>
<tr>
<td>In Art</td>
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<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>In Music</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>In Phys Ed</td>
<td>9</td>
<td>5</td>
<td>5</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>In Spanish</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td><strong>General Science</strong></td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>General Science Teaching</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Special Education</strong></td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>I: 7-12 Mld/M</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>I: Elementary</td>
<td>20</td>
<td>27</td>
<td>21</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>I: Elem/Secdy</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>I: K-6 Mld/Md</td>
<td>18</td>
<td>14</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>I: Secondary</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>K-12 Endorsements</strong></td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>In Art</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>In Music</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>In Phys Ed</td>
<td>9</td>
<td>5</td>
<td>5</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>In Spanish</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td><strong>K-6 Endorsements</strong></td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>Endorsement in Math</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>---------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>K-6 Endorsement in Music</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>In Endorsement in Phys Ed</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Middle School</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>Middle School Endorsement</td>
<td>22</td>
<td>19</td>
<td>18</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>Reading</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>Reading Endorsement</td>
<td>70</td>
<td>73</td>
<td>72</td>
<td>81</td>
<td>64</td>
</tr>
<tr>
<td>Teaching Reading as a Second Language</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>TESL</td>
<td>15</td>
<td>16</td>
<td>22</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Unified Early Childhood</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>Unified Early Childhood</td>
<td>10</td>
<td>13</td>
<td>7</td>
<td>32</td>
<td>26</td>
</tr>
</tbody>
</table>

*Note.* (Wallinga, 2013).

By conducting a study of the performance of the effect of teacher preparation routes on teacher candidate performance on classroom and behavior management one can determine whether there is wisdom in moving toward preparation routes that require candidates to earn licensure in special education and general education. Examining the effects of the preparation routes on performance on behavior and classroom management in the light of the standards of the professional bodies that drive the direction of teacher preparation could help the professional shape quality teacher preparation programs. The field must be responsive to the professional and state standards, to the results of the prescribed programs, and to the lived experiences of teachers in the field. This study provided some results based context that could inform the field in this state and beyond.
CHAPTER THREE: METHODOLOGY

Introduction

The problem that was examined in the study was that many new teachers feel unprepared to address classroom and behavioral issues, thereby causing many to leave the profession early in their careers. The purpose of the quantitative study was to determine whether student teachers in both general and special education programs are prepared to address classroom and behavioral management issues based on skills learned in their teacher preparation programs. The Iowa teacher education program at a small liberal arts college in Iowa was the focus and research site for the study.

The research study focused on the student teachers in a small teacher preparation program in Iowa. The review of the literature revealed new teachers are unprepared for their roles in classroom and behavior management (Boe & Cook, 2006; Boe et al., 2007; Darling-Hammond, 2010; Goldhaber et al., 2011; Guarino et al., 2006). This has been shown to be true on the national front; it is also true of the evaluations of the program completed by the first-year teachers who are graduates of the program under study (L. Daily, personal communication, January 30, 2014). Even so, there are candidates who are successful with classroom and behavior management as student teachers and in their career as a professional educator. The study included an examination of archival evaluation data to compare the classroom and behavior management skills of the student teachers who were earning a license in general education and those earning dual licenses in general and special education. This study serves to inform the school and inform the profession concerning licensure path and performance on classroom and behavior management. The target institution may use the results of this study to change paths to certification within the institution.
Research Design

A causal-comparative design was used to determine if the classroom management skills and abilities of student teachers differed based on their teacher preparation route. Causal-comparative studies were designed to examine the possible cause and effect relationship between variables that already exist. Causal-comparative design is ex post facto research, non-experimental design. In this research design, a phenomenon is studied after the fact; that is, after it occurred naturally or was already manipulated (Glatthorn & Joyner, 2005.) This design is like descriptive research in that the researcher seeks to describe a phenomenon. However, it differs from descriptive research in that this design attempts to examine a possible cause and effect relationship between the variables. The purpose of this causal-comparative research approach was to examine whether the independent variable, in this case the teacher education licensure program, had a possible causal relationship with the dependent variables, or ratings on the cooperating teacher final evaluation. A true experimental design could not be used because it would be unethical to force students into a specific degree program based on the needs of research. Therefore, a true experimental design was not possible (Gall, Gall, & Borg, 2010). Additionally, more rigorous experimental research will need to be done in order to verify any results.

Between-subject experimental design requires separate, individual groups of individuals. In this case, the individuals were in self-selected cells that received different treatments. The treatment was the course of study candidates chose for their pre-student teaching education program. The general goal of a between-subject design is to determine whether differences exist between two or more treatment conditions (Gall et al., 2010). The researcher in this case examined whether an endorsement in the field of special education affected the scores of pre-
service teachers on the classroom management items on their final evaluation of their general education student teaching experience. Homogeneity within the groups was easily established as the groups were clearly determined by subtype. Those seeking general licensure and those seeking dual licensure were mutually exclusive groups and were easily separated.

Descriptive statistics were gathered including gender and ethnicity. As is often the case with ex post facto research, the variables under investigation may be confounded by extraneous variables that make it difficult to determine whether the independent variable was having a causal effect (Lancaster & Bain, 2009). Randomization of the participants is the best way to control for these extraneous variables; however, in this case, that was not possible.

The study compared performance on the student teaching evaluation form for the three groups. The three groups were the elementary student teachers, secondary student teachers, and dual preparation student teachers with special education and general education. Teacher candidates chose which study path to take. Student teacher evaluations were the same for all three groups.

**Research Questions**

The problem related to the study was many new teachers feel unprepared to address classroom and behavioral issues, thereby causing many to leave the profession early in their career in comparison to their peers in special education. The purpose of the quantitative study was to determine whether student teachers in both general and special education programs were able to address classroom and behavioral management issues based on skills learned in their teacher preparation programs. The research questions guiding the quantitative study were:

**RQ1:** What is the difference between student teachers’ performance as measured by the general education cooperating teacher based on whether the student teacher is seeking a general
education license or dual licensure on the classroom and behavior management section of their final student teaching evaluation of the general education setting?

**RQ2:** What is the difference between the performance of student teachers preparing to be general educators and those earning dual licensure as measured by the overall score on the final student teaching evaluation of the general education setting?

The design had one independent variable with two levels. The independent variable was the teacher preparation program. The two levels of the independent variable were: (a) General education teacher preparation, and (b) Dual general education plus special education teacher preparation. The study had two related dependent variables. The first dependent variable was performance on the classroom and behavior management item on the final evaluation. The second dependent variable was the overall score on the final evaluation.

**Null Hypotheses**

**H₀₁:** There is no statistically significant difference between the performance of student teachers preparing to be general education teachers and those earning dual licensure as measured by the behavior management section of the student teaching final evaluation.

**H₀₂:** There is no statistically significant difference between the performance of student teachers preparing to be general education teachers and those earning dual licensure as measured by the overall score on the final evaluation.

**Participants and Sampling**

The sample for this study consisted of elementary education graduates from one teacher education program in Iowa. The students were primarily traditional students in the 18–22 age range. More than 90% of the students were residential students, meaning they lived on campus and were of traditional college age. The student teacher sample consisted of all student teachers
in each semester from the fall of 2009 to the spring of 2013. A total of 227 student teachers completed a student teaching experience in general education through this teacher education program during the period of fall of 2009 to the spring of 2013. All 227 were included in the sample. These student teachers generated 536 total student teacher evaluations or data points. The decision to include eight semesters of student teacher data was made because during this period, the same instrument was used to collect data.

The three subgroups consisted of the student teachers who prepared for elementary general education only, secondary general education only, and those who have prepared for dual licensure. The group that prepared for elementary general education consisted of 79 student teachers. There were 45 dual prepared student teachers and 103 secondary general education only. The dual licensure candidates included 45 elementary dual candidates. Although there are three secondary dual candidates, their data was omitted from the study due to the small numbers.

Candidates chose general education only or included dual licensure in general education and special education as part of their degree program (Northwestern College catalog, 2013). Special education is only one of many different endorsements offered by the program. Candidates choose from any one of a number of endorsements, such as early childhood, teaching English as a second language, math and many more. All candidates who did not choose to add a special education endorsement were included in the general education cell under elementary and secondary. Table 6 indicates the total number of teacher candidates earning particular endorsements during a four-year period. This information is included here to show the total number of candidates and the number and types of endorsements earned.
Table 6

**Total Student Teachers for Four Years**

<table>
<thead>
<tr>
<th>Type of License Earned</th>
<th>Fall 2009-2010</th>
<th>Fall 2010-2011</th>
<th>Fall 2011-2012</th>
<th>Fall 2012-2013</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary with Gen Ed License</td>
<td>20</td>
<td>20</td>
<td>13</td>
<td>26</td>
<td>79</td>
</tr>
<tr>
<td>Elementary Gen Ed with Special Ed</td>
<td>12</td>
<td>8</td>
<td>14</td>
<td>11</td>
<td>45</td>
</tr>
<tr>
<td>Secondary General Only</td>
<td>31</td>
<td>18</td>
<td>26</td>
<td>28</td>
<td>103</td>
</tr>
</tbody>
</table>

The sample was a convenience sample and therefore determined by the total number of graduates in the time period chosen. Convenience sampling was used because the researcher had access to the entire group of graduates of the program under study. This type of sampling is a non-probability sample (Borg & Gall, 1996). Convenience sampling allows the researcher to choose their research sample from those individuals to which they have access. This type of sampling is often used to study student teachers or students. It is not a true sampling technique because this type of research is not seeking to generalize findings from a small part of a larger whole. The fact that the findings are not generalizable is one of the weaknesses of this type of study (Borg & Gall, 1996).

It was the largest sample that was possible at this institution over time using the same rubric and assessment. The student teacher rubric changed during the 2013-2014 year. The same rubric and assessment was used during these five years. The causal-comparative study used a t-test to examine differences between the groups (Wilson VanVoorhis & Morgan, 2007). For causal-comparative research designs, a group size of 30 yields a power of .61 for one-tailed
tests—or independent-samples t-tests—to detect a moderate difference between two groups at the .05 level of statistical significance and .48 for two-tailed t-tests (Erdfelder, Faul, & Buchner, 1996). A minimum group size of 15 for causal-comparative designs, as suggested by some authors, yields a power of only .38 for one-tailed tests and .26 for two-tailed tests (Wilson Van Voorhis & Morgan, 2007). This research had a sample size of at least 30 in each cell. Although this sample size was adequate according to textbook authors (Gall et al., 2010), it is understood that a larger sample size would decrease the likelihood of a Type II or failing to reject the null hypothesis.

**Setting**

The college in the proposed study was a small, liberal arts college in Iowa (Northwestern College catalog, 2013). The college was fully accredited by the regional accrediting body. The teacher education program (TEP) first earned Iowa State Board of Education approval in 1965 and has kept its accreditation since then (R. Juffer, personal communication January 30, 2014). The TEP was most recently reaccredited in 2008 (L. Daily, personal communication, January 30, 2014). The TEP first earned NCATE approval in 1971. The TEP has retained full accreditation in the ensuing years, most recently in 2009.

All teacher candidates prepare for general education licensure. Some candidates choose to pursue special education licensure as well. Other candidates choose different routes of specialization. All Iowa candidates are required to earn a license in general education. No candidates can earn a special education only license. Candidates in Iowa can earn general education only, but not special education only.
Procedures

Before any data were collected, the researcher gained permission to obtain the student records. The education office received the forms from the cooperating teacher. The office assistant marked the record as complete then sent the forms to the career center. The researcher obtained permission to access archival student teacher evaluation forms from the director of the career development center and the academic dean. Next, the researcher submitted an application to Northwestern College’s Institutional Review Board seeking approval to conduct this study. After institutional approval from the target institution, the researcher submitted an application to Liberty University’s Institutional Review Board seeking approval to conduct the study.

All final student teacher evaluations from the general education experience for four years beginning in the fall of 2009 were obtained. This archival data was accessed during the fall of 2016. The final evaluations are housed in the career center at the college. The director of the career center photocopied each form and saved it to PDF format. Later, this individual saved the forms on a secure drive and shared it with the teacher education office. After assuring that the data was properly grouped according to preparation area, all names were removed to avoid any Federal Education Rights and Privacy Act (FERPA) violations. Access to the secure drive was provided to the researcher to be accessed only on the secure drive within the education office.

Instrumentation

The student teacher final evaluation was developed using Danielson’s 2007 handbook entitled, Enhancing Professional Practice: A Framework for Teaching. The final evaluation is found in Appendix A. The framework for teaching identifies the standards for quality teaching practice. The framework is divided into four domains of teaching responsibility: Domain 1:
Planning and Preparation; Domain 2: The Classroom Environment; Domain 3: Instruction; and Domain 4: Professional Responsibilities.

The domain with the most relevance to this study is Domain 2: The Classroom Environment. The language in this standard was used for the development of the evaluation. The rubric used to describe the performance levels was adapted for use from the Danielson material.

Danielson’s framework was originally devised in 1996 (Danielson, 2007). Danielson’s work on this framework pioneered the development of standards for teacher education programs (Roth, 1996). The purpose of the framework was to identify and measure effective teaching practice. Her framework has helped to name and identify elements of quality teacher performance (Darling-Hammond, 2010). Teacher preparation programs to define and measure quality for teacher candidates for their field and clinical experience have used the work. The final evaluation for this program was developed using her work as a guide.

Danielson’s framework has been used to evaluate teachers across the country. The MET study looked at the framework and best practices around using the domains for teacher evaluation (Cantrell & Kane, 2013). Best practices include training of observers on the instrument as well as the use of multiple observers. Cooperating teachers are given training and a rubric for use in the evaluation of student teachers. The ratings include scores given by both cooperating teachers and university supervisors.

The final evaluation used in this study consists of a four-point rating scale. Cooperating teachers were asked to rate their student teacher on all four domains as well as answer an overall question asking for the cooperating teacher’s assessment of the candidate’s probable success as a
teacher. The rating scale items were defined as such: 1 = Unsatisfactory, 2 = At Standard, 3 = Proficient, 4 = Distinguished.

The evaluation question that was most applicable and was the focus of the study is from Danielson’s Domain 2: Classroom Environment. The form asks the cooperating teacher to give a single rating to the following section. There are three descriptors: 2.1 Demonstrates knowledge of students, 2.2 Manages student behavior and classroom procedures, and 2.3 Creates an environment of respect and rapport, yet the cooperating teachers were asked to give this section just one rating. The rubric describes the criteria (see Appendix B).

The evaluators were provided with a rubric also based on the Danielson (2007) model. The rubric described the levels of performance to be observed by the cooperating teacher. The rubric for the student teaching supervision is in Appendix B. There were four levels of skill for each subscale as described in the rubric. Cooperating teachers were instructed to use the rubric as they completed the evaluation. Cooperating teachers gave candidates one score for each subsection. The range of scores is 1–4 with the descriptors stating 1 – Insufficient; 2 – Emergent/Needs Improvement; 3 – Target Proficiency; 4 – Outstanding Performance.

The instrument had face validity because it was based on the work of Danielson (2007). The instrument is a good translation of the work that she described and used (Trochim, 2006). It also had content validity, meaning it asked cooperating teachers to rate student teachers’ performance on a reasonable range of beginning teacher performances. The validity of this instrument was strengthened using expert validation (Creswell & Plano, 2007). Four faculty members from the teacher education program, all experts in the field, were involved in the writing of the instrument. The advisory committee consisting of cooperating teachers and principals, as well as all college supervisors, evaluated the instrument, used it for a semester and
then re-evaluated it. This study examined the results of all of the semesters that used the very same instrument.

In addition to looking at the validity of the instrument, care was taken to ensure the reliability of the instrument. It is important that the instrument yield scores that are stable and consistent over time (Gravetter & Walnau, 2009). The reliability of the instrument was strengthened by the use of a rubric that describes performance for each of the ratings. Cooperating teachers were given training in evaluation before they completed the student teacher final evaluation. If there is a high level of consistency in the scores from semester to semester, the researcher can be confident that the instrument produces reliable results. Internal reliability for each scale can be calculated using Cronbach’s alpha and calculated using the Excel program.

**Validity and Reliability**

Threats to validity were present in the study. The cooperating teacher evaluation of candidate performance was used to compare performance based on preparation route. One inherent threat was that random assignment to groups is not possible in causal-comparative research. The groups were non-equivalent. Selection differences are a threat to internal validity (Cook & Campbell, 1979). This was unavoidable because random assignments to groups was not possible for this study.

Another threat was the instrumentation threat. The instrument used was not been evaluated in terms of reliability. In order to minimize that threat, training was given to all evaluators on using the instrument. In addition, a rubric to describe levels was also made available to the evaluators.

The instrument was evaluated in terms of reliability measures that were used. Cronbach’s alpha is a measure of internal consistency (Ary, Jacobs, Sorenson, & Razavieh,
This test is considered to measure scale reliability which is appropriate since the items are on a four-point scale. The Cronbach’s alpha was calculated to be .83 and reached the conventional standards for scale reliability.

**Data Analysis**

The SPSS program was used to complete the data analysis. A t-test was used the compare student teacher evaluations. A t-test was chosen for this research because there were non-equivalent groups being studied.

The number of participants per cell is recommended to be 20-30 in each cell (Wilson Van Voorhis & Morgan, 2007). However, if the participants cannot equal 30 in each cell, the number of participants must equal at least seven participants in each cell. Although more participants would be better, it is most imperative to have more participants than the number of dependent variables. There were 536 total evaluation forms examined for this research. There were 302 total elementary evaluation forms examined in this research.

A $p < .05$ level of significance was used for all analyses. Each hypothesis was tested using a t-test. Effect size was also calculated using Cohen’s d. It is recommended that researchers report an effect size whenever the researcher is reporting a statistical difference (Ary et al., 2010).

**Summary**

This research was designed to determine if a statistical difference in the mean scores on the classroom and behavior management sections of the final student teacher evaluation form existed. This study examined data from the general education student teaching experience from candidates preparing to be general educators and those preparing to be special educators. The study was designed to see if a statistical difference existed between the scores of those student
teachers who were preparing to be general educators and those student teachers who were preparing to be special educators.

Statistics comparing performance data were used to describe performance differences. An independent-samples t-test was conducted on the mean data from the student teaching final evaluations gathered from a four-year period. Chapter Four contains the information related to the results of the data analysis. The data was interpreted to explain how teacher education path may relate to preparedness for classroom and behavior management and overall success as a student teacher.
CHAPTER FOUR: FINDINGS

Research Questions

Two research questions guided the development of the proposed study in relation to the problem of student teachers’ classroom and behavior management skills in regular education classrooms. Those questions were:

**RQ1:** What is the difference between student teachers’ performance as measured by the general education cooperating teacher based on whether the student teacher is seeking a general education license or dual licensure on the classroom and behavior management section of their final student teaching evaluation of the general education setting?

**RQ2:** What is the difference between the performance of student teachers preparing to be general educators and those earning dual licensure as measured by the overall score on the final student teaching evaluation of the general education setting.

Null Hypotheses

The null hypothesis for the first research question in this study states that there is no significant difference between the student teachers’ performance as measured by the general education cooperating teacher based on whether the student teacher is seeking a general education license or dual licensure on the final student teaching evaluation of the general education setting. The null hypothesis for the second research question is similar. It states that there is no significant difference between the performance of student teachers preparing to be general educators and those earning dual licensure as measured by the overall score on the final student teaching evaluation of the general education setting.

The purpose of the study was to examine whether there is a difference in the classroom management performance of student teachers who are earning only a general education teacher
license versus those who are earning dual licensure in general and special education. All cooperating teachers were asked to evaluate the performance of student teachers upon completion of their general education student teaching experience. Evaluation forms were created using the Danielson model (Danielson, 2007).

The state of Iowa requires all special education teachers to earn dual licensure in general education and special education (Iowa Board of Educational Examiners, 2013). This means that all special educators must complete a student teaching experience in the general education classroom. The participants of this study earned a license in general education or dual licensure in general and special education through a small program in Iowa during the eight semesters between the fall of 2009 and the spring of 2013.

Initially, a literature review was done to inform the study. A teacher retention problem exists in the field. The literature shows that both special educators and general educators are leaving the field early (Guarino et al., 2006). Many of these educators cited the fact that they were driven from the field due to a problem with classroom and behavior management across the nation (Barnes et al., 2007).

The participants in this study included all teacher candidates who completed a general education student teaching experience between the fall of 2009 and the spring of 2013 in one Iowa preparation program. All student teachers prepared in Iowa must complete a general education student teaching experience. This student teaching experience occurs prior to the special education student teaching experience. The data from the final evaluations are presented in this chapter followed by a summary of results.

The period between 2009 and 2013 was chosen because no changes were made in the evaluation instrument during that time. Three groups were compared. The three subgroups were
student teachers who have prepared for elementary general education only, secondary general education only, and those who have prepared for dual licensure in general education and special education. The group that had prepared for elementary general education consisted of 79 student teachers. There were 45 dual prepared student teachers and 103 secondary general education prepared student teachers only. The dual licensure candidates included 45 elementary dual candidates and three secondary dual candidates. The majority of the participants of this study were traditional student teachers, aged 22–23 (Wallinga, 2013).

The purpose of the quantitative study was to determine whether student teachers in both general and special education programs were prepared to address classroom and behavioral management issues based on skills learned in their teacher preparation program in the small program in Iowa. The data gathered was from the student teacher final evaluations. This study included the data on the classroom and behavior management subsection as well as on the probable success as a teacher, or overall evaluation numbers.

**Results**

**Null Hypothesis One**

The null hypothesis for the first research question in this study states that there is no significant difference between the student teachers’ performance as measured by the general education cooperating teacher based on whether the student teacher is seeking a general education license or dual licensure on the final student teaching evaluation of the general education setting.

An independent-samples t-test was conducted to compare the means of the Domain 2 scores from the student teaching evaluation for the dual prepared student teachers and the general education student teachers. The independent sample t-test results for the Domain 2 scores are
indicated in Table 7. The Domain 2 score is shown to be higher for the dual prepared with special education student teachers (M = 3.62, SD = .52) and the general education only student teachers (M = 3.42, SD = .72). These results indicate that student teachers who were dual prepared in general education and special education scored higher on the Domain 2 student teacher evaluation score than those prepared as general education teachers. Cohen’s effect size value (d = .55) suggests a moderate practical significance. There is sufficient evidence to reject the null hypothesis.

Table 7
Means, Standard Deviations, and t-tests (Domain 2)

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special</td>
<td>124</td>
<td>3.62</td>
<td>.52</td>
<td>2.79</td>
<td>.006</td>
</tr>
<tr>
<td>General</td>
<td>177</td>
<td>3.42</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Null Hypothesis Two

An independent-samples t-test was conducted to compare the means of the overall scores from the student teaching evaluation for the dual prepared student teachers and the general education student teachers. The independent sample t-test results for the overall scores are indicated in Table 8. The mean overall score for the special education dual prepared student teachers is significantly higher (M = 3.76, SD = .48) than for general education only prepared student teacher (M = 3.59, SD = .69). These results indicate that student teachers who were dual prepared in general education and special education scored higher on the overall student teacher evaluation score than those prepared as general education teachers. Cohen’s effect size value (d = .29) suggests a small to moderate practical significance. There is sufficient evidence to reject the null hypothesis.
Table 8
Means, Standard Deviations, and t-tests (Final Evaluation Overall Score)

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special</td>
<td>124</td>
<td>3.76</td>
<td>.47</td>
<td>2.38</td>
<td>.018</td>
</tr>
<tr>
<td>General</td>
<td>177</td>
<td>3.59</td>
<td>.69</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9
Average Domain Scores for the Dataset Using Excel

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Number of General Ed Students</th>
<th>Number of Special Ed Students</th>
<th>Domain 2 Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Elem Gen Ed Students</td>
</tr>
<tr>
<td>2012-13</td>
<td>44</td>
<td>15</td>
<td>3.28</td>
</tr>
<tr>
<td>2011-12</td>
<td>55</td>
<td>18</td>
<td>3.32</td>
</tr>
<tr>
<td>2010-11</td>
<td>79</td>
<td>14</td>
<td>3.50</td>
</tr>
<tr>
<td>2009-10</td>
<td>33</td>
<td>9</td>
<td>3.50</td>
</tr>
<tr>
<td>2008-9</td>
<td>13</td>
<td>9</td>
<td>3.71</td>
</tr>
</tbody>
</table>

Demographics of Survey Respondents

Northwestern College is a Christian liberal arts college with a student body of approximately 1,200 students representing 34 states and 23 countries. The majority of students are from Iowa, South Dakota, Minnesota, Nebraska, California and Colorado, with 89% of total students living on campus. During the fall 2015 semester, 89% of the student body was between the ages of 18-24, with only 1% of students under the age of 18; 7% between the ages of 25-39; and 3% age 40 and over.

The teacher candidates from this institution are homogenous. There are few with any significant experience in schools. None of the teacher candidates in this data set were non-
traditional students. Although the student body has become more racially and geographically diverse with the number of ethnic minority students increasing over the past decade, this data set reflects a very white, Midwestern teacher candidate group (Wallinga, 2013).

Table 10

*Total Teacher Candidates for 2009-2013*

<table>
<thead>
<tr>
<th>Type of License Earned</th>
<th>Fall 2009 - Spring 2010</th>
<th>Fall 2010 - Spring 2011</th>
<th>Fall 2011 - Spring 2012</th>
<th>Fall 2012 - Spring 2013</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary with Gen Ed License</td>
<td>20</td>
<td>20</td>
<td>13</td>
<td>26</td>
<td>79</td>
</tr>
<tr>
<td>Elementary Gen Ed with Special Ed</td>
<td>12</td>
<td>8</td>
<td>14</td>
<td>11</td>
<td>45</td>
</tr>
<tr>
<td>Secondary General Only</td>
<td>31</td>
<td>18</td>
<td>26</td>
<td>28</td>
<td>103</td>
</tr>
</tbody>
</table>

Table 11 indicates the racial and gender makeup of the teacher candidates enrolled in educator preparation during the time this data set was gathered. This chart compiles all teacher candidates enrolled and not the particulars of the student teachers in the data set during the final year of data collection. This is a typical picture of enrollment at this small, faith-based institution. Because of the homogeneity of the sample, comparisons based on program are more easily made.

Table 12 indicates the Domain 2 and the overall score on the student teacher evaluation. The table indicates the special education candidates, or student teachers who are earning special education plus general education or dual licensure first. In this table, the teacher education candidates are not separated by elementary and secondary candidates. All of the dual licensure candidates are indicated by the term “special” in the table below. These scores are compared
with the “general” candidates only. Domain 2 scores are indicated on the top of the table and the overall scores, also referred to as the probable success scores, are listed below.

Table 11

*Total Students Enrolled in Education Programs for 2009-2014*

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Students Enrolled in Educator Preparation Program</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>2012-2013</td>
<td>22</td>
</tr>
<tr>
<td>2011-2012</td>
<td>18</td>
</tr>
<tr>
<td>2010-2011</td>
<td>15</td>
</tr>
<tr>
<td>209-10</td>
<td>17</td>
</tr>
<tr>
<td>2008-9</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 12

*Descriptive Statistics for Special Education vs. General Education Students*

<table>
<thead>
<tr>
<th>Special (1) or General (2)</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain 2 Score Special</td>
<td>3.627</td>
<td>.5158</td>
<td>124</td>
</tr>
<tr>
<td>General</td>
<td>3.415</td>
<td>.7237</td>
<td>177</td>
</tr>
<tr>
<td>Total</td>
<td>3.502</td>
<td>.6536</td>
<td>301</td>
</tr>
<tr>
<td>Overall Score Special</td>
<td>3.761</td>
<td>.4754</td>
<td>124</td>
</tr>
<tr>
<td>General</td>
<td>3.590</td>
<td>.6931</td>
<td>177</td>
</tr>
<tr>
<td>Total</td>
<td>3.661</td>
<td>.6177</td>
<td>301</td>
</tr>
</tbody>
</table>
CHAPTER FIVE: SUMMARY AND DISCUSSION

Introduction

A review of the literature surrounding early career teacher attrition revealed that new teachers feel unprepared for the role as classroom managers (Ingersoll, 2003). Teacher training institutions in Iowa are required to prepare special education teachers for both general education and special education licensure. Therefore, all special educators prepared in Iowa must also carry general education licensure and preparation.

In accredited programs, all teacher candidates must demonstrate standards-based competency in order to earn an initial license (Ginsberg & Levine, 2013). Iowa institutions must build and assess teacher candidates according to standards, and most programs use these standards to assess student teacher performance (Tucker, 2011). It is important for the teacher education program to then examine the data from candidate performance to improve their own program (Roth, 1996). The rubrics that the programs use serve to describe and measure the candidate performance, and to quantify the performance so it can be examined around program goals.

Classroom and behavior management are of particular difficulty for new teachers, leading to new teacher attrition (Moore & Sampson, 2008). Students who leave the field early often cite classroom and behavior management of particular difficulty (Moore & Sampson, 2008). Teachers who leave the field early often cite the challenges of classroom and behavior management as the reason for leaving the field (Honowar, 2007).

In the state of Iowa, where this study was conducted, all teacher candidates for general education positions must demonstrate skill competency around the standards. However, the preparation path chosen by the candidates can differ by licensure path (Iowa Board of
Educational Examiners, 2013). All teacher candidates in the state who are preparing for a license for special education must earn a license in general education as well. All teacher education candidates in the state, therefore, must require a student teaching experience in general education. Although some states are calling for dual licensure for all candidates, programs requiring dual certification are rare (Brownell et al., 2010). In Iowa, candidates can choose to do general education only, or they can choose special education to add to their general education license (Iowa Board of Educational Examiners, 2013).

This research study was conducted to add to the body of research by investigating the relationship between the choice of teacher education programs and the scores on the classroom and behavior management section, as well as the overall score of the final general education student teaching assessment. The general problem, which prompted this study, was to address the issue that many new teachers leave the field early in their career because of perceived difficulties with classroom and behavior (Ingersoll, 2003; Roth, 1996).

**Summary of the Research Results**

The purpose of this study was to determine whether there is a relationship between the preparation path of student teachers and their ability to address classroom and behavior management in their classrooms. The selected data for this research indicated that a quantitative methodology was warranted because it sought to see if the variables were related (Glatthorn & Joyner, 2005). The goal was to find whether differences in skills based on preparation area could lead to improvement in the particular teacher education program at the small teacher education program under study, as well as in the field of teacher preparation, especially in the state of Iowa where dual preparation for special educators is already required (Conderman et al., 2012).
An initial step in this study was to calculate descriptive statistics. The mean and standard deviation was calculated using the SPSS 22 for the test data. The sample sizes were sufficient to run the independent-samples t-test statistic. There were 124 student teacher evaluations in the special education set and 177 in the general education set.

The independent-samples t-test statistic was completed using the SPSS 22 for the statistics. There was a statistically significant difference on the Domain 2 score, or classroom and behavior management section of the student teacher final evaluation based on the preparation path (Gall et al., 2010). The mean score for Domain 2 is significantly higher for the group of student teachers who were dual prepared in general education and special education than for those who were prepared only for general education. These results suggest that teacher preparation route does have an effect on the ability of teacher candidates to manage the classroom and student behavior. Therefore, there is enough evidence to reject the null hypothesis for research question one.

**RQ1:** What is the difference between student teachers’ performance as measured by the general education cooperating teacher based on whether the student teacher is seeking a general education license or dual licensure on the classroom and behavior management section of their final student teaching evaluation of the general education setting?

There is enough evidence to reject the null hypothesis and state that there is a statistical difference between the performance of student teachers preparing to be general education teachers and those earning dual licensure as measured by the behavior management section of the student teaching final evaluation.
RQ2: What is the difference between the performance of student teachers preparing to be general educators and those earning dual licensure as measured by the overall score on the final student teaching evaluation of the general education setting?

The null hypothesis is rejected indicating that there is a statistical difference between the performance of student teachers preparing to be general education teachers and those earning dual licensure as measured by the overall scores on the final student teacher evaluation. There is enough evidence to reject the null hypothesis for both research questions.

Discussion of Research Results

One of the important goals of teacher education data examination is to create an opportunity for teacher education programs to improve. This study looked at two different preparation routes to see whether the route made a difference in performance. This study showed that indeed, the preparation route chosen by the candidate is related to performance as measured by the final evaluation of student teacher performance. The effect sizes were rather small, however. There was a significant difference between groups for both levels of the dependent measure. Though the effect is quite weak, the difference exists and should be discussed.

The variability of scores on both dependent measures is limited. This finding suggests that all student teachers are actually scoring quite well on the four-point scale. Although, there is a statistical difference between the groups and the size of the difference is quite small. Scores for Domain 2, classroom and behavior management as well as overall scores are significantly different for teacher candidates who have chosen the dual preparation route.

At this point, the institution is examining whether or not to adopt a dual preparation route for all teacher candidates. Other institutions in the state are also examining whether or not dual
preparation for general and special education is a good idea. This decision is based on the quality of the performance of teacher candidates, but also to address a teacher shortage in special education.

Challenging student behavior creates stress and burnout for teachers (Gebbie, Ceglowski, Taylor, & Miels, 2012). The issue of classroom management and teacher preparation has long been a topic of discussion for teacher educators. The institution under study has examined data related to this persistent problem for several years (Daily, 2013). This study adds to the body of research examining teacher preparedness for the tasks of classroom and behavior management.

Conderman et al., (2012), reports that new teachers in both general education and special education state that they were inadequately prepared for the tasks related to classroom management. The results of this study indicate that novice teachers trained both to be special educators and general educators have slightly better performance in classroom and behavior management in the general education setting than those trained only as general educators. These results could indicate that although special educators also feel underprepared for their roles, the results of their preparation are evident in their ratings on their skills.

Typical reform efforts call for higher GPA, content majors, and higher test scores (Levine, 2006). This study indicates that at least one key could be outside of the typical reform efforts called for. Additional training in special education for all teachers could be a key factor in building skill for classroom and behavior management. In turn, better skill in classroom and behavior management could keep teachers in the field longer.

Skills in classroom and behavior management are shown to be critical to a beginning teacher’s success in the classroom (Marzano et al., 2009, Ponitz, Rimm-Kaufman, Grimm, & Curby, 2009). Teacher education programs must systematically integrate these skills in an
evidence-based way (Allen, 2010). This study indicates that by requiring dual preparation in special education and general education we could expect that classroom management skills in general education would improve for all teachers.

Although the results of this research show that the candidates who have been prepared for dual licensure do score higher, future research will need to address sampling problems to determine an outright link between cause and effect. It was ethically impossible to assign preparation routes to the candidates preparing for licensure. For post hoc research, it is difficult to randomly assign candidates to groups. A true experimental design may be possible by using matching based on test results or other statistical measures.

In this research design, it is difficult to determine whether or not candidates who chose a particular preparation path have skills that might predict outcomes in any particular domain. Therefore, it is possible that more skilled teacher candidates choose to study special education. Follow up interviews could assist researchers in determining whether this is the case. Mixed methodology research could assist the researchers in determining whether there appear to be patterns in the reasons candidates choose to study special education. This study could be strengthened by using interviews to determine why a particular preparation path was chosen by particular candidates.

**Conclusions**

This study examined the effect of teacher preparation routes on teacher candidate performance on classroom and behavior management and on the overall performance of student teachers during their general education student teaching experience. This research was done to examine whether a dual licensure preparation route is the best option to address persistent concerns around the classroom and behavior management skills for beginning teachers. There is
a persistent problem with teacher retention and the lack of skills around classroom and behavior management is the most often cited difficulty for new teachers. This quantitative study did determine that there is a statistically significant relationship between the preparation route and the evaluation scores. However, the effect was small. It may not be enough evidence to convince the teacher preparation programs in the state of Iowa and beyond that a dual preparation program is right for them. It is a matter for continuing research.

**Implications**

The results of this study can be used to shape teacher education programs at this teacher preparation program and for other teacher education programs in the state of Iowa and beyond. This research found that the teacher candidates who were dual prepared in special education and general education scored better on the behavior management section of the student teacher evaluation and on the overall section of the student teacher evaluation. The effect of teacher education programs persists into the early career of professional educators (Scheeler, 2008). The teacher education programs must use the performance of their own candidates to improve their own program. This study allows this particular program to complete the feedback loop by showing that dual preparation may have benefits for overall classroom and behavior management in the general education field.

A problem that exists is that teachers are leaving the field early. One of the most often cited reasons given for teachers to leave the field are difficulties with classroom and behavior management (Corbell et al., 2010). New teachers report feeling unprepared for the tasks facing them as educators which leads many teachers to leave the field. This study has implications for teacher preparation. It appears that dual preparation in special education and general education
has a positive effect on the classroom and behavior management skills for new teachers. This new knowledge could lead to improvement in teacher education.

Addressing the problem of new teacher attrition was an important focus of this study. Teacher attrition is expensive for schools and difficult for students (Guarino et al., 2006). It is important for teacher education institutions to improve teacher preparation, especially around the often-cited reason teachers leave. Because it is known that challenging student behavior is a prominent factor for teacher stress and teacher burnout (Gebbie et al., 2012), it is wise for teacher preparation programs to better equip candidates with the skills necessary for the task. This research indicates that there is an advantage to teachers who were dual prepared in general and special education in the areas of classroom and behavior management.

One of the important goals of data examination is data driven change. This study looked at two routes to see which route prepares better teachers. The study showed that indeed, the preparation route is related to the performance of teacher candidates in their general education student teaching experience. Although the effect is weak, it exists and should serve to inform the direction of this particular program and also for other programs in the state and beyond.

**Limitations**

The nature of the causal-comparative research design is to determine whether one variable has an effect on another (Glatthorn & Joyner, 2005). As an ex post facto study design, limitations of this type of research include lack of randomization and manipulation (Gay, Airasian, & Mills, 2012). Research of this kind is typically used to investigate cause and effect relationships when the researcher cannot randomly assign subjects to groups; it begins with research subjects who already differ on the independent variable, in this case the program of study which is chosen by the teacher candidate.
Performance on the behavior and classroom management section of the final evaluation of the general education student teaching experience was compared between two groups of student teachers. One of the groups was seeking special education license as part of preparation for licensure; the other group was not. There was no control group in this research study. The two groups were not equal in size; there were fewer teacher candidates with special education licensure. Randomization was not possible; teacher candidates selected their licensure routes and the researcher cannot manipulate their selection.

Another threat was the instrumentation threat. The instrument used has not been evaluated in terms of reliability. To minimize this threat, inter-rater reliability was examined to assess reliability. The reliability statistics indicated that the instrument met the standards for reliability. Additionally, a rubric was used to inform the evaluators and give consistency to the instrument.

**Recommendations for Future Research**

The purpose of this study was to examine whether the preparation area chosen by the candidate is a factor in the success of student teachers for managing classroom. The study is important because many teachers who exit teaching early cite difficulties with classroom and behavior management. Teacher preparation programs must examine the data around candidate performance in order to improve their own practice. This study provides a starting point for the discussion on whether or not teacher preparation programs should choose dual preparation in general and special education for all of teacher candidates.

This researcher recommends that qualitative methodology should be used to further examine the question of whether or not dual preparation in general and special education affected the candidate’s skill with classroom and behavior management. This study was quantitative and
it showed an effect. Qualitative methodology could reveal more nuance, such as (a) What factors in the special education curriculum drove the improved scores? (b) What factors within the candidates themselves drove them to choose to do dual preparation? (c) Were there other factors involved with dual preparation that this study did not reveal?

This quantitative study focused on teacher preparation. This researcher recommends methodology to see if the improved results in student teaching persist as candidates entered the field. Qualitative methodology could be used to look at novice teachers to see if the dual prepared teachers had better skills in classroom and behavior management than the general education only novice teachers had. Qualitative methodology could reveal (a) How do dual prepared teachers view their own skills and abilities to manage a classroom after a year in the classroom? and (b) How do general education only prepared teachers view their own skills and abilities after a year in the classroom?

Finally, this researcher recommends qualitative methods be used to further understand how teacher candidates choose their preparation route. Perhaps a study of the themes emerging from the question of motives would reveal some commonality for those who choose special education. It could be that there are particular motivations involved in candidates who choose dual preparation and those responses could be exploited to build better teacher preparation programs. It is important that educational researchers continue to examine teacher preparation routes and classroom and behavior management. If it is true that the effect of teacher preparation persists into the career of professional educators, then it is imperative that teacher programs examine the results of their program and use those results to inform improvement.
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# Appendix A: Student Teacher Final Evaluation

## Cooperating Teacher

### Recommendation Checklist

Northwestern College  
Orange City, IA 51041  
[Return to Education Office]

---

### Candidate Name

---

### Grade Level/Subject Taught  

<table>
<thead>
<tr>
<th>Dates of School/District Experience</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1-Unsatisfactory; 2-At Standard; 3-Proficient; 4-Distinguished;

---

### Domain #1 - Planning and Preparation

1.1 Knowledge of subject matter.  
1.2 Expectation for learning & achievement.  
1.3 Setting instructional outcomes.  
1.4 Designs lessons using a variety of instructional strategies. ([INTASC Standards 1, 2, 4, 7])

### Domain #2 – Classroom Environment

2.1 Demonstrates knowledge of students.  
2.2 Manages student behavior and classroom procedures.  
2.3 Creates an environment of respect and rapport. ([INTASC Standards 3, 5])

### Domain #3 - Instruction

3.1 Utilizes resources and technology.  
3.2 Understands and uses formal/informal assessment strategies.  
3.3 Communicates clearly through written and oral language.  
3.4 Engages students in learning.  
3.5 Uses assessment data. ([INTASC Standards 1, 2, 3, 4, 6, 7, 8])

### Domain #4 – Professional Responsibilities

4.1 Demonstrates ability to make professional judgments.  
4.2 Growing and developing professionally.  
4.3 Appears enthusiastic and committed to serving children and society through teaching.  
4.4 Fosters relationships with school, community and professionals.

### Exhibits Organizational Skills ([INTASC Standards 4, 7])

### Probable success as a teacher ([INTASC Standards 1-10])

---

Please attach a letter of recommendation using your school’s letterhead.

Cooperating Teacher Signature _______________________________

---
Appendix B: Rubric for Evaluation of Student Teaching

Rubric for Evaluation of Student Teaching
To be used as a reference when completing student teacher evaluations.

<table>
<thead>
<tr>
<th>Domain 1 Planning &amp; Preparation</th>
<th>Unsatisfactory</th>
<th>At Standard</th>
<th>Proficient</th>
<th>Distinguished</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1: Knowledge of subject matter (CD 1a)</td>
<td>In planning and practice, candidate makes content errors or does not correct errors made by students.</td>
<td>Candidate is familiar with important concepts in the discipline but may display lack of awareness of how these concepts relate to one another.</td>
<td>Candidate displays solid knowledge of the important concepts in the discipline and how these relate to one another.</td>
<td>Candidate displays extensive knowledge of the important concepts in the discipline and how these relate both to one another and to other disciplines.</td>
</tr>
<tr>
<td>1.2: Expectation for learning and achievement (CD 1b)</td>
<td>Candidate sees no value in understanding how students learn and does not seek such information.</td>
<td>Candidate recognizes the value of knowing how students learn, but this knowledge is limited or outdated.</td>
<td>Candidate’s knowledge of how students learn is accurate and current. Candidate applies this knowledge to the class as a whole and to groups of students.</td>
<td>Candidate displays extensive and subtle understanding of how students learn and applies this knowledge to individual students.</td>
</tr>
<tr>
<td>1.3: Setting instructional outcomes (CD 1c)</td>
<td>Outcomes represent low expectations for students and lack of rigor. They do not reflect important learning in the discipline or a connection to a sequence of learning.</td>
<td>Outcomes represent moderately high expectations and rigor. Some reflect important learning in the discipline and at least some connection to a sequence of learning.</td>
<td>Most outcomes represent high expectations and rigor and important learning in the discipline. They are connected to a sequence of learning.</td>
<td>All outcomes represent high expectations and rigor and important learning in the discipline. They are connected to a sequence of learning both in the discipline and in related disciplines.</td>
</tr>
<tr>
<td>1.4 Designs lessons using a variety of instructional strategies (CD 1d)</td>
<td>Learning activities are not suitable to students or instructional outcomes and are not designed to engage students in active intellectual activity.</td>
<td>Only some of the learning activities are suitable to students or instructional outcomes. Some represent a moderate cognitive challenge, but with no differentiation for different students.</td>
<td>All of the learning activities are suitable to students or to the instructional outcomes, and most represent significant cognitive challenge, with some differentiation for different groups of students.</td>
<td>Learning activities are highly suitable to diverse learners and support the instructional outcomes. They are designed to engage students in high-level cognitive activity and are differentiated, as appropriate, for individual learners.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Domain 2 Classroom Environment</th>
<th>Unsatisfactory</th>
<th>At Standard</th>
<th>Proficient</th>
<th>Distinguished</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1: Demonstrates knowledge of students (CD 2a)</td>
<td>Candidate displays little or no knowledge of students’ skills, knowledge, language proficiency, interests or special learning or medical need and why such is important.</td>
<td>Candidate recognizes the value of understanding students’ skills, knowledge, language proficiency, interests and special learning or medical needs for the class as a whole.</td>
<td>Candidate recognizes the value of understanding students’ skills, knowledge, language proficiency, interests and special learning or medical needs and displays this knowledge for groups of students.</td>
<td>Candidate displays understanding of individual students’ skills, knowledge, and language proficiency and has a strategy for maintaining such information.</td>
</tr>
<tr>
<td>2.2: Managing student behavior and classroom procedures. (CD 2b)</td>
<td>Student behavior is not monitored, and candidate is unaware of what students are doing. Candidate does not respond to misbehavior, or the response is inconsistent, overly repressive, or does not respect the student’s dignity.</td>
<td>Candidate is generally aware of student behavior but may miss the activities of some students. Candidate attempts to respond to student misbehavior but with uneven results, or no serious disruptive behavior occurs.</td>
<td>Candidate is alert to student behavior at all times. Candidate response to misbehavior is appropriate and successful and respects the student’s dignity, or student behavior is generally appropriate.</td>
<td>Monitoring by candidate is subtle and preventive. Students monitor their own and their peers’ behavior; correcting one another respectfully. Candidate response to misbehavior is highly effective and sensitive to students’ individual needs, or student behavior is entirely appropriate.</td>
</tr>
<tr>
<td>2.3 Creates an environment of respect and rapport (CD 2c)</td>
<td>Candidate Interaction with at least some students is negative, demeaning, sarcastic or inappropriate to the age or culture of the students. Students exhibit disrespect for candidate.</td>
<td>Candidate-student interactions are generally appropriate but may reflect occasional inconsistencies, favoritism, or disregard for students’ cultures. Students exhibit only minimal respect for candidate.</td>
<td>Candidate-student interactions are friendly and demonstrate general warmth, caring, and respect. Such interactions are appropriate to developmental and cultural norms. Students exhibit respect for candidate.</td>
<td>Candidate demonstrates genuine caring and respect for individual students. Students exhibit respect for candidate as an individual, beyond that for the role.</td>
</tr>
<tr>
<td>Domain 3 Instruction</td>
<td>Unsatisfactory</td>
<td>At Standard</td>
<td>Proficient</td>
<td>Distinguished</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------</td>
<td>-------------</td>
<td>------------</td>
<td>---------------</td>
</tr>
<tr>
<td>3.1 Utilizes resources and technology (CD 3c)</td>
<td>Instructional materials and resources are unsuitable to the instructional goals or do not engage students mentally.</td>
<td>Instructional materials and resources are partially suitable to the instructional goals or students’ level of mental engagement is moderate.</td>
<td>Instructional materials and resources are suitable to the instructional goals and engage students mentally.</td>
<td>Instructional materials and resources are suitable to the instructional purposes and engage students mentally. Students initiate the choice, adaptation, or creation of materials to enhance their learning.</td>
</tr>
<tr>
<td>3.2 Understands and uses formal/informal assessment strategies (CD 3d)</td>
<td>Candidate does not monitor student learning in the curriculum.</td>
<td>Candidate monitors the progress of the class as a whole but elicits no diagnostic information.</td>
<td>Candidate monitors the progress of groups of students in the curriculum, making limited use of diagnostic prompts to elicit information.</td>
<td>Candidate actively and systematically elicits diagnostic information from individual students regarding their understanding and monitors the progress of individual students.</td>
</tr>
<tr>
<td>3.3 Communicates clearly through written and oral language (CD 3a)</td>
<td>Candidate’s spoken language is inaudible, or written language is illegible. Spoken or written language contains errors of grammar or syntax. Vocabulary may be inappropriate, vague, or used incorrectly, leaving students confused.</td>
<td>Candidate’s spoken language is audible, and written language is legible. Both are used correctly and conform to standard English. Vocabulary is correct but limited or is not appropriate to students’ age or backgrounds.</td>
<td>Candidate’s spoken and written language is clear and correct and conforms to standard English. Vocabulary is appropriate to students’ age and interests.</td>
<td>Candidate speaks and written language is correct and conforms to standard English. It is also expressive, with well-chosen vocabulary that enriches the lesson. Candidate finds opportunities to extend students’ vocabularies.</td>
</tr>
<tr>
<td>3.4 Engages students in learning (CD 3c)</td>
<td>Activities and assignments are inappropriate for students’ age or background. Students are not mentally engaged in them.</td>
<td>Activities and assignments are appropriate to some students and engage them mentally, but others are not engaged.</td>
<td>Most activities and assignments are appropriate to students, and almost all students are cognitively engaged in exploring content.</td>
<td>All students are cognitively engaged in the activities and assignments in their exploration of content. Students initiate or adapt activities and projects to enhance their understanding.</td>
</tr>
<tr>
<td>3.5 Uses assessment data (CD4a)</td>
<td>Candidate does not know whether a lesson was effective or achieved its instructional outcomes, or candidate profoundly misjudges the success of a lesson.</td>
<td>Candidate has a generally accurate impression of a lesson’s effectiveness and the extent to which instructional outcomes were met.</td>
<td>Candidate makes an accurate assessment of a lesson’s effectiveness and the extent to which it achieved its instructional outcomes and can cite general references to support the judgment.</td>
<td>Candidate makes a thoughtful and accurate assessment of a lesson’s effectiveness and the extent to which it achieved its instructional outcomes, citing many specific examples from the lessons and weighing the relative strengths of each.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Domain 4 Professional Responsibilities</th>
<th>Unsatisfactory</th>
<th>At Standard</th>
<th>Proficient</th>
<th>Distinguished</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1: Demonstrates ability to make professional judgments (CD 4f)</td>
<td>Candidate makes decisions and recommendations based on self-serving interests.</td>
<td>Candidate’s decisions and recommendations are based on limited though genuinely professional considerations.</td>
<td>Candidate maintains an open mind and participates in team or departmental decision making.</td>
<td>Candidate takes an active role in decision making as also seeks and receives feedback regularly.</td>
</tr>
<tr>
<td>4.2: Growing and developing professionally (CD 4e)</td>
<td>Candidate makes no effort to share knowledge with others or to assume professional responsibilities.</td>
<td>Candidate finds limited ways to participate in profession development.</td>
<td>Candidate actively participates in professional development.</td>
<td>Candidate initiates activities that contribute to the profession.</td>
</tr>
<tr>
<td>4.3: Appears enthusiastic and committed to serving children and society through teaching</td>
<td>Candidate’s commitment and enthusiasm for teaching and serving is lacking.</td>
<td>Commitment and enthusiasm for teaching and serving is adequate.</td>
<td>Demonstrates passion and enthusiasm for teaching and serving.</td>
<td>Demonstrates strong passion, enthusiasm, and commitment toward teaching and serving. Eager to interact with students.</td>
</tr>
<tr>
<td>4.4 Fosters relationships with school, community, and professionals (CD 4d)</td>
<td>Candidates relationships with school, community and professionals are negative or self-serving.</td>
<td>Candidate maintains cordial relationships with school, community and professionals to fulfill duties that the school or district requires.</td>
<td>Relationships with school, community and professionals are characterized by mutual support and cooperation.</td>
<td>Relationships with school, community and professionals are characterized by mutual support and cooperation. Candidate takes initiative in assuming leadership among the faculty.</td>
</tr>
</tbody>
</table>

Resources: Enhancing Professional Practice: A Framework for Teaching, C. Danielson