

A SENSE OF PREPARATION: PERCEPTIONS OF ALTERNATIVE LICENSURE  
TEACHER CANDIDATES

by

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## ABSTRACT

MARSHA JOYCE BRIGMAN. A sense of preparation: Perceptions of alternative licensure teacher candidates. (Under the direction of DR. TERESA PETTY)

This study explored alternative licensure teacher candidates' perceptions of preparedness for the classroom based on the principles and standards of the Interstate New Teacher Assessment and Support Consortium (INTASC) which serve as a common set of principles embodying the skills, knowledge, and dispositions of new teachers. Using five consecutive semesters' exit survey data collected upon candidate completion of elementary, middle, or secondary alternative licensure programs, results were analyzed using descriptive statistics and one-way ANOVAs for differences in respondents' perceptions of preparation for teaching in the classroom. Distance education and face-to-face on-campus study participants were included. Findings revealed a high sense of preparedness with a slightly higher sense of preparedness reported by elementary program completers. Minimal differences were reported by gender groups and no significant differences were reported among racial groups.

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## DEDICATION

This dissertation is dedicated to all who have strived over the years to work tirelessly for the benefit of our students and our schools. I have worked alongside many of these people who have inspired and challenged their students, their colleagues, and myself as well. It is with this knowledge and confidence in future generations that bodes well for the future of education. Thank you.

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## CHAPTER 1: INTRODUCTION

Not long ago, the United States surpassed the 50th anniversary of *Brown v. Board of Education* where the Supreme Court ruled that all children in the United States were entitled to equal educational opportunities regardless of race. Today, as then, the United States faces another societal dilemma in regards to the numbers of our students leaving public schools with the absence of a diploma. Students who graduate from high school in possession of such a diploma are much more likely to be employed, contribute to their communities, and rear children who graduate from high school (Legters & Balfranz, 2010). The reverse is also apt to be true. Students not in possession of a diploma are more likely to encounter problems regarding future employment and career opportunities, earnings, parenthood, and even possible incarceration (Sum, Khatiwada, McLaughlin & Palma, 2009). In considering means of responding to this societal challenge, this study examined one aspect: the preparation of teachers in facing their particular contributory role in fostering student success and their perceptions of that preparation.

The ultimate challenge confronting American schools of education is to prepare teachers for an entirely different world than that of the twentieth century (Levine, 2006). Teachers are expected to educate diverse learners in their classrooms while facilitating those students' understandings of roles in an increasingly global society (Emihovich, 2008). Furthermore, students who seem to have experienced less than adequate success in the classroom appear to populate schools. As stated by Corbett, Wilson, and Williams, "students who appeared to be most successful in overcoming

previously poor records in school had teachers and attended schools that were willing to take on the mantle of responsibility when no one else would" (2002, p. 148).

Colleges of education are called upon to provide preparation programs that include "relevant and authentic experiences that will help pre-service teachers understand the culture and community where they will be working" (Singer, Catapono, & Huisman, 2010, pp. 120-121). A crucial part of increasing teacher effectiveness is in the area of teacher preparation with the end result being, as Education Secretary Duncan has proposed, "to ensure that students exiting one level are prepared for success, without remediation, in the next" (US Department of Education, 2009, p. 207). This challenge entails exploring the means of providing teachers with an efficacious sense of preparedness in their overall teaching abilities.

### Statement of the Problem

#### The High School Graduation Challenge

Over the years education in the United States, as well as other countries, has faced many problems and challenges. Today, even though the nation's higher education system is sought after by students worldwide, the K-12 public school system is not as highly esteemed (Merton, 2002). For many, there exists a lower level of trust in their own country's education system (Kodrzycki, 2002). In terms of education levels, the average population of the United States compares well to populations of other nations; however, the average secondary student does not compare well in terms of international comparative test results (Kodrzycki, 2002). According to the Organization for Economic Co-operation and Development (2006), the U.S. ranked 17th in high school graduation statistics among countries of the developed world. Other countries such as Finland, the

Netherlands, Korea, China, Australia, and New Zealand have surpassed the United States after implementing their own policy changes (Darling-Hammond, 2010).

According to the Higher Education Policymaking and Analysis Information Center, only 70.1% of American students who were high school freshmen in 2004-05 received a high school diploma four years later in 2008 (2009). This picture has not drastically improved since that time, as current rates reported by the North Carolina Department of Instruction reveal a high school graduation rate of 71.7% for the 2008-2009 school year (NC DPI, 2010). In scrutinizing these numbers, both as a whole and within subgroups in this most recent graduation class, it is apparent that successful completion of high school remains a challenge for many. If examining the graduation rates holistically, North Carolina is faced with over a quarter of its students failing to achieve a high school diploma.

In examining subgroups and casting light on the graduation status of minority populations, statistics reveal over 40% of Hispanic students and 35% of African American students failing to graduate with their class (NCDOI, 2010). Even if considering the majority culture's high school graduation rates, white students still reflect approximately 22% of its number as not graduating in 2009. The lack of a basic high school education is arguably problem enough without the ensuing loss of potential wages and the addition of greater public-sector expenditures as non-graduates are more likely to require public assistance or be involved in the criminal justice system (Alliance for Excellent Education, 2008). Communities themselves that encompass Americans' public school systems benefit from a higher number of students who successfully complete high school (Stanley, Spradlin, & Plucker, 2008).

## Successful Students who are Career and College Ready

In response to the current state of the educational system, on July 24, 2009, President Obama and Secretary of Education Arne Duncan released details for the Race to the Top Fund with the goal of improving student achievement in the United States. The Race to the Top Fund is a new federal nationwide competitive grant program whose purpose is

. . . to encourage and reward states that are creating the conditions for education innovation and reform; achieving significant improvement in student outcomes, including making substantial gains in student achievement, closing achievement gaps, improving high school graduation rates, and ensuring student preparation for success in college and careers (US Department of Education, 2009).

In short, the overarching goal of helping all students become college and career ready will become the future imperative for the United States (Aldeman, 2010). Essential to this goal are the points of student transition and the preparation of students for successful completion of one stage of development prior to transitioning to the next. “Vertical alignment across P-20 is particularly critical at each point where a transition occurs (e.g., between early childhood and K-12 or between K-12 and postsecondary/careers) to ensure that students exiting one level are prepared for success, without remediation, in the next” (US Department of Education, Race to the Top Application for Initial Funding, 2009, p. 207). Within the K-12 system of education in the United States are typically points between specific grade levels and also between elementary, middle, and high school settings.

Two major points of transition involve these three settings: 1) elementary school setting to middle school and 2) middle school setting to high school. In considering both points of transition, it is necessary to give thought to students who may be advancing to a grade level setting where they may not be prepared for success. In this age of ever increasing requirements for high school graduation, these students face failure, dropping out, or a combination of both. The ninth grade year, in particular, has become a pivotal point for many students resulting in continuing onward to either pursue a high school diploma and ensuing opportunities beyond graduation or not (Mizelle & Irwin, 2000). During that year when students often turn sixteen, ninth grade becomes the point where dropping out becomes official even though the actuality may have long ago occurred as students merely stopped coming to school.

At the same time, districts and states across the United States have instituted more rigorous criteria for high school graduation. For example, North Carolina's Board of Education has established higher requirements for high school graduation which went into effect with the class of 2010. As of 2010, students must pass five End-of-Course Tests in Algebra I, English I, Biology, US History, and Civics and Economics (NC Department of Instruction, 2005). It is interesting to note that, had this new policy had been in effect when it was initially approved, many students would not have graduated. According to the *Raleigh News & Observer*, fewer than 20 percent of the state's African American students and 23 percent of the Hispanic students would have met the standard for graduation in 2005 (Silberman, 2005).

The ratio of our students who successfully graduate from our districts' high schools is a major indicator of public education's success (Princiotta, & Reyna, 2009). In turn, the caliber of our graduates from public school systems impacts student success



rates in our post-secondary system as well. Among those who do graduate from high school, many depart unprepared to continue their education on the university level or pursue sustainable employment (Jacobson & Mokler, 2010). According to Goldberger (2007), only one fifth of the nation's low-income students graduate from high school ready for academic success in college, while approximately half of students from families of mid-to-high socioeconomic levels are similarly prepared. Although national progress is being made, it is slow progress (Simkins, 2005).

For the purposes of this study, a successful student was defined as one who had left one level of education (e.g. elementary, middle, or high school) prepared for "success without remediation" (US Department of Education, *Race to the Top Application for Initial Funding*, 2009, p. 207) in the next level of education. Adversely, an unsuccessful student was defined as one who left one level of education unprepared for success at the next level. In scrutinizing further the concept of successful students who are career and college ready, the role of the classroom teacher must be considered.

#### Out of Field and Inexperienced Teachers

Students of color and those from families of lower socioeconomic status are often among those assigned teachers untrained in the subject area or lacking teaching credentials of any kind (Almy & Theokas, 2010). Out-of-field teaching is markedly prevalent in high-poverty schools. Compounding this, schools possessing high numbers of minority students also often possess higher numbers of unqualified teachers. Students in these schools are more likely to be taught by inexperienced teachers as well (Clotfelter, Ladd, & Vigdor, 2005). Minority students are less likely to be taught by experienced teachers and they are less likely to study as rigorous a curriculum as those students assigned more qualified teachers (Oakes & Gamoran, & Page, 1992). In fact, it is

possible that some students might well be excluded from participation in higher level high school courses due to prior insufficient preparation (Barton, 2003). As more and more tests administered on students' routes to college rely on problem-solving and higher levels of analytical ability, students whose experiences in classrooms have been basal readers, worksheets, and skill reviews are grossly under-prepared for mastering the standards aligned with new assessments (Darling-Hammond, 2000). Often observed in many inner city schools are scripted lessons, lower level assignments, and isolation from the rest of the world (Kozol, 2005).

Student success in coursework, particularly higher level coursework, is manifestly associated with the caliber of teacher in the classroom who is fluent in the subject's content and pedagogy. The community is often uninformed as to teachers' credentials. As of 2008, only five states (i.e. Arkansas, Florida, Georgia, Hawaii, and New Mexico) required notification to parents if their children were being taught by an out-of-field teacher (US Department of Education, National Center for Education Statistics, 2010).

#### The Effective Teacher

Few people would argue against the notion of the significance of effective teachers (Barth, 2004). Teacher effectiveness as “the contribution a teacher makes to his or her students' achievement” and “is perhaps the most important dimension of teacher quality because schools and school systems are increasingly being held accountable for students' achievement” (Goe, 2007, p. 7). This contribution is key to understanding the power of influence, either positive or negative, possessed by the classroom educator. The teacher has been found to make a greater difference in students' academic progress even when compared to other important classroom factors such as class size, student

achievement level, or the demographic make-up of students in the classroom (Wright, Horn, & Sanders, 1997).

In establishing identifying criteria for beginning effective teachers, among the most thorough standards were introduced in 1992 by the Interstate New Teacher Assessment and Support Consortium (INTASC). This collection of ten standards reflected universal and identifiable expectations for teachers entering the classroom (Alban, Proffitt, & SySantos, 1998; Capraro, Capraro, & Helfeldt, 2010). Subsequently, many states adopted these standards as initial licensure criteria and they were subsequently integrated into many university teaching preparation programs as a means of training and producing effective teachers.

Based on these standards and for the purposes of this study, effective teachers were described as those who possess, implement, and reflect upon: 1) knowledge of subject content and curriculum, 2) knowledge of pedagogical content, 3) knowledge of student development as it relates to teaching and learning, 4) knowledge of assessment and evaluation pertaining to students' ongoing progress, and 5) relationships with other important stakeholders as contributing members of the school community. In short, they are contributing practitioners who possess, implement, and reflect upon their knowledge of content, content pedagogy, development, and assessment within the framework of the school community.

#### A Sense of Preparedness

In considering the attributes of the successful practitioner, it is also important to note what their classroom educator faces upon entering a classroom for the first time. As Darling-Hammond stated, "in the classrooms most beginning teachers will enter, at least 25% of students live in poverty and many of them lack basic food, shelter, and health

care; from 10% to 20% have identified learning differences; 15% speak a language other than English as their primary language (many more in urban settings); and about 40% are members of racial/ethnic “minority” groups, many of them recent immigrants from countries with different educational systems and cultural traditions” (Darling-Hammond, 2006, p. 301). Therefore, how a teacher has been trained prior to entering such an environment becomes pivotal in the success of the novice teacher and the students that teacher encounters.

Possessing a sense of preparedness, or assurance in one’s pre-service training and subsequent abilities, is the first step in becoming an effective teacher. Teachers professing that they had received sufficient preparation for the classroom were more likely to be self-efficacious in their classrooms while those professing a lower sense of preparation for the classroom were more likely to feel less prepared to successfully teach (Gallo & Little, 2003). The need to establish a high sense of preparedness is elemental to subsequent teacher development of self-efficacious classroom behaviors.

#### Teacher Preparation Programs

It is certainly possible to provide exemplary teaching preparation in the nation’s colleges. As noted by Linda Darling-Hammond (2006), “one of the most damaging myths prevailing in American education is the notion that good teachers are born and not made.... A companion myth is the idea that good teacher education programs are virtually nonexistent and perhaps even impossible to construct.” In aligning 21<sup>st</sup> century K-12 knowledge and skills with teacher preparation, the most essential have been identified under the systems of standards, assessments, curriculum and instruction, professional development, and learning environments (Wilson, Floden, & Ferrini-Mundy, 2002). Today’s teachers must be prepared to address not only the processes of teaching

and learning but also the challenges and conflicts of public education in the context of society (Liston & Zeichner, 1996).

Teacher preparation programs have the responsibility of preparing their candidates for the reality of teaching. This is especially true when considering the diverse nature of the students who inhabit our classrooms. This includes schools with greater pupil enrollments with higher levels of poverty (Ambach, 2000). As noted by Wolthuis, “unless programs that prepare teachers begin to focus on the needs of at-risk students, the problems existing in K-12 education today will not only continue but likely even increase” (2004, p. 195).

In addition, many teachers currently leave the profession long before prior generations did so. Instead of remaining in the profession and becoming more experienced at their craft, many teachers leave the profession, leaving schools populated by more inexperienced teachers. According to the National Center for Education Statistics (2010), 8.0% of public school teachers left the teaching profession as of 2008-2009 while 15.9% of private school teachers did so. The more underprepared these teachers feel, the more likely they are to leave the profession prematurely (Darling-Hammond, 2003). In reversing this finding, one could make the statement that the more prepared these teachers feel, the more likely they are to remain in the profession. See Table 1 below for a comparison of teachers leaving the profession.

Table 1

*Percentage of Teachers Leaving the Profession*

	Year	Total Number of Teachers	% Leaving the Profession
<b>Public Schools</b>			
	1988-1989	2,386,500	5.6
	1991-1992	2,553,500	5.1
	1994-1995	2,555,800	6.6
	2000-2001	2,994,700	7.4
	2004-2005	3,214,900	8.4
	2008-2009	3,380,300	8.0
<b>Private Schools</b>			
	1988-1989	311,900	12.7
	1991-1992	353,800	12.3
	1994-1995	376,900	11.9
	200-2001	448,600	12.5
	2004-2005	465,300	13.6
	2008-2009	487,300	15.9

(National Center for Education Statistics, 2010)

*Alternative licensure programs.*

Included within teacher preparation programs are sub-programs which provide a more non-traditional route to teaching credentials. These are often known as alternative licensure programs. Additionally, in recent decades in order to answer increased demands for teachers, alternative pathways to licensure have been widely expanded (Gimbert & Cristol, 2005). In spring 2010, there existed 125 alternative pathways to teaching preparation across all states preparing 62,000 new teachers annually with 600 program sources, including “school-based programs, college/district institutes, apprenticeships, residencies, internships, charter school training academies, as well as third-party routes such as Teach for America, Teaching Fellows, The New Teacher Project, and the alternative certification route of the American Board for Certification of Teacher Excellence” (AACTE, 2010, p. 1). Of the total number of AACTE reporting institutions,

540 offer a Master of Arts program or alternative licensure program for initial licensure (Ludvig, Kirshstein, Sidana, Ardila-Rey, & Bae, 2010). Teachers who achieve their initial licensure through alternative licensure routes such as these make up a discernable segment of the teaching force. It is estimated that a half million teachers have achieved licensure through this route (Feistritzer, 2009).

Additionally, because of the variations in these many programs, it is difficult to make generalized statements about their effectiveness (Buck & O'Brien, 2005). As observed by Boyd, Lankford, Loeb, and Wyckoff, "Not all alternative routes are alike; some offer pre-service coursework very similar to that provided by traditional routes, while others feature little coursework or exposure to students and schools prior to entry in the classroom" (2004, p. 169). These differences across the various alternative licensure programs highlight concerns regarding standards and requirements especially as many of these teachers find employment in challenging schools with high populations of low income students (Center for Urban and Multicultural Education, n.d.)

*Distance education programs.*

An additional aspect of teacher preparation programs is that of distance education. The general development and proliferation of distance learning has seen phenomenal and widespread growth over the course of recent decades. It is possible to take courses and even entire programs of study online from respected institutions of learning. As of the fall of 2007, 31% of the country's higher institutions reported having education programs which were fully implemented online in the United States. Of those institutions which did so, public institutions were overwhelmingly in the forefront of commencing and implementing these distance education programs and enrolling large numbers of students (Allen & Seaman, 2008).

This proliferation of distance education encompasses teacher preparation programs, including alternative licensure programs. More distance learning courses were offered at AACTE colleges and universities with greater numbers of graduate students and larger student enrollment in schools of education (Ludvig, et al., 2010). Less traditional students such as those who are older, those who seek part-time educational opportunities, or those who are seeking career changes in an economic downturn gravitate towards courses and programs that are not bound by specific times and locations. To serve this population, institutions of higher education have revised their traditional modes of service to meet these students' needs (Merton, 2002).

#### Theoretical Framework

The theoretical framework for this study was based on two main foundations: 1) efficacy and a sense of preparedness; and 2) the principles of the Interstate New Teacher Assessment and Support Consortium (INTASC) standards. Both of these components informed the execution of this study in the context of teacher preparation and alternative licensure. The dual aspects of the framework created a basis for investigating teacher candidates' perceptions of their preparedness after their program completion.

Based on the understanding that teachers have influence on their students' academic success, this study acknowledged that a perceived sense of preparedness for the classroom and its accompanying challenges aids in promoting self-efficacious teaching behaviors. Teachers who recognized their preparedness in their teaching programs were more likely to be self-efficacious (Gallo & Little, 2003). In addition, these self-judgments regarding personal efficacy could be influenced by experiences in teacher preparation programs (Hoy & Woolfolk, 1990).



This sense of preparedness, or assurance in one's training in the classroom, is fundamental to developing efficacious behaviors. Foundational to this concept is Bandura's theory of efficacy which he posed as "one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1977, p.3). Teacher efficacy could be defined as the self-evaluation of one's ability to cause "desired outcomes of student engagement and learning" (Tschannen-Moran & Hoy, 2001, p. 783). Therefore, to become more likely to positively affect students in the K-12 classroom, it is necessary to develop a self-efficacy where teachers feel that they have the power to positively affect their students' learning outcomes (Ashton, 1983).

The Interstate New Teacher Assessment and Support Consortium (INTASC) standards have been recognized as valid principles as well as vital components of teacher preparation programs, including alternative licensure programs. The standards of the Interstate New Teacher Assessment and Support Consortium (INTASC) have served as a common set of principles embodying the skills, knowledge, and dispositions of beginning teachers (Capraro, Capraro, & Helfeldt, 2010).

These include commonly accepted components of well-prepared novice teachers which include: content pedagogy, student development, diverse learners, multiple instructional strategies, motivation and management, communication and technology, planning, assessment, professional development, school and community, and working with families (INTASC Consortium, 1992). These INTASC standards were also used to create a construct to better measure teacher candidates' perceptions of preparedness after completion of the alternative licensure program.

Briefly, the figure below represents the linear connective relationship from the teacher preparation program to the desired end result of successful students leaving K-12

classrooms. To accomplish the end result of successful students who are career and college ready, it is necessary to ensure that teachers leave effective teacher preparation programs and enter classrooms with a sense of preparedness.

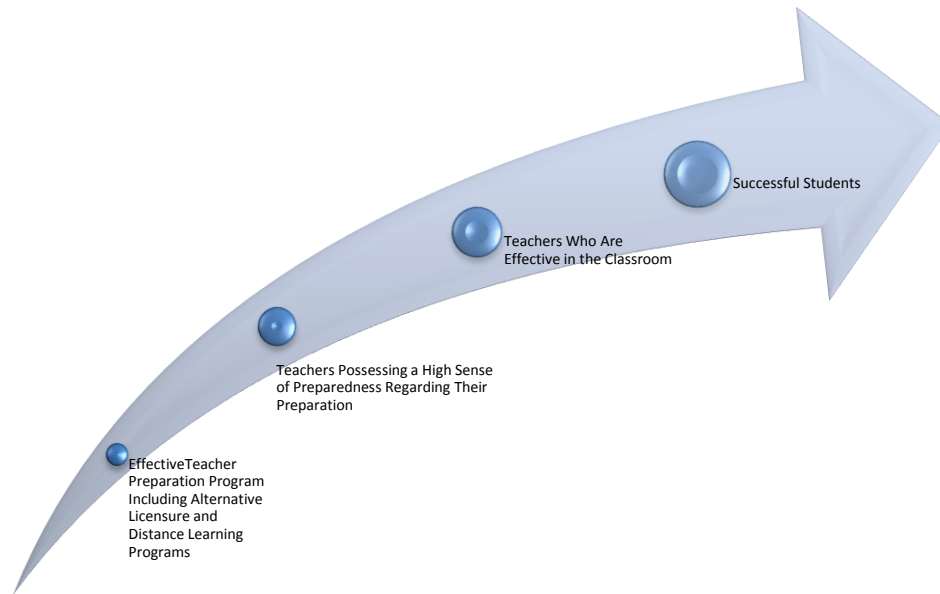


Figure 1. A Sense of Preparedness in Relation to a Teacher Preparation Program and the Classroom

#### Purpose of the Study

As teachers enter classrooms, they are faced with the challenge of high expectations of educating our nation's youth, bringing them to college and career readiness. As observed by Labaree, "teaching is an enormously difficult job that looks easy" (2004, p. 39). Teacher education programs are catalysts for their preparation; therefore, it would benefit teacher educators to better understand their graduates' perceptions of their college program and their own resulting career readiness. As critical to our nation's schools' success as our teachers are, as great is the need to ascertain their perceptions on their preparation for the classroom.

If it is accepted that an effective teacher in the classroom is a determining factor in student success, then a logical next step involves scrutiny of the preparation of those teachers. In determining what constitutes the best means of preparing teachers, it is necessary to access a variety of sources. One such source was the focus of this study – the teacher candidate, or pre-service teacher, who being as close as possible to the actual preparation program itself, can render valuable and pertinent information. In short, what can our teacher candidates tell us that will aid in our knowledge regarding preparation of teachers for classrooms in the United States?

Teacher preparation programs have always faced the challenge of training educators for generations of American students. However, in contemplating the current status of education preparation in the United States, this study sought to focus on a particular area of teacher preparation: alternative licensure. By investigating the reported perceptions of recent completers of an alternative licensure program in a large urban university in the southeastern United States, this study focused on their sense of preparedness for the classroom. This research exploration was intended to aid in the identification of possible factors impacting candidates' perceived efficacy regarding their preparation in becoming effective and successful classroom teachers. The following set of questions directed this study.

#### Research Questions

1. What is the reported sense of preparedness of university graduate students who have completed their program of teacher preparation through an urban public university graduate certificate program?
  - a. What are the demographic identities of teacher candidates in the graduate certificate program? How do these demographic identities

- compare to the national demographic identities of congruent programs?
- b. Is there a difference among demographic groups and the reported sense of preparedness among teacher candidates?
2. Among completers of an urban university's graduate certificate program, are there differences across and within programs of teacher preparation?
    - a. Is there a significant difference among the reported sense of preparedness of recent graduate certificate students in an urban public university's elementary, middle, and secondary teacher preparation programs?
    - b. Is there a significant difference in the reported sense of preparedness between completers of a graduate certificate enrolled in a distance education teacher preparation program and those in an on campus teacher preparation program?
  3. Among completers of an urban university's graduate certificate program, what percentage subsequently enrolls in a Masters of Arts in Teaching program?

#### Definition of Terms

*Alternative Licensure:* A route to teaching licensure that typically targets prospective teachers who have completed at least a four-year degree in another field and now wish to pursue a teaching career. The term Graduate Certificate was used synonymously with Alternative Licensure.

*Distance Education:* A "formal education process in which the students and instructor are not in the same place" (Parsad, Lewis, & Tice, 2008). Can be synchronous or asynchronous and includes courses and programs that are totally online or a

blended/hybrid format. Synonyms are distance learning, online learning, or online education. In this study, all these terms were used interchangeably.

*Efficacy*: Self-identified expectations individuals hold that are supported by previous life experiences and experiences observed in others (DiGiulio, 2004); Teacher efficacy refers to the degree teachers believe in their abilities to affect student learning.

*Effective Teacher*: Determined by the foundational concepts of the INTASC standards for beginning teachers; for example, a teacher who is a contributing practitioner and who possesses, implements, and reflects upon knowledge of content, content pedagogy, learner development, and assessment within the framework of the school community.

*Initial Licensure Completers Exit Survey*: A part of the college's overall assessment system, this survey is administered each semester and measures teacher candidate perceptions of their teacher preparation experiences upon program completion.

*INTASC Standards*: Ten standards used as criteria for obtaining initial licensure in many teacher preparation programs have been identified as rudimentary and necessary for the beginning teacher. Standards include content pedagogy, student development, diverse learners, multiple instructional strategies, motivation and management, communication and technology, planning, assessment, reflective practice, and school/community involvement.

*Perception*: A self-perceived reality on which subsequent thoughts, decisions, and actions are based.

*Program of Preparation*: The program in which the teacher candidate is being prepared for teaching licensure. This can include initial or advanced licensure. In this study, the program scrutinized was a graduate level alternative initial licensure program.

*Sense of Preparation:* The self-perceived degree that a teacher candidate feels prepared to teach effectively and have a positive impact on students. For this study, INTASC standards were used as factors combining to form a measureable construct referred to as preparation.

*Successful Student:* Although this term can be defined in a variety of ways, for this study a successful student is defined as one who was able to master the grade appropriate curriculum eventually leading to a career and college ready high school diploma.

*Teacher Candidate:* A student who has not yet achieved teaching licensure. Synonyms include pre-service teacher, Candidate Teacher, or candidate for licensure and are used interchangeably in this study.

## CHAPTER 2: LITERATURE REVIEW

Whereas traditionally, control of schools and teacher preparation has largely been viewed in the arena of local and state controls, the field of education has increasingly become more of a national public interest as well as federal government's focus. That focus has especially spotlighted attention on issues of standards, standardized assessments, and teacher licensure that "have become highly contentious, political, and polarized" (Futernick, 2010, p. 1). With recent federal monies such as Race to the Top grants, increasing political interjection into schooling, and national standards fast becoming a reality, education in the twenty-first century is in a state of flux. Within this context, the crucial role of the classroom teacher remains stable in its importance. It is the classroom teacher who is able to make positive or negative impact on K-12 students. This study specifically scrutinizes teacher candidates' sense of preparation for the classroom after a program of teacher preparation.

Review of the literature for this study included the following topics and subtopics:

1. Effective Teachers
  - a. Pathways to Teaching
  - b. Effectiveness in Classroom Teaching
2. Preparation of Effective Teachers
  - a. Content and Content Pedagogy
  - b. Clinical Experiences
  - c. Preparation through Alternative Licensure

#### d. Preparation through Distance Education

3. INTASC Standards
4. A Sense of Preparedness
5. Perceptions and Preparedness

#### Effective Teachers

The importance of an effective teacher is not a novelty. An oft-repeated saying, “A teacher affects eternity; he can never tell where his influence stops” (Adams, 1918), has long indicated the perpetual influence that classroom educators possess. From time to time, proponents of this notion repeat similar messages. DiGiulio clearly espouses that “a skillful, caring teacher is still the best resource we have to make our world a better place” (2004, p. xii). Teachers, and by inference schools themselves, have tremendous impact on student achievement (Rivkin, Hanushek, & Kain, 2005). How might this impact be felt?

. . . (O)n a daily basis, teachers confront complex decisions that rely on many different kinds of knowledge and judgment and that can involve high-stakes outcomes for students’ futures. To make good decisions, teachers must be aware of the many ways in which student learning can unfold in the context of development, learning differences, language and cultural influences, and individual temperaments, interests, and approaches to learning. In addition to foundational knowledge about these areas of learning and performance, teachers need to know how to take the steps necessary to gather additional information that will allow them to make more grounded judgments about what is going on and what strategies may be helpful. Above all, teachers need to keep what is best for the child at the center of their decision making. This sounds like a simple



point but it is a complex matter that has profound implications for what happens to and for many children in school (Darling-Hammond & Bransford, 2005, pp. 1-2).

What teachers actually do in the classroom makes a great difference (Wenglinsky, 2000). Teachers typically share a large portion of students' days for the majority of the year. What occurs in a shared year can impact students' educational foundation for ensuing instruction and solid grounding in basic educational knowledge. In educating students in our nation's classrooms to be capable in an increasingly competitive world, teachers must be able to deliver curriculum that is accurate, meaningful, and appropriate. "Teaching challenging content to learners who bring very different experiences and conceptions would depend on the capacity of practitioners to create powerful and diverse learning experiences that connect to what students know and how they most effectively learn" (Darling-Hammond & McLaughlin, 1999, p. 376).

Thus, the effective teacher simultaneously navigates diverse areas of endeavor ranging from curriculum to lesson design to community relations. The teacher is that one entity "who must orchestrate all these factors in a classroom, which is located within a school and a community that provide both unique and generic opportunities and challenges" (Richardson & Roosevelt, 2004, p. 106). Actions of quality teachers encompass both what is taught as well as how it is taught (Fenstermacher & Richardson, 2005). Therefore, the knowledge of the subject content as well as pedagogical knowledge has impact on student learning.

### Pathways to Teaching

In looking back, many in the United States have long held interests in the method of preparing teachers as schools grew in popularity and availability. In considering

teacher preparation in the United States, four paths have historically existed: 1) The quickest pathway or one that requires *no previous training* for licensure such as emergency licensure; 2) Similar to the first pathway, the *direct pathway* through departments of education, regional centers, or other organizations; 3) The pathway to teaching via *college-based schools* such as normal schools that later became teacher colleges; and 4) Teacher preparation programs at four-year colleges and research universities with strong content and pedagogical emphases (Andrew, 2005).

The landmark report by the National Commission on Excellence in Education, *A Nation at Risk* (1983), pronounced the predicament of education in the United States. One of the commission's five recommendations was unsurprisingly the importance of the preparation and professionalization of teaching. Three years later, The Task Force on Teaching as a Profession answered in its report *A Nation Prepared: Teachers for the 21<sup>st</sup> Century* (1986). Among their recommendations, higher standards for teacher education were identified as paramount to preparing adequately trained teachers for the new century. In 2008, the US Department of Education re-examined the *Nation at Risk* report and noted the growing demands of a global economy and that there still remained grave risk as to the caliber of the nation's schools. The report notes that "of 20 children born in 1983, six did not graduate from high school on time in 2001 and of the 14 who did, 10 started college that fall, but only five earned a bachelor's degree by spring 2007" (US Department of Education, 2008, p. 1).

The standards movement of the 1980's brought new scrutiny on teacher quality and preparation with a focus on "what teachers should know and be able to do" (Rotherham & Mead, 2004, p. 25). Increased numbers of professional organizations grew during the 1980's and 1990's. Foremost among them were National Council for

the Accreditation of Teacher Education (NCATE), National Board for Professional Teaching Standards (NBPTS), American Association of Colleges for Teacher Education (AACTE), National Commission on Teaching and America's Future (NCTAF), and Interstate New Teacher Assessment and Support Consortium (INTASC) (Rotherham & Mead, 2004).

By the end of the 1980's, the National Board for Professional Teaching Standards had published its initial five umbrella propositions of what effective teachers should know and be able to do through "knowledge, skills, dispositions, and beliefs" (NBPTS, 2002, pp. 7). These propositions are as follows:

1. Teachers are committed to students and their learning
  - Teachers recognize individual differences in their students and adjust their practice accordingly
  - Teachers have an understanding of how students develop and learn
  - Teachers treat students equitably
  - Teachers' mission extends beyond developing the cognitive capacity of their students
2. Teachers know the subjects they teach and how to teach those subjects to students
  - Teachers appreciate how knowledge in their subjects is created, organized, and linked to other disciplines
  - Teachers command specialized knowledge of how to convey a subject to students
  - Teachers generate multiple paths to knowledge
3. Teachers are responsible for managing and monitoring student learning

- Teachers call on multiple methods to meet their goals
  - Teachers orchestrate learning in group settings
  - Teachers place a premium on student engagement
  - Teachers regularly assess student progress
  - Teachers are mindful of their principal objectives
4. Teachers think systematically about their practice and learn from experience
- Teachers are continually making difficult choices that test their judgment
  - Teachers seek the advice of others and draw on education research and scholarship to improve their practice
5. Teachers are members of learning communities
- Teachers contribute to school effectiveness by collaborating with other professionals
  - Teachers work collaboratively with parents
  - Teachers take advantage of community resources (White, Makkonen, & Stewart, 2009, p. 2).

In 1987, the same year as the establishment of the National Board for Professional and Teaching Standards, the Interstate New Teacher Assessment and Support Consortium (INTASC) program was established as a collaborative effort among the states and professional agencies. This inter-collaboration sought to revise assessment for initial licensing in addition to a means of re-visioning how teachers are prepared to enter the classroom (INTASC, 1992). Following their redefinition of the mission of teaching and

learning, INTASC standards called for “supportive policies for preparing, licensing, and certifying educators and for regulating and accrediting schools” (INTASC, 1992, p. 3).

In North Carolina, beginning in 1985, a Task Force on the Preparation of Teachers investigated means of improving teacher education, and by 1990, NCATE accreditation was mandated for state programs which prepared teachers. Under President Clinton, *Goals 2000* renewed the importance of high academic standards for all students as well as teacher quality (Plecki & Loeb, 2004).

Since the decade of the 1980’s, lawmakers and policymakers have increasingly analyzed and sometimes assailed teacher preparation programs in the United States (Bullough, 2008). With publication of *What Matters Most: Teaching for America’s Future*, the following five items were recommended to address future school reform in the United States.

1. Get serious about standards, for both students and teachers.
2. Reinvent teacher preparation and professional development.
3. Fix teacher recruitment and put well-qualified teachers in every classroom.
4. Encourage and reward teacher knowledge and skill.
5. Create schools that are organized for student and teacher success (National Commission on Teaching and America’s Future, 1996, pp. 2-4).

Obviously crucial among these reforms were calls for higher expectations as well as recognition for teachers and the reinvention of teacher preparation. The report included a plan for teaching improvement in the United States but also included “barriers to improved instructional practice including low expectations for student performance, unenforced teacher standards, sloppy teacher recruitment, poor teacher

induction, lack of professional development and rewards for knowledge and skill, and schools poorly structured for success” (Ramirez, 2004, p. 62).

Current implementation of No Child Left Behind legislation (NCLB) consigns great pressure on individual schools, districts, and states to make stringent assessment goals or face austere consequences (Plecki & Loeb, 2004). In a clarion call for a highly qualified teacher in each classroom in the United States, the No Child Left Behind Act appeared as part of the reauthorization of the Elementary and Secondary Education legislation first born in the Great Society enactments of the 1960’s. Leaving the definition of highly qualified up to states’ discretion, NCLB sought to revitalize the state of the American public education system with the highly qualified teacher (HQT) as the lynchpin for future improvement. States were hence required to ensure that HQT’s in their districts possessed a bachelor’s degree, state licensure, and content knowledge of their subject area (US Department of Education, 2003).

Furthermore, states were required to take such steps as to “ensure that poor and minority children are not taught at higher rates than other children by inexperienced, unqualified, or out-of-field teachers” (US Department of Education, 2001, Elementary and Secondary Education Act). In short, a prominent requirement of No Child Left Behind legislation is the proverbial highly qualified teacher who possesses state licensure in the subject area taught. With the 2005-06 deadline for that requirement of HQT’s now in the past, states must face the challenge of providing effective teachers who most positively impact student achievement (Goe, 2007).

#### Effectiveness in Classroom Teaching

In looking back over the historical background of teacher preparation, teacher effectiveness has long been the subject of scrutiny and study. The provision of well-

prepared teachers for the nation's classrooms is neither novel nor viewed with indifference. In support of this notion, Sanders and Rivers (1996) made public a pivotal report from the University of Tennessee Value-Added Research and Assessment Center. Identified were both the additive and cumulative effects of teachers. Even more pertinent, as teacher effectiveness increased so also had the achievement gains of their students. First to profit from such a teacher were lower achieving students. In short, the achievement outcomes for students could be very different depending on the variable of the teacher. Furthermore, the cumulative benefits over time with an ongoing sequence of efficient teachers had additional positive achievement outcomes for students. A reverse result existed as well when students were placed with less than effective teachers over a long period of time. In short, the adverse effect of an ongoing sequence of ineffective teachers over time was evident (Rivers & Sanders, 2007).

In a policy information report for Educational Testing Services was reported the following identifiers which correlated school-related factors with student achievement: (1) rigor of curriculum, (2) teacher experience and attendance, (3) teacher preparation, (4) class size, (5) technology-assisted instruction, and (6) school safety (Barton, 2003). Of these, four of the six can be directly attributed to the teacher in the classroom: rigor of curriculum, experience and attendance, preparation, and technology-assisted technology.

In qualitatively examining common factors among similar high-performing Kentucky schools, the following eight variables impacted school performance via school culture:

- The belief that all students can succeed at high levels
- High expectations
- Collaborative decision making

- Teachers accept their role in student success or failure
- Strategic assignment of staff members
- Regular teacher-parent communication
- Caring staff
- Dedication to diversity and equity (Kannapel & Clements, 2005)

Yet again, in scrutinizing these factors, it becomes apparent that a common denominator remains the effective classroom teacher.

Teacher preparation and experience play a significant role in student success (Aaronson, Barrow, & Sander, 2007). In a study by the Education Trust, it was reported that out-of-field teaching is markedly higher in high-poverty schools (Almy & Theokas, 2010). Even more revealing is that schools possessing high numbers of minority students often also possess far more unqualified teachers. These students are far more likely to be taught by inexperienced and unqualified teachers (Clotfelter, et al., 2005; Jerald & Ingersoll, 2002). The result is a narrowing of future options as students in high-poverty schools often lack opportunities to study as rigorous a curriculum as students at other schools (Oakes, Gamoran, & Page, 1992).

Student success in coursework, particularly higher level coursework, is manifestly associated with the caliber of teacher in the classroom who is fluent in the subject's content and pedagogy. An active teacher willing to urge their students to higher achievement can affect students regardless of their previous preparation or background (Wenglinsky, 2002). Adversely, students can possibly be excluded from later higher level courses due to insufficient preparation by their teachers prior to high school (Barton, 2003). Student performance improves when opportunities are available for all students to



access a challenging curriculum gauged by equally challenging standards and expectations (Zurawsky, 2004).

Recommendations from North Carolina's Middle School Task Force specify the importance of providing curriculum and instruction that is "comprehensive and challenging" and permit "the acceleration of learning at all levels" (2004, p. 16). In their action plan to improve education, the Southern Regional Education Board spotlights the need to revise preparation and licensure of teachers. Included are non-traditional avenues of licensure. Recommendations for these alternative paths to licensure include dual focus on the academic and pedagogical preparation of high-quality middle school educators (Cooney, 2000).

#### Preparation of Effective Teachers

It would be difficult to find someone who would argue against an effective teacher in any child's classroom. Therefore, perhaps our attention should be drawn to what we know about effectiveness in teaching and how it can permeate our public school systems. As pointed out by Barth, "the more we know and understand about teachers, schools, and students, the more we come to realize that good information about teacher quality can be leveraged to improve almost every important aspect of our education system" (Carey, 2004). First, what is an effective teacher? How is one recognized? Secondly, how does one recognize an effective teacher preparation program?

In considering the ultimate necessity of a quality teacher in each K-12 student's classroom, it is logical that the next step would be to examine how such teachers are professionally prepared. In professionally preparing educators, programs must provide modeling of the curriculum and instruction they will in turn offer to K-12 students. They must provide intentional learning opportunities to "learn, develop, practice, refine, and

assess 21<sup>st</sup> century curriculum, planning, and instruction” (Wilson, Floden, & Ferrini-Mundy, 2002). Basic components of successful preparation programs include coherence, a core curriculum, connected and extensive clinical experiences, an inquiry approach, school and university partnerships, and a professional standards-based assessment (Darling-Hammond, 2006).

The effective teacher must possess dual philosophical outlooks. They are typically expected to be prepared to be “reflective practitioners, constructivists, critical thinkers, and nurturing facilitators and to use alternative assessments. On the other hand, teachers . . . are held accountable for students’ scores on standardized exams reflecting minimal thinking skills” (Pushkin, 2001, p. 47). Effective teachers are observed as being proficient in communications, management, differentiation of instruction, and assessment practices (Minor, Onwuegbuzie, Witcher, & James, 2002).

In their *Educator Preparation: A Vision for the 21<sup>st</sup> Century*, the American Association of Colleges of Teacher Education and the Partnership for 21st Century Skills identified the following competencies that educators must master for the classroom:

- Seizing opportunities to integrate appropriate technology-enabled tools and teaching strategies appropriately into classroom management and practice.
- Aligning instruction with standards, particularly those standards that embody 21st century knowledge and skills.
- Balancing direct instruction strategically with project-oriented teaching methods.
- Using a range of assessment strategies to evaluate student performance (e.g., formative, portfolio-based, curriculum-embedded, summative).

- Participating actively in learning communities; tapping the expertise within a school or school district through coaching, mentoring, knowledge-sharing, and team teaching.
- Acting as mentors and peer coaches with fellow educators.
- Using a range of strategies (such as formative assessments) to reach diverse students and to create environments that support differentiated teaching and learning.
- Pursuing continuous learning opportunities and embracing career-long learning as a professional ethic (2010, pp. 13-14).

In examining the effective teacher preparation program, we must consider that which most impacts the making of an effective teacher. As envisioned by the American Association of the Colleges of Teachers of Education, “we have the opportunity to establish a vibrant vision for educator preparation, one that leverages the best of what has worked in the past, combined with what educators need now and in the future, in order to prepare all students for the future they deserve” (2010, p. 11).

Furthermore, as the number of urban school settings grows, so does the need for effective teachers in those schools. Teacher preparation programs are challenged to train their teaching candidates to be successful in teaching in such settings. Urban settings often entail student populations with lower socioeconomic levels which foster additional challenges such as greater diversity of learners and families often headed by a single parent or other non-traditional head of household. Teacher preparation programs must include as aspects of their curriculum these strategies which address the greater challenges of urban teaching (Houston, 2000). The American Association of Colleges for Teacher Education concurs in recommending the creation of more urban-based programs

and including clinical experiences in urban settings, including student teaching (Imig, 2000).

Teacher education programs have the responsibility of preparing their candidates for the reality of teaching. Again, this is particularly true of the many at-risk students currently among our student populations. This includes schools with greater pupil enrollments with higher poverty (Ambach, 2000). “Unless programs that prepare teachers begin to focus on the needs of at-risk students, the problems existing in K-12 education today will not only continue but likely even increase” (Wolthuis, p. 195). Similarly, some beginning teachers feel that they are frequently assigned the more challenging students within a school’s population. Forty two percent of new teachers in one study reported their perception that beginning teachers in more affluent school settings are deliberately entrusted with the education of these particular students. (Rochkind, Ott, Immerwahr, Doble, & Johnson, 2007).

In other research, new teachers reported their misgivings regarding preparation for teaching diverse students in their classes (Castro, 2010; McClanahan & Buly, 2009).

In summary, the following findings have also been reported:

1. First year teachers found their overall teaching preparation wide-ranging and helpful.
2. First year teachers found their preparation in dealing with diversity as not helpful.
3. First year teachers found that dealing with diversity in more affluent schools was an even greater challenge.

4. First year teachers found their general classroom preparation also lacking in teaching students with special needs.
5. First year teachers made strong recommendations for teaching preparation programs that includes instruction for diverse students (Rochkind, et al., 2008).

In addition, many middle and high school teachers reported that their preparation to teach lacked practicality and contained too much theoretical content (Rochkind, et al., 2007). As one beginning teacher stated, “Every day [I have to] fight for my students’ attention. I was prepared to deal with the politics of the school and with the lesson planning and extra duties teachers have. I was completely taken aback by the lack of interest in the students in learning and even more surprised by their disrespect for teachers” (Rochkind, Ott, Immerwahr, Doble and Johnson, 2007, p. 9).

What happens if a practicing teacher has not had the benefit of an effective teacher preparation program? A teacher who has not been adequately prepared to teach will often fall back on teaching in the manner of their own K-12 experiences. “When a powerful teacher education process does not intervene, new knowledge does not have an opportunity to transform teaching across generations. Yet prospective teachers cannot profit from these insights if they have no opportunity to encounter them” (Darling-Hammond, Wise & Klein, 1995).

Responsibility for the improvement of our nation’s teacher quality is the shared responsibility of both educators and policy makers (Rivers & Sanders, 2002). Improvement of “teacher quality will help ensure that more students reach their potential because they benefited from effective teachers *every year*” (Rivers & Sanders, 2002,

p.23). In considering the provision of an effective teacher preparation program, “teacher educators are in the business of demystifying teaching, giving away their own expertise in order to empower the prospective teacher to carry on the practice of teaching without need for continuous consultation and chronic professional dependency” (Labaree. 2004, p. 61). So the question becomes: How is the preparation of effective teachers demystified and how is it demystified for the 21<sup>st</sup> century’s students?

First, it is possible to train teachers to be effective. As noted by Linda Darling-Hammond (2006), “one of the most damaging myths prevailing in American education is the notion that good teachers are born and not made....A companion myth is the idea that good teacher education programs are virtually nonexistent and perhaps even impossible to construct.” In aligning 21<sup>st</sup> century K-12 knowledge and skills with teacher preparation, the most essential have been identified under the systems of standards, assessments, curriculum and instruction, professional development, and learning environments (Partnership for 21<sup>st</sup> Century Learning Skills, 2004). Today’s teachers must be prepared to address not only the processes of teaching and learning but also for the challenges and conflicts of public education in the context of society (Liston & Zeichner, 1996).

In consideration of teaching in the 21<sup>st</sup> century, “the challenge facing education schools is not to do a better job at what they are already doing, but to do a fundamentally different job. They are now in the business of preparing educators for a new world” (Levine, 2006, p. 104). A litany of features geared for 21<sup>st</sup> century success were included in teacher preparation programs of high quality over a decade ago:

- a common, clear vision of good teaching that is apparent in all coursework and clinical experiences;

- a curriculum grounded in substantial knowledge of child and adolescent development, learning theory, cognition, motivation, and subject matter pedagogy, taught in the context of practice;
- extended connected clinical experiences (at least 30 weeks) which are carefully chosen to support the ideas and practices presented in simultaneous, closely interwoven coursework;
- well-defined standards of practice and performance that are used to guide and evaluate coursework and clinical work;
- strong relationships, common knowledge, and shared beliefs among school- and university-based faculty; and
- extensive use of case study methods, teacher research, performance assessments, and portfolio evaluation to ensure that learning is applied to real problems of practice (Darling-Hammond, 1997, p. 30).

In preparing these teachers for a new age, programs must encompass not only pedagogical content but also the means by which candidates can successfully teach in the communities of today. As one teacher remarked, “[I think that effective recruitment of teacher candidates is] going to mean [that districts have to start] partnering with universities and colleges, and particularly trying to recruit teachers who understand and fit into the demographics of the schools in which they’ll be teaching” (Berry, Daughtrey, and Wieder, 2010, p. 2). In terms of staffing urban schools, this is certainly important. In fact, it is crucial to provide candidates with the background and skills necessary to succeed in urban settings--- whether geographically urban or culturally urban in nature. In today’s society, with increased information and communication access, urbanism has expanded far beyond the boundaries of physical proximity. Therefore, training teachers to

be effective in urban cityscapes will also benefit their teaching effectiveness in suburban and rural settings.

What should an effective preparation program contain? In considering teaching for a century where we have already experienced its initial decade, there are essential areas where teacher competency is necessary. A proposed framework for the requisite skills and knowledge espoused by many teaching standard statements includes understandings of learners, curriculum, and pedagogy (Darling-Hammond, 2006). These pertinent arenas are visualized in Figure 2:

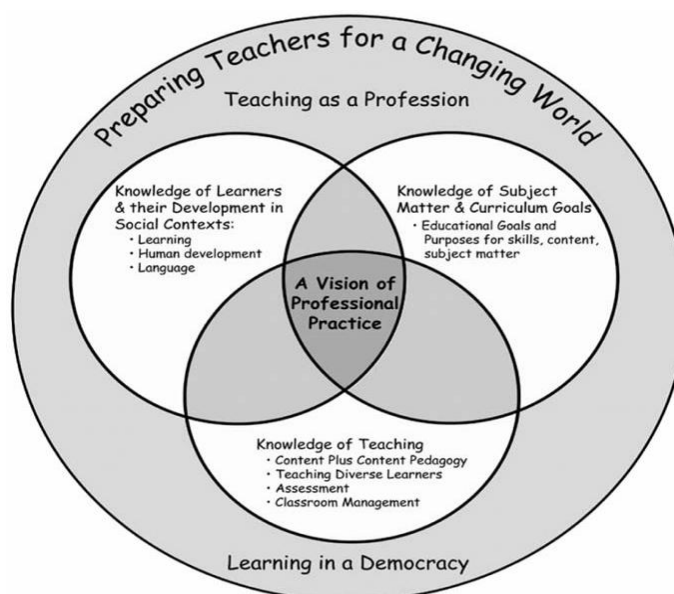


Figure 2. Preparing Teachers for a Changing World. This figure depicts the National Academy of Education Committee’s Teacher Education Framework (Darling-Hammond & Bransford, 2005, p. 11).

The three mainstays of preparation are 1) knowledge of appropriate subject matter, (2) thorough field experiences in classrooms, and 3) “greater preparation in child development, learning theory, curriculum development, and teaching methods” (Darling-Hammond, Wise & Klein, 1995, p. 27). Based on the increased needs of K-12 students,



the AACTE proposes the following as critical to meeting those needs and the subsequent proper preparation of their teachers:

- The ability to work with diverse learners, including special education students and English language learners (ELLs);
- The capacity to teach adolescent literacy skills regardless of the content area;
- The ability to effectively use assessment and data to impact teaching and learning;
- The ability to teach in specialized teaching environments, including urban and rural settings; and
- The ability to convey content knowledge to students in an understandable manner, tailored to the academic discipline (Miller, 2009, p. 4).

In an examination of current teacher preparation programs in the United States, the following questions were used to guide a report prepared for the US Department of Education.

1. What kind of subject matter preparation, and how much of it, do prospective teachers need? Are there differences by grade level? Are there differences by subject area?
2. What kinds of pedagogical preparation, and how much of it, do prospective teachers need? Are there differences by grade level? Are there differences by subject area?

3. What kinds, timing, and amount of clinical training (“student teaching”) best equip prospective teachers for classroom practice?
4. What policies and strategies have been used successfully by states, universities, school districts, and other organizations to improve and sustain the quality of pre-service teacher education?
5. What are the components and characteristics of high quality alternative certification programs? (Wilson, Floden, and Ferrini-Mundy, 2001, pp. 4-5)

These guiding questions draw attention to elements for use in examining teacher preparation programs. First, in considering the initial three guiding questions, the following important areas of knowledge are requisite for exemplary teacher preparation: knowledge of content, knowledge of content pedagogy, and the caliber of clinical experiences. Second, the final two guiding questions draw our attention to ascertaining those practices in teacher preparation programs that produce effective teachers whether in a traditional program or in an alternative program.

Areas of knowledge in which teachers should demonstrate competency have been identified which reflect classroom effectiveness:

- Content knowledge;
- General pedagogical knowledge, with special reference to those broad principles and strategies of classroom management and organization that appear to transcend subject matter;

- Curriculum knowledge, with particular grasp of the materials and programs that serve as “tools of the trade” for teachers;
- Pedagogical content knowledge, that special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding;
- Knowledge of learners and their characteristics;
- Knowledge of educational contexts, ranging from the workings of the group or classroom, the governance and financing of school districts, to the character of communities and cultures; and
- Knowledge of educational ends, purposes, and values, and their philosophical and historical backgrounds (Schulman, 1986, p. 8).

### Content and Content Pedagogy

Teachers exiting a teacher preparation program should show evidence of possessing both a deep knowledge of the content they will be teaching and an unambiguous understanding of that content’s pedagogy (Miller, 2009). The question of the content amount or number of content courses in a preparation program is moot as well. Merely increasing the amount of additional coursework has not proven to have a later positive impact on K-12 student achievement in the classroom (Goe, 2007).

However, the courses that pre-service teachers experience, whether content or pedagogy related, do indicate a positive effect on K-12 student learning on all grade levels.

Candidates’ content-specific courses have been shown to be most effective in secondary classrooms and in mathematics on all grade levels (Goe, 2007). For example, in one study involving Chicago ninth grade math students, Aaronson, Barrow, and Sander

(2007) found that within a single semester with an effective teacher, students could add from 25% to 45% greater math performance.

Having a substantial foundation in the subject area in which a teacher is assigned is paramount to success in the classroom. Beginning teachers themselves recommend requiring secondary teachers to possess a major in the content area they are teaching (Rochkind, et al., 2008). On the middle school level as well, teachers must be highly qualified in their subject areas and possess understanding regarding the "importance and relevance of all content areas as well as their inter-relatedness and connections across disciplines" (Middle Grades Task Force, 2004, p. 16). As for what effective teachers actually do in the classroom, Wenglinsky (2000) identified the link between actual teaching practices and student learning. Shulman saw pedagogical knowledge as a "second kind of content knowledge, which goes beyond knowledge of subject matter per se to the dimension of subject matter for teaching . . . [and] makes the learning of specific topics easy or difficult" (Schulman, 1986, p. 9).

### Clinical Experiences

Teachers often reference field experiences, and especially student teaching, as instrumental in preparing them for their own classroom (Darling-Hammond, et al., 1995). A 2008 examination of evidence on teacher education for the National Bureau of Economic Research reported that teachers with greater clinical training, such as a yearlong internship were linked to higher student academic achievement growth than those teachers with no comparable experience.

Often viewed as critical to the development of the pre-service teacher, clinical experiences can be widely varied in their intention, scope, and frequency (Wilson, et al., 2002). These field experiences offer future educators the opportunities to experience the

“real world” while making those crucial connections between the university classroom and the K-12 classroom. Such experiences put the “curricular topics into practical context” (Barry, Daughtry, & Wieder, 2010). Therefore, it is not uncommon for pre-service teachers to experience a myriad of “ah ha” moments that, without the clinical experience, would not occur until after eventual completion of a program.

In demystifying the teaching candidates’ understanding of the actual implementation of theory, the clinical experience is where the theory of teaching and the reality of teaching are merged. The sooner and the more frequently valuable clinical experiences take place, the greater the pre-service teacher’s true understanding of teaching can develop. That understanding encompasses content knowledge and pedagogy as well as classroom management, an area of teaching that often challenges the best of teachers whether experienced or inexperienced. There can result a “lack of integration between curricula and clinical experiences so that even though the topic is covered, it doesn’t translate into candidate ability to handle it in practice” (Cibuka, 2010, p. 3).

Teachers with greater clinical experiences were more likely to have later positive impact on student achievement (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2009). The National Bureau of Economic Research scrutinized characteristics of teacher education and discovered that those teachers with greater pre-teaching clinical experiences, such as a year-long internship, were linked to student academic results greater than teachers who were prepared with less extensive clinical experiences (Barry, Daughtry, and Wieder, 2010). Clinical experiences offer teacher candidates those opportunities where they might practice their craft and receive formative and summative evaluative feedback from experienced teachers (Darling-Hammond, et al., 1995).

In the National Bureau of Economic Research's findings, essential pre-service clinical experiences included the following: 1) an intensive supervised period of student teaching that was similar to their subsequent first year of teaching, 2) experience in practicing what was learned in their program, 3) curriculum study and analysis, and 4) a culminating assessment that involved action research or portfolio evaluation (Boyd, et al., 2009). The period of student teaching allows for the ultimate field experience with as accurate a facsimile of classroom teaching as possible. It is here that begins "a confrontation with self and the limitations of self" (Bullough & Young, 2008, p. 117).

Darling-Hammond (2006) identified basic components of successful preparation programs as including coherence, a core curriculum, connected and extensive clinical experiences, an inquiry approach, school and university partnerships, and a professional standards-based assessment. That coherence is central to successfully intertwining aspects of field experiences, pedagogy, and content within a framework of the K-12 schools and the teacher preparation program itself.

#### Preparation through Alternative Licensure

A few decades ago, the sole route to acquiring teaching licensure for public schools lay through a traditional on-campus undergraduate four-year program. Now the route to teaching is definitely multi-faceted. In fact, thirty five percent of teachers responding to the most recent *Survey of the American Teacher* had a previous career before entering the classroom (Met Life, 2010). During the 1980's, alternative programs serving as pathways to teacher licensure were created to a certain extent in answer to shortages in the teaching workforce (Richardson & Roosevelt, 2004). In 1983, fewer than nine states allowed alternative teacher education programs at American colleges or universities. As of 1993, however, there existed post-baccalaureate alternative teacher

preparation programs in forty states. With 80% of the states offering alternative programs, the then-preponderance of teacher shortages could be addressed (Wilson, Floden, & Ferrini-Mundy, 2002). By the year 2000, approximately one sixth of the teachers in Texas, one fifth of those in New Jersey, and one tenth of those in California were using alternative avenues to enter the teaching profession. By this time, forty five of the fifty states possessed alternative licensure enactments (Hess, Rotherham, & Walsh, 2004).

By the spring of 2010, there existed 125 alternative pathways to teaching preparation across all states preparing 62,000 new teachers annually with 600 program sources including “school-based programs, college/district institutes, apprenticeships, residencies, internships, charter school training academies, as well as third-party routes such as Teach for America, Teaching Fellows, The New Teacher Project, and the alternative certification route of the American Board for Certification of Teacher Excellence” (AACTE, 2010, p. 1). Of the total number of AACTE reporting institutions, 540 offered a master’s program or post baccalaureate program, respectively in the form of a Master of Arts degree, or alternative licensure without a final degree, for initial licensure (Ludvig, Kirshstein, Sidana, Ardila-Rey, & Bae, 2010).

Teachers who achieve their initial licensure through routes such as these presently comprise a discernable segment of the teaching force. According to the *Survey of the American Teacher: Collaborating for Student Success*, many who have moved to teaching from other careers are reportedly more likely to work in schools with students in low income families and high numbers of minority students (2010). These alternative pathways to licensure have attracted diverse potential educators in terms of age and ethnicity (Wilson, et al., 2002). Demographically, the National Center for Education

Information reports higher numbers of males, minorities, and older candidates when compared to those who secure licensure by more traditional pathways to teaching. The center reports 37% male and 63% female participants in alternative programs with 68% white, 12% black, and 19% other minorities among the nation's alternative certification routes (Feistmeister, 2005).

Different backgrounds and previous work experiences from various sectors is not unusual with a majority of 59% undertaking master's programs, 33% undertaking a bachelor's program and 7% undertaking a program of alternative licensure (Hart, 2010). Teacher candidates typically have the desire to be effective in the classroom and seek the benefits of quality programs that will enable them to reach that goal (Hart, 2008). At the same time, these multiple pathways now afforded must remain of such a quality so as not to weaken the universal integrity of teacher preparation (Berry, Daughtrey, & Wieder, 2010).

Almost 60,000 teachers across the country received licensure through alternative programs in a recent single year: 2008-2009 (National Center for Alternative Licensure, 2010). The number and varying program requisites for alternative licensure programs in the United States are numerous (Boyd, et al., 2004; Richardson & Roosevelt, 2004). Because of the variations in these programs, it is difficult to make generalized statements that can be applied across the board to their effectiveness (Goe & Stickler, 2008; Buck & O'Brien, 2005). As observed, "not all alternative routes are alike; some offer pre-service coursework very similar to that provided by traditional routes, while others feature little coursework or exposure to students and schools prior to entry in the classroom" (Boyd, et al., 2004, p. 169),



Recommendations for exemplary alternative programs leading to licensure include high program entrance requirements, mentoring and supervision of candidates, pedagogical instruction, classroom management, content curriculum, working with diverse learners, ongoing assessment, lesson design practice and high program exit standards (Wilson, Floden, & Ferrini-Mundy, 2002). The importance of content-area licensure and knowledge is not to be underestimated. In *Teacher Quality and Student Achievement: Making the Most of Recent Research*, strong evidence indicated the inclusion of the following in a program of alternative licensure:

1. The importance of academic majors or minors in the subject are taught
2. Some types of teacher test scores
3. Teachers' pedagogical content knowledge (Goe and Stickler, 2008, p. 13)

When making a decision to pursue teaching as a career, candidates are most often unknowledgeable about the actual components in alternative programs of preparation and certification. After learning of those components, teaching candidates rate most highly the following: 1) proximity to where they reside, 2) inclusion of clinical experiences in actual classrooms with veteran teachers, 3) inclusion of adults with prior work experience, and 4) include mentor support in the first years of actual teaching (Hart, 2008).

#### Preparation through Distance Education

At the same time that alternative licensure programs were increasing nationally, there has also been a transformation of teacher preparation in the United States in terms of delivery. No longer confined to a physical structure, the classroom dedicated to the preparation of future and current teachers has now become far less physical and more

digital in nature. The concept that a community of learning is purely applicable to a location of a four-walled structure is inaccurate in the 21<sup>st</sup> century. Now a classroom of learners and what that means has evolved to include not only the traditional classroom but the less traditional classroom of cyberspace. It is no longer a physical proximity that defines the classroom but one that can include the digitally available proximity for the classroom of a new millennium.

In the same vein, the general development and proliferation of distance learning has seen phenomenal and widespread growth over the course of recent decades. In most any area of study, it is possible to take courses and even entire programs of study online from respected institutions of learning. As of the fall of 2007, 31% of the country's higher institutions reported having specific education programs which were fully implemented online in the United States. Of those which did so, public institutions were overwhelmingly in the forefront of planning and implementing these distance education programs and enrolling greater numbers of students (Allen & Seaman, 2008).

The availability and possibilities of online learning has emerged as reaching far beyond the former days of correspondence courses (Maeroff, 2003). By the 1990's, the everyday use of computers and the Internet was common enough to integrate into university students' studies (Mehrotra, Hollister, & McGahey, 2001). A generation later has seen instructional technology metamorphosing from the world of overhead projectors and slide carousels to interactive communication and asynchronous modalities (Johnson, 2003). With web 2.0 technologies of far greater collaborative context, the world of distance learning has been embraced by post-secondary educators. Based on data from the National Center for Education Statistics (2008), degrees and certificate programs obtainable through distance learning have increased almost exponentially. Furthermore,

there is a simultaneous interest on the part of these institutions to develop less costly alternatives to face-to-face coursework (Hollister, McGahey, & Mehrotra, 2001).

Larger segments of post-secondary students achieve degrees and certificates through distance education modes of program delivery. Based on information from the National Center for Educational Statistics, approximately two thirds of the nation's 4,160 two- and four-year institutions of higher learning included distance education coursework (2008). Of those reporting, 600 four year public institutions (88%) offered distance education coursework for college credit and 1,000 (97%) of public two year institutions did so.

Hence, distance education opportunities are responsive to an upsurge of interest on the part of both learners and providers of that learning. Societal changes have driven the transformation of distance education. More nontraditional students such as those who are older than the traditional college years, those who seek part-time educational opportunities or those who are seeking career changes in an economic downturn gravitate towards courses and programs that are not bound by specific times and locations. As greater requirements are increasingly necessary for advanced career and lifelong opportunities, so too are the needs for greater scheduling and access flexibility. To serve this population, institutions of higher education have had to revise their traditional modes of service to meet these students' needs (Merton, 2002).

A definition of distance education can be construed as "any formal approach to instruction in which the majority of the instruction occurs while educator and learner are not in each other's physical presence" (Hollister, et al., 2001, p. 1). In considering the provision of such instruction via distance education, certain challenges are faced by higher education in delivering distance education programs. The primary challenge is

how to structure programs delivered via distance learning while simultaneously preserving the integrity and values of the content of the delivered program (Maeroff, 2003). In other words, the vehicle of the program's delivery should in no way be influential in diluting or revising the program itself. The program is the program. The system of delivery whether on-campus or online is simply that --- the system of delivery.

In face-to-face courses taking place on campus, the instructor manages the delivery of the content and makes pedagogical decisions regarding how this is done. Similarly, in distance learning, the instructor manages delivery of the course although typically through modules which sub-divide the course's content in increments of time allowed for each course topic. Within each module is usually an introduction to the topic, readings, some form of discussion, and associated assignments for students. According to Paquette (2004), the on-line training model, or distance learning model, possesses characteristics which emancipates students from place and time restrictions and provides an entrée to local as well as global knowledge, learner collaboration, and ongoing assistance. This delivery model "maximizes learning efficiency" on the part of the learner (Paquette, 2004, p. 14).

These remote students then pace themselves as they are not necessarily working together at one time. They may work at their own pace, collaborate, and intersect with the provided material within the parameters set by the instructor. The instructor functions as advisor and course expert and maintains communication with students through email, discussion boards, and other exchanges (Paquette, 2004). More common is the asynchronous delivery where there is no requirement for a class common work time element. A synchronous delivery, although arguably a more realistic virtual experience, is less common but hardly unusual providing a "type of two-way communication with

virtually no time delay, allowing participants to respond in real time” (Johnson, 2003, p. 49).

This explosion of distance education offerings across the United States has predictably resulted in the increased involvement of students, faculty, and colleges. Within this context, the field of educating the teaching profession has been impacted as well. Among AACTE institutions, more distance learning courses were offered at colleges and universities with greater numbers of graduate students and larger student enrollment in schools of education (Ludvig, Kirshstein, Sidana, Ardila-Rey, & Bae, 2010). With increasing globalization as well as enhanced communication capabilities, institutional practices and programs have swiftly evolved to offer distance education course options as part of their offerings (Burbules & Callister, 2000). As distance education expanded so did competition among institutions of higher learning to provide both the more classroom-centered web-enhanced courses and the more totally web-based courses (Mehrotra, Hollister, & McGahey, 2001).

According to the AACTE’s *What is the Role of Distance Learning in Preparing the Teacher Workforce?* (Ludvig, et al., 2010), institutions preparing teachers for the workforce have greatly increased their education-related distance learning course offerings, particularly in public institutions. Between 2004 and 2008, there was a reported 12.3% increase with the vast majority of public institutions of higher learning (91.2%) providing distance learning courses. Approximately half (49.1%) of the reporting private colleges and universities attested to provision of distance learning courses (Ludvig, et al., 2010).

With each passing year, distance learning grows in scope and delivery and is no longer considered an outgrowth program but a viable and important part of an institution

of higher learning. In considering the quality of selecting one avenue of learning over the other, Daves and Roberts (2010) discovered in their study comparing education students' perceptions involving online and face-to-face programs, that students in both program settings had similar experiences and overall satisfaction in terms of social connectedness and learning. Education's future can only be enhanced by the inclusion of distance learning as an additional vehicle of preparation (Johnson, 2003).

Furthermore, it is possible to experience a variety of 1) depth and 2) breadth regarding distance learning experiences. In today's educational world, students may more readily select program offerings which more precisely fit their particular circumstances and idiosyncratic needs based on factors such as current employment hours, career goal aspirations and/or familial responsibilities. The flexibility afforded by distance learning offers students the means by which their individual educational needs might be met.

As attention is turned to colleges of education, distance learning is recognized as a valuable vehicle for learning. Currently, colleges responsible for preparing the nation's teachers are confronted by two challenges. First, they are mandated to produce educators capable of teaching students of great diversity (Emihovich, 2008). Second, they are urged to provide increased numbers of online courses as well as blended courses in answer to demand (Schrum, Burbank, & Capps, 2007). Many institutions of learning are moving forward to produce distance learning opportunities for students and are devoting significant technology investments to do so (Institute for Higher Education Policy, 1999). This movement certainly encompasses programs responsible for the preparation of future teachers.

## INTASC Standards

In 1992, the Interstate New Teacher Assessment and Support Consortium (INTASC) published its standards for new teacher licensure. Meant for novice teachers, they strongly reflected the influence of the five core propositions of the National Board for Professional Teaching Standards. Many states, including North Carolina, adopted these standards to structure their structure of licensing. These ten standards served as the archetype for use by states and were based on whether the teacher possessed the following:

1. Understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.
2. Understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.
3. Understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.
4. Understands and uses a variety of instructional strategies to encourage students' development of critical thinking, problem solving, and performance skills.
5. Uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.
6. Uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.

7. Plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.
8. Understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.
9. Is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.
10. Fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being (INTASC, 1992, pp. 13-43).

By establishing this structured outline of standards, newly trained teachers and those responsible for their training would know exactly what they were expected to know and be able to do. The Interstate Teacher Assessment and Support Consortium itself was created from a collection of state agencies and national organizations. According to their official website (2010), the consortium is “dedicated to the reform of the preparation, licensing, and on-going professional development of teachers” and their work is dedicated to a single premise: “An effective teacher must be able to integrate content knowledge with the specific strengths and needs of students to assure that all students learn and perform at high levels.”

In creating the ten standards, the Council of Chief State School Officers sought to systematize “essential knowledge, skills, and dispositions of well-prepared novice teachers” (Capraro, Capraro, & Helfeldt, 2010, p. 134). This common core of performance-based standards for the initially licensed was created with dual intentions. 1) The knowledge contained in these standards would constitute a common commitment to



a universal language and understandings. 2) The opportunity for assessment of common knowledge would exist based on specialty areas (INTASC, 1992).

This collective set of standards formed a foundation on which teachers build as they become more adept at their professional craft. That foundation epitomized the “knowledge of student learning and development, curriculum and teaching, contexts and purposes which creates a set of professional understandings, abilities, and commitments that all teachers share” (Alban, Proffitt, & SySantos, 1998, p. 1). The standards established an identifiable collection of exact principles with which the novice teacher upon entering the classroom actually used to interact with students who would benefit from teacher possession of knowledge, skills, and dispositions or, reversely, does not benefit from them. These knowledge, skills, and dispositions of the INTASC standards could also provide a means of measuring teacher preparation program outcomes (Lang & Wilkinson, 2008).

In the state of North Carolina, as well as many other states, the ten INTASC standards were used as criteria for obtaining initial licensure and hence for many preparation programs within the state. As noted by the National Education Goals Panel’s *Policy Recommendations and Examples Regarding State Professional Development Programs Linked to Student Standards*, “state initial teacher licensure and certification should be linked to requirements that prospective teachers demonstrate knowledge of education standards and assessments, as is proposed by the coalition of states working together in the Interstate New Teacher Assessment and Support Consortium” (2000, NEGP web site). Standards focused on the broad areas that were identified as both rudimentary and necessary for the beginning teacher. These broad areas included content pedagogy, student development, diverse learners, multiple instructional strategies,

motivation and management, communication and technology, planning, assessment, reflective practice, and school/community involvement.

In the teacher preparation program involved in this particular study, the INTASC standards have formed a major foundational component of the overall program with inclusion in course syllabi, exit surveys, and portfolios through the 2009-2010 school year. In order to be prepared for later district and state expectations regarding implementation of these standards in daily teaching, pre-service teachers experienced extensive instruction and familiarity with INTASC components with a focus on knowledge, skills, and dispositions. Upon completion of the preparation program and entering beginning teacher status, teachers used INTASC standards in their individual growth plans required by the state's Department of Public Instruction. As delineated by the state public school policy 4.20:

Each beginning teacher is required to develop an Individual Growth Plan in collaboration with his/her principal (or the principal's designee) and mentor teacher. The plan is to be based on the INTASC (Interstate New Teacher Assessment and Support Consortium) Standards, and must include goals, strategies, and assessment of the beginning teacher's progress in improving professional skills. In developing the plan, the beginning teacher, principal (or designee), and mentor teacher should begin with an assessment of the beginning teacher's knowledge, dispositions, and performances. Throughout the year, formative assessment conferences should be held to reflect on the progress of the beginning teacher in meeting the goals established for professional growth. The plan should be updated on an annual basis, each year of the

Beginning Teacher Support Program (North Carolina State Board of Education, 2006, p. 1).

### A Sense of Preparedness

First, it is important to note what a teacher faces upon entering the classroom for the first time. What will he or she face? As Darling-Hammond stated, “in the classrooms most beginning teachers will enter, at least 25% of students live in poverty and many of them lack basic food, shelter, and health care; from 10% to 20% have identified learning differences; 15% speak a language other than English as their primary language (many more in urban settings); and about 40% are members of racial/ethnic “minority” groups, many of them recent immigrants from countries with different educational systems and cultural traditions” (Darling-Hammond, 2006, p. 301). Therefore, how a teacher has been trained prior to entering such an environment as that described above becomes pivotal in the success of that novice teacher and the students that teacher encounters daily for that school year.

Entering beliefs of pre-service teachers certainly have impact on how they eventually address teaching (Richardson, 2003). However, these beliefs are also impacted by the knowledge and understandings derived from preparation program experiences. Feelings of teacher efficacy have reportedly improved during pre-service preparation as new knowledge and skills are accumulated (Hoy & Woolfolk, 1990). As stated by the President of the National Commission on Teaching and America’s Future on their organization’s website, “we need new teachers for new schools. Until we reinvent teacher education, the gap between traditional teacher preparation and the demands of teaching for the future will continue to undermine our ability to create 21st century learning organizations” (Carroll, 2010).

Hence, this sense of preparedness, or assurance in one's pre-service training and subsequent abilities, can only enhance a beginning teacher's effectiveness in the classroom. It is possible that the foundational elements of self-efficacy which take root within the preparation stage of development might well be of greater impact than that during a later period (Mulholland & Wallace, 2001). For instance, findings from a study on elementary teacher education strongly indicated the positive connection between greater preparation in content areas of math and science and higher teacher efficacy (Wu & Chang, 2006). Additionally, in their extensive study of general education teachers, Brownell and Pajares (1999) identified the quality of teacher preparation in teachers' sense of efficacy regarding educating students who possessed learning disabilities.

That strong self-efficacious foundation is pivotal in allowing the developing teacher to feel able to meet the challenges of the modern classroom (Darling-Hammond, 2003). Thus, in considering teachers' sense of preparedness, it is necessary to contemplate self-efficacious behavior and its general impact. Social cognitive theory focuses on the concept of agency, or "the ways that people exercise some control over their own lives" (Goddard, 2003, p. 185). Indeed, it is this agency that is the driving force in individuals' pursuit of demanding and personally satisfying goals. Within the classroom arena, social cognitive theory posits that teacher decision-making is impacted by the perceived efficacy of the teacher (Goddard, 2003). A teacher attribute deemed key to the quality of a teacher by DiGiulio (2004), efficacy is the self-identified expectations individuals hold that are supported by previous life experiences and experiences observed in others. Teacher efficacy is the springboard for future classroom success where teacher actions are built on the internal belief, or sense, that they are actually prepared to be successful with their students.

Teachers professing sufficient preparation for the classroom were more likely to be self-efficacious in their classrooms while those professing a lower sense of preparation were more likely to feel less prepared to successfully teach (Gallo & Little, 2003).

Teachers feeling secure in their knowledge and skills have been found to also display effectual classroom management abilities (Cartledge & Johnson, 1996). Efficacious teachers are more likely to be creative and to make changes in their teaching and to make a positive impact on their students, particularly of students with lower achievement levels (Alderman, 2004).

The work of Bandura has long broached the concept of self-efficacy as a major influence on individuals' actions. As defined by Bandura (1997, p. 3), "perceived self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments." The internal beliefs within us have the power to impact our impressions, our emotions, our decision-making, and, ultimately, our acts. Expected outcomes of actions can have direct pathways to our efficacy beliefs. That perception regarding efficacy beliefs on the individual's part involves an evaluative decision of their "ableness" to carry out their desired actions. The expected outcome is again an evaluative decision but on the probable result of the actions.

Perceptions of teachers themselves have great impact. In short, their teaching efficacy greatly colors "their general orientation toward the educational process as well as their specific instructional activities" (Bandura, 1997, p. 241). Teachers perceiving their own value and preparedness will often experience greater positive results. As argued by Bandura, teachers with a higher perception of their instructional efficacy possess belief in the "teach-ability" of all their students (as cited by Gibson & Dembo, 1997). This sense of preparedness includes not only the motivated and family-supported among their

students but also the less motivated with little family support or possessing outside negative influences. They spend more time actually engaging students by implementing scholastic activities while providing instructional support and praise as needed. These teachers possess a greater belief in their personal teaching endeavors and their selection of suitable pedagogical strategies. This sense of efficacy implies “the extent to which teachers believe that they have the capacity to affect student performance” (Ashton, 1983). There exists a positive correlation between teachers’ efficacy in impacting student achievement and actual student achievement (Goddard, Hoy, & Hoy, 2000). On the other hand, teachers with a low level of efficacy maintain the belief that their efforts are unlikely to overcome a lack of student motivation and other adverse influences.

Furthermore, as reported in the Met Life *Survey of the American Teacher*, teachers possessing a “stronger belief in the success of their students, are more confident in their own ability to help their students succeed and have more support for and experiences with collaboration in their schools” (2010, p. 46) and are also likely to be highly satisfied in their chosen profession. These teachers are more likely to report a belief that their students have the ability to succeed in classrooms and will later attend college. They are also more likely to self-report convictions of their own professional abilities that enable their students to thrive in the school setting (Met Life *Survey of the American Teacher*, 2010.)

Definite positive relationships have repeatedly been found to reiterate the connection between preparation and classroom effectiveness (Darling-Hammond, 2003, Wenglinsky, 2000). In alluding to the benefits to experiencing a program of preparation, findings indicate that those teachers with greater preparation for the classroom possess greater confidence and ultimate success with their students than those teachers possessing

little training or even no training at all (Darling-Hammond, 2000). Hence, the teacher candidate receiving a well-conceived preparation prior to teaching and possessing the resultant higher level of teacher efficacy would be in a far better position to positively affect the students in their future care. In a similar vein, the teacher candidate receiving a less well-conceived preparation and possessing a lower level of teacher self-efficacy regarding that preparation would be less likely to have a positive impact on future students.

### Perception and Preparedness

Lastly is addressed the importance of perception or perceived beliefs. Perceptions of competency can have great effect on ensuing thoughts and future actions of individuals. Such beliefs are intertwined with “cognitive, affective, and behavioral elements, implying that they play a complex role in influencing human action, including teaching” (Sanger & Osguthorpe, 2010, p. 571). Subsequent successes in areas of classroom management, instructional efficacy, and student engagement have been linked to an educator’s perceived level of teaching competence (Poulou, 2007). Therefore, there exists a definite need for teacher candidates and, later, teachers themselves to possess genuine perceptions of a sense of preparedness. In possessing a perception of competence in the classroom, teachers are more likely to “make judgments about their personal capabilities, skills, knowledge, personality traits, and personal weaknesses in particular teaching contexts” (Poulou, 2007, p. 214). In reviewing alternative licensure pathways, it is possible to capture an informative picture of teacher candidates’ beliefs regarding their sense of preparedness through a lens comprised of particular programs of study and modes of delivery (e.g. online or face-to-face) as well as by demographic identities of program participants.

## Conclusion

Teacher programs of preparation are charged with producing effective teachers possessing a sense of preparedness for the twenty-first century classroom. This desired outcome of teacher candidates completing programs valuing their experiences, skills and knowledge will serve to further hone teacher effectiveness. That undercurrent of efficacy and the internal motivation necessary for the effective teacher are crucial to this desired outcome (Ashton, 1984). As noted by Alderman, “teacher expectations followed by a high sense of teaching efficacy are the starting points to make ‘all students can learn’ more than a slogan” (2004, p. 198). Focusing on alternative licensure pathway programs of study, modes of program delivery, and demographic identities of program participants serves as connecting characteristics for revealing perspectives of preparedness that are necessary for both teacher education and later teacher and student success in the classroom. Chapter 3 will discuss the methodology devised to answer the three research questions for this particular study.



## CHAPTER 3: METHODOLOGY

The purpose of this study was to investigate teachers' perceptions of preparedness after completion of an alternative licensure program at a large urban university in the southeast United States. Findings from this study were intended to aid in the identification of factors impacting teacher candidates' perceived efficacy regarding their teacher preparation in alternative licensure programs. This chapter describes the research methodology used to answer the identified research questions and includes the design, participants, sampling, instrumentation, procedures, and data analysis.

### Research Questions

1. What is the reported sense of preparedness of university graduate students who have completed their program of teacher preparation through an urban public university graduate certificate program?
  - a. What are the demographic identities of teacher candidates in the graduate certificate program? How do these demographic identities compare to the national demographic identities of congruent programs?
  - b. Is there a difference among demographic groups and the reported sense of preparedness among teacher candidates?
2. Among completers of an urban university's graduate certificate program, are there differences across and within programs of teacher preparation?

- a. Is there a significant difference among the reported sense of preparedness of recent graduate certificate students in an urban public university's Elementary, Middle, and Secondary teacher preparation programs?
  - b. Is there a significant difference in the reported sense of preparedness between completers of a graduate certificate enrolled in a distance education teacher preparation program and those in an on campus teacher preparation program?
3. Among completers of an urban university's graduate certificate program, what percentage subsequently enrolls in a Masters of Arts in Teaching program?

#### Design

Methodology for this study was primarily descriptive involving quantitative survey research. A form of non-experimental methodology, survey research is often used to obtain a better understanding of a current situation (Leedy & Ormrod, 2001). Therefore, utilizing survey research methodology for this study offered a viable vehicle for gaining insight into teacher candidates' perceptions of their preparedness. With survey research, it is possible to clearly describe a situation or scrutinize relationships among variables, as well as access information regarding participant opinions or feelings regarding identified topics (Muijs, 2004). As a non-experimental study, independent variables are not actually manipulated but observed, described, and analyzed as they currently exist (Gall, Gall & Borg, 2005). Independent variables for this study included:

- Demographics of participants (gender, ethnicity).
- Participants' particular teaching program area (elementary, middle or secondary) and the instructional method of delivery (distance learning and on-campus).

Program content and course requirements were identical for both modes of

delivery whether through distance learning or on-campus in more traditional face-to-face settings.

Dependent variables in this study included:

- Teacher candidates' perceptions of their preparation and sense of readiness as measured by the College of Education's INTASC-based three point Likert-scale *Initial Licensure Completers Exit Survey*. The eleven INTASC-based questions served as the factors used to later construct a single latent factor of preparedness.

### Participants

Participants in this study were graduate certificate candidates in a teacher education program in an urban public university located on a 1,000 acre campus in the southeastern United States. This university was originally founded in response to needs of returning World War II veterans and has now evolved into an urban institution of approximately 25,000 students. There are currently seven separate colleges on the main campus with a growing distance education component. Established in 1970, the College of Education itself is presently celebrating its 40<sup>th</sup> anniversary and has an enrollment of over 3,000 undergraduate and graduate students.

All participants of this study were graduate students who have sought initial teaching licensure. They possessed undergraduate degrees and had been enrolled in the college's alternative licensure program known as the Graduate Certificate in Teaching Program. This program, although not degreed, leads to a recommendation for licensure and centers on knowledge, skills, and dispositions deemed crucial for a teacher commencing a career in the classroom. By the end of their program, participants would have completed 12 or 18 hours of graduate teaching courses, any content-deficiency coursework, clinical experiences in schools, student teaching, a technology portfolio, and

PRAXIS II requirements. Middle grades and secondary program completers also had the option to apply and complete 18 additional hours to receive a Masters of Arts in Teaching degree. For elementary program completers, a further 12 hours for a Master of Arts in Teaching degree was necessary (Graduate Certificate in Teaching, 2010).

The Graduate Certificate in Teaching is composed of a variety of specific teaching programs. For this study, participants completed their particular program over the course of five consecutive semesters in one of the following specific areas: Elementary Education (K-6), Middle Grades Education (6-9), or Secondary Education (9-12). Participant numbers involved in this study are displayed in Table 2 below.

Table 2

*Exit Survey Respondents and Return Rates*

Semester of Graduate Certificate Completion	Elementary Education Program	Middle Grades Program	Secondary Program	Aggregated Total Number of Program Completers	Return Rate
Spring 2008	$n = 47$	$n = 14$	$n = 18$	$n = 79$	Data Not Available
Fall 2008	$n = 10$	$n = 7$	$n = 15$	$n = 32$	Data Not Available
Spring 2009	$n = 55$	$n = 16$	$n = 26$	$n = 97$	88.9%
Fall 2009	$n = 30$	$n = 23$	$n = 18$	$n = 71$	92%
Spring 2010	$n = 73$	$n = 38$	$n = 45$	$n = 156$	93%
Total	$n = 215$	$n = 98$	$n = 122$	$n = 435$	

### Sample

A sample of convenience was used for this particular study. Study inclusion was based on program completion for teacher preparation resulting in a graduate certificate for Elementary Education, Middle Grades, or Secondary Education. The determination of this particular pool of participants was due to their status as alternative licensure program students who would most likely possess the program knowledge and experiences necessary to provide an accurate picture of the current perception of candidate preparedness for the classroom.

### Measurement

Upon completion of their alternative certificate program, participants submitted the College of Education's Initial Licensure Completers Exit Survey (hereafter referred to as the exit survey), which was the primary instrument used in the study. The exit survey was a created component of the College of Education's Comprehensive Candidate Assessment System (CCAS). In recognizing the importance of high teacher quality, the college adhered to the concept that "work of a College of Education must be grounded in evidence-based practice and professional wisdom and the work must be informed by ongoing assessments that lead to continuous improvement" (Anderson et al., 2004, p. 8). Hence, the system was "designed to collect data, analyze findings, and make judgments about candidate, program, and unit performance and operations" (Edwards, Flowers, & Stephenson-Green, 2005, p. 3).

The assessment system, including the exit survey, was firmly embedded in the knowledge bases of professional education programs outlined by the college's conceptual framework. These included conceptual, pedagogical, and reflective knowledge bases which stressed the effective instruction, response to learner needs, collaboration with

families, colleagues, and community, and provision of leadership (Anderson et al., 2004) as can be seen below:

Excellent professionals possess a comprehensive knowledge base that is comprised of conceptual knowledge, pedagogical knowledge, and reflective knowledge. Conceptual knowledge relates to the individual's broad knowledge base as well as a more specialized knowledge base in their content field and knowledge of how human beings learn and develop. Pedagogical knowledge entails the understanding of methods of effective teaching: knowledge of how to teach subject matter and knowledge of how to teach the subject matter to specific learners, attention to individual differences and how to create environments that support learning. Reflective knowledge enables cogent evaluation of teaching practice, including self-appraisal. Excellent professionals understand how to blend these types of knowledge in actuating teaching and learning in positive ways. Excellent professionals make connections between the knowledge base and the uses of this knowledge (Anderson et al., 2004, p. 6).

In emphasizing these attributes of effective professional educators, the college's assessment system also reflected the tenets of appropriate accrediting bodies and standards required by the state's Department of Public Instruction. This included strong consideration of INTASC standards in the development of the conceptual framework as well as the college's assessment system, including the Initial Licensure Completers Exit Survey. For instance, in considering pedagogical knowledge emphasized by the college in its programs, five of the INTASC standards (content pedagogy, diverse learners,

motivation and management, planning, and assessment) integrate such knowledge (Anderson et al., 2004).

The Comprehensive Assessment System regularly collected assessments regarding pre-service teachers' "content knowledge, pedagogical content knowledge, professional and pedagogical knowledge and skills, and dispositions and the impact of P-12 student learning" (Edwards et al., 2005, p. 3). Upon program completion, pre-service teachers were expected to be knowledgeable, effective, reflective, responsive, and collaborative leaders (Anderson et al., 2004).

With the goal of producing effective teachers, the college held the following expectations of its candidates upon program completion:

- *Excellent Educational Professionals . . .* use justifiable, appropriate strategies well grounded in research and best practice within their respective disciplines
- *Excellent Educational Professionals . . .* make links among theory, research and practice as well as between content and pedagogy
- *Excellent Educational Professionals . . .* apply their knowledge to planning, setting goals, implementation and continuous assessment within the educational environments in which they work
- *Excellent Educational Professionals . . .* demonstrate high regard and adherence to the code of ethics established in their respective professional fields. (Anderson et al., 2004, pp. 28-29).

Specifically, the college required four transition points for programs of licensure, including the Elementary, Middle Grades, and Secondary programs. These four points for initial licensure included 1) entry into teacher education; 2) midpoint admission into a

graduate internship or student teaching; 3) completion of the graduate internship; and 4) follow-up during the first two years after awarding licensure. All initial licensure programs possessed common assessments and standards during the timeframe of this study (e.g. fall 2008-fall 2010 semesters). This would indicate INTASC standards being used commonly in all programs as well, which included Elementary, Middle Grades, and Secondary (College of Education Data Annual Report, 2009).

The exit survey instrument (See Appendix A.) was used by the College of Education to measure teacher candidate perceptions of their preparation experiences upon program completion. Prior to students' final conferences with their supervisors, teacher candidates were asked to complete the exit survey which is made available to them through a portfolio system known as TK20. This instrument was administered every semester and results submitted to the college's Assessment Committee. Items included in the survey instrument were comparatively short and understandable and had been developed and field tested in the fall of 2003. Full implementation of this instrument began in the spring of 2004.

The survey possessed two sections. Section 1 measured teacher candidates' beliefs regarding relevancy of their preparation. Preparation areas included general education, major background deficiency courses, academic concentration courses, professional education courses, clinical experiences, and student teaching. Using a 3-Point Likert scale, Section 1 of the exit survey directed participants to self-rate themselves as follows:

Please rate how well the following experiences at \_\_\_\_\_ contributed to your preparation to become a teacher. Use the following scale:

3 = Most of the courses/experiences were relevant to my preparation.



2 = Some of the courses/experiences were relevant to my preparation.

1 = Very few or none of the courses/experiences were relevant to my

Preparation (Initial Licensure Completers Exit Survey, n.d.).

Section 2 of the Exit Survey was based on the INTASC standards.

Devised by a cadre of representatives from state agencies and professional organizations over a period of eighteen months, the standards were reflective of the five propositions of the National Board of Professional Teaching Standards. First released in 1992, the INTASC standards were based on the following areas: content pedagogy, student development, diverse learners, multiple instructional strategies, motivation management, communication technology, planning, assessment, reflective practice, school/community involvement, and working with families. With the purpose of addressing the practice of beginning teachers, the INTASC standards reflected the four essential sections of (1) core principles, (2) knowledge, (3) dispositions, and (4) performances (INTASC Consortium, 1992, p. 14-33). A 3-point Likert scale was again used with the following ratings:

3= I have developed exceptionally effective knowledge, skills, and dispositions in relationship to this standard.

2= I have developed adequate effective knowledge, skills, and dispositions in relationship to this standard.

1 = I do not yet have the knowledge, skills, and dispositions in relationship to this standard (Initial Licensure Completers Exit Survey, n.d.).

To measure participants' sense of preparedness, the eleven INTASC-based survey items were used to develop a construct of preparedness resulting in a scale of 3-33. As

noted by Gliem and Gliem, “as individuals attempt to quantify constructs which are not directly measurable they oftentimes use multiple-item scales and summated ratings to quantify the construct(s) of interest” (2003, p.82). Likert scale items based on INTASC standards which were combined to create a composite score are displayed in Table 3.

Table 3

*Survey Items Used to Create a Construct of Preparedness (INTASC Consortium, 1992, p. 14-33)*

<b>INTASC- Based Standard</b>	<b>Description</b>
Content Pedagogy	Understands the central concepts, tools of inquiry, and structures of the discipline(s) she/he teaches and can create learning experiences that make these aspects of subject matter meaningful to students.
Student Development	Understands how children learn and develop and creates learning opportunities to support their intellectual, social, and personal development.
Diverse Learners	Understands how students differ in their approaches to instructional opportunities that are adapted to diverse learners.
Multiple Instructional Strategies	Understands and uses a variety of instructional strategies to encourage student development of critical thinking, problem solving, and performance skills
Motivation and Management	Understands individual and group motivation and behavior to create a learning environment that encourages social interaction, active engagement in learning, and self motivation.
Communications and Technology	Uses effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.
Planning	Plans based upon knowledge of subject matter, students, the community, and curriculum goals.
Assessment	Understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.

Table 3 (Continued)

*Survey Items Used to Create a Construct of Preparedness (INTASC Consortium, 1992, p. 14-33)*

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Professional Development	As a reflective practitioner, continually evaluates the effects of choices and actions on students, parents, and other professionals in the learning community and actively seeks out opportunities to grow professionally.
School and Community Involvement	Fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well being.
Work with Families	Understands differences in families and creates opportunities to involve families in supporting student learning.

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As INTASC standards and their principles have been so widely accepted by leaders in education, the instrument's eleven INTASC-based survey items could be considered valid measurements in the expected preparation of beginning teachers (Lang & Wilkinson, 2008). Thus, content validity existed as these items were reflective of the latent concept of preparedness. There was also a predictive validity as INTASC-based questions would be expected to predict preparedness regarding the classroom. To measure participants' sense of preparedness, a scale factor, preparedness, was created from the eleven INTASC-based questions comprising the major portion of the exit survey instrument. Additionally, there was evidence of face validity where, as described by Sirkin (2005), expert individuals have found such a measurement used as appropriately addressing the concept being measured. It has been noted that "INTASC principles, when combined with appropriate measurement methods, provide an appropriate standards-based construct that allows college personnel to do what they need to do -- make decisions that are less likely to be successfully challenged while, at the same time, providing data that can be aggregated to improve the outcomes of their programs. Valid,

reliable, and fair measurement can lead to information about what students are learning and what they are not learning. It can also serve as a predictor of future behavior and a tool for both individual and program improvement.” (Lang & Wilkinson, 2008, p.4).

To aid in drawing accurate conclusions regarding the data and measuring internal survey consistency, Cronbach’s alpha was performed. Using Cronbach’s alpha allowed the researcher to reliably use a single test to determine the “average value of the reliability coefficients one would obtain for all possible combinations of items when split into two half-tests” (Gliem & Gliem, 2003). A Cronbach’s alpha score indicated strong internal consistency and reliability of the factor. To determine strength of consistency, alpha size ( $\alpha$ ) was indicated by the following measurements:  $>0.9$ = excellent,  $>0.08$ =good,  $>0.07$ =acceptable,  $>0.06$ =questionable, and  $<0.06$ =unacceptable (George & Mallery, 2003). To determine item dimensionality, a factor analysis was also conducted.

Three-point Likert scale exit survey responses were examined and data was analyzed in order to answer the three research questions posed for this study. Respondents’ programs involved in this study used INTASC standards as major components of course syllabi, portfolios and exit surveys. During the time of this study’s data collection, the state in which this College of Education operated used INTASC standards to develop Individual Growth Plans used by their newly hired teachers (North Carolina Board of Education, 2006). In short, the INTASC-based survey questions provided an acceptable reliable means of constructing a scaled measurement instrument for the latent concept of preparedness.

#### Procedure

Application for university IRB approval was made prior to data collection. Upon receipt of that approval, access to the data pertinent to this study took place. Survey

results were de-identified. In order to protect participants' confidentiality, all names and other identifying characteristics were eliminated. Participants submitted the exit survey upon completion of their Graduate Certificate program and were identifiable by specific education program (Art, Dance, CHFD, ELED, Foreign Language, Special Education, TESL, Middle School with sub-programs of E/LA, Mathematics, Science, and Social Studies, and Secondary with sub-programs of English, Science, Mathematics, and Social Studies). For this study, scrutiny was limited to Elementary, Middle Grades, and Secondary programs. Other program completers were excluded from the sample.

Data from five consecutive semesters were included in this study with the following numbers of total exit survey completers for Elementary Education, Middle Grades, and Secondary programs:

Spring 2010	College of Education Exit Survey Participants = 156
Fall 2009	College of Education Exit Survey Participants = 71
Spring 2009	College of Education Exit Survey Participants = 97
Fall 2008	College of Education Exit Survey Participants = 32
Spring 2008	College of Education Exit Survey Participants = 79

#### Data Analysis

Data was collected and entered into a computer file format for analysis to take place. SPSS statistical software was used to perform analyses. Frequency distributions and measures of central tendency aided in accurately describing teacher candidates' self-perceptions and making comparisons across demographic groups according to gender and race. To measure the concept of preparedness, a single factor was created from the eleven INTASC-based survey items. Examinations of the patterns of correlations within the survey instrument aided in establishing further construct validity. Additional inferences

were made through cross-tabulations, one-way ANOVAs, and factorial ANOVAs. In order to answer the three overarching research questions, multiple analyses were used. These include means and standard deviations and analyses to determine relationships between and among variables. Cross referencing to determine gender and ethnicity was also used.

To answer research question 1, descriptive statistics and cross-tabulations were conducted and comparisons between groups by gender and race were examined. One-way ANOVA calculations were used to ascertain group differences regarding their sense of preparation after their program completion (elementary, middle, secondary). Post hoc tests including Tukey, Dunnett C, and Levine's Test of Equality of Error Variances were used to ensure the assumption of equal variances and to control for Type I error (Green & Salkind, 2005).

To answer research question 2, one-way ANOVA tests were run to ascertain the significance of any differences among groups of elementary, middle and secondary program completers with possible post hoc tests such as Tukey, Dunnett C, and Levine's Test of Equality of Error Variances. Similarly, one-way ANOVA tests were used to calculate any differences between mode of delivery (e.g. online and on-campus). Such tests allowed for scrutiny of the relationship between program completers and their perceptions of their sense of preparedness for the classroom.

To answer research question 3, cross referencing of Graduate Certificate program completers and acceptance to the Masters of Arts in Teaching program took place. Factorial ANOVA was used to make comparisons and correlations between the factor of preparedness and subsequent enrollment or non-enrollment to the degreed program.

Additional analyses across and within the three programs of the study also took place to gain possible further information

## CHAPTER 4: DATA ANALYSIS AND FINDINGS

The purpose of this study was to investigate perceptions of teacher candidates on their preparation after completion of a graduate level alternative licensure program. Programs of licensure were categorized by three groups: elementary (K-6), middle (6-8), and secondary (9-12). They were similar in their content integrating INTASC standards, clinical experiences, and developmental and methodology coursework. The middle and secondary program varied by a single course. Other than course number changes, there were no revisions during the time data was collected for this study (M. Spooner, personal communication, April 13, 2011).

Aggregated data collected over the course of five consecutive semesters was analyzed by program, mode of delivery, and demographics of gender and race as well as collectively. SPSS software was used to calculate descriptive statistics, frequencies, cross-tabulations, factorial ANOVA, and one-way ANOVAs in order to answer the previously identified research questions. This chapter presents quantitative analyses using information from exit surveys from completers of elementary, middle, and secondary programs ( $N=444$ ) at a large southeastern university from fall 2008 through fall 2010. Table 4 displays the frequency counts of the program completers.



Table 4

*Elementary, Middle and Secondary Program Participants of Study*

Semester	Percentage
Fall 2008	7.9 (N=35)
Spring 2009	22.8 (N=101)
Fall 2009	16.3 (N=72)
Spring 2010	34.8 (N=154)
Fall 2010	18.3 (N=81)

Elementary, middle, and secondary program respondents were asked to complete the exit survey based on their personal perceptions of preparedness for the classroom. Respondents were also asked to rate other aspects of their preparation as well. These included attitudes regarding professional education courses, clinical experiences in schools, and student teaching/internship. Over the course of the identified five consecutive semesters of collected aggregated data, a greater number of participants, 42.8%, completed the elementary graduate certificate program (n=190), 30.2% in the secondary program (n=134), and 27.0% in the middle grades program (n=120 ). Table 5 displays the frequency counts of program completers by program.

Table 5

*Completers of Alternative Licensure Program*

Alternative Licensure Program	Number	Percentage	Total Percentage in Program
Elementary Program	190	42.8	42.8
Middle Program			27.0
Middle Mathematics	36	8.1	
Middle English Language Arts	25	5.6	

Table 5 (Continued)

*Completers of Alternative Licensure Program*

Middle Science	28	6.3	
Middle Social Studies	31	7.0	
Secondary program	24	20	30.2
Secondary Biology	12	2.7	
Secondary Chemistry	1	0.2	
Secondary Comprehensive Science	9	2.0	
Secondary Earth Science	4	0.9	
Secondary English	40	9.0	
Secondary Mathematics	16	3.6	
Secondary History/Social Studies	52	11.7	

Table 6 displays means and standard deviations of the eleven INTASC-based items used in the construct of preparation.

Table 6

*Descriptive Statistics for INTASC-Based Exit Survey Items*

INTASC Factor	Mean	Standard Deviation
Content Pedagogy	2.76	.435
Student Development	2.70	.475
Diverse Learners	2.54	.525
Multiple Instructional Strategies	2.65	.515
Motivation and Management	2.64	.530
Communication and Technology	2.71	.481
Planning	2.73	.488
Assessment	2.60	.530
Professional Development	2.74	.458
School and Community Involvement	2.61	.546
Work with Families	2.50	.584

### Research Question 1

*What is the reported sense of preparedness of university graduate students who have completed their program of teacher preparation through an urban public university graduate certificate program?*

Upon completion of the alternative licensure graduate certificate program, most students reported a high rating regarding their sense of preparedness with a mean of 29.1689 out of a possible rating of 33. Mean, median, mode, and the standard deviation are reported below in Table 7 along with relative frequencies of respondents' ratings.

Table 7

#### *Central Tendencies of a Sense of Preparation*

Mean	29.1689
Median	30.0000
Mode	33.0000
Std. Deviation	3.56679

The following table displays results of preparedness rating frequencies as reported by respondents in this study.

Table 8

#### *Reported Sense of Preparedness by Respondents*

Preparedness Scores	Percentage
16.00	.2
17.00	.2
19.00	.2
20.00	.2
21.00	1.1
22.00	4.8
23.00	3.0

*Table 8 (continued)*  
*Reported Sense of Preparedness by Respondents*

24.00	3.4
25.00	3.9
26.00	5.0
27.00	5.9
28.00	8.4
29.00	7.8
30.00	12.8
31.00	11.4
32.00	6.2
33.00	25.3
Total	100.0

A reported high sense of preparedness was indicated with one fourth of participants denoting a rating of 33 out of a possible score of 33. Over half rated themselves at or above the scale score of 30. No respondent self-rated lower than 16 out of a possible 33 points while only 17% of the respondents rated themselves 25 or lower out of a possible 33 points.

*Research Question 1A: What are the demographic identities of teacher candidates in the graduate certificate program? How do these demographic identities compare to the national demographic identities of congruent programs?*

**Research Question 1A: Gender Identity**

In answer to research question 1A, demographic identities of teacher candidates in the graduate certificate program included race and gender. In analyzing exit survey results by gender, a one-way analysis of variance was used to determine possible significant differences between the two genders. Demographic information regarding gender revealed approximately 76% of the respondents as female (n=331) and 24% of the

respondents as male ( $n=105$ ). In scrutinizing the three specific programs pertinent to this study (elementary, middle, and secondary), demographic information regarding gender is displayed in Table 9 below. As can be seen, elementary participants were overwhelmingly female and middle level participants were largely so. Secondary respondents were more evenly divided between male and female program completers.

Table 9

*Gender of Alternative Licensure Program Completers*

Alternative Licensure Program	Female	Male
Elementary	94%	12%
Middle	75%	25%
Secondary	52%	48%

Research Question 1A: Racial Identity

Racial demographic information was identified as the following: 81.1% White, 13.2% Black, 1.8% Hispanic, 2.3% Asian or Pacific, 0.5% American Indian/Alaskan Native, 0.7% International, and 3% Non-specified. Later, participants in the latter five groups were collapsed into one group labeled as “Other” for analysis purposes. Analysis of demographic data related to race was henceforth conducted for three groups: White/Non- Hispanic, Black/Non-Hispanic, and Other. Table 10 displays the identities of respondents.

Table 10

*Race of Alternative Licensure Program Completers*

Race of Program Completers (Combined Elementary, Middle, Secondary)	Percent
Caucasian, Non-Hispanic	81.1 %
Black, Non-Hispanic	13.2 %
Hispanic	1.8 %
Asian or Pacific	2.3 %
American Indian/Alaskan Native	.5 %
International	.7 %
Not Specified	.5 %

In identifying the racial identities of specific programs pertinent to this study (e.g. elementary, middle, and secondary), the following frequencies are displayed in Table 11.

Table 11

*Racial Identity by Program*

Race	Elementary Program	Middle Program	Secondary Program
White	158	89	109
Black	21	23	14
Other	11	5	25

## Research Question 1A: National Identities

According to the National Center for Education Information, alternative licensure was awarded to approximately 71.3% White, 22.2% Black, and 6.7% Other minorities in the state of this particular study's institution. Seventy two percent of those were female and 28% were male. (2010). To compare the demographics of program completers with national demographics, Table 12 summarizes and compares information.

Table 12

*Comparison of Demographic Identities of Alternative Licensure Program Completers*

Gender	This Study's Alternative Licensure Completers	National Alternative Licensure Program Completers (National Center for Educational Information, 2010)	Difference
Female	76%	63%	+13%
Male	24%	37%	-13%
Race			
White	80%	68%	+12%
Black	13%	12%	+1%
Other	6%	20%	-14%

## Challenges to Making National Comparisons by Licensure Program

There were challenges in making comparisons with national identities as middle level licensure is often awarded not as a traditional licensure program but as an add-on to another program, most frequently as an add-on to elementary or secondary program (McEwin, 2007). Therefore, demographic comparisons between the population of this study (where it is a stand-alone license) and the national population (where it is often an add-on license) were problematic.

According to the Bureau of Labor Statistics (2010), US teachers in 2008 totaled nearly three and a half million educators. Additional information from the National Center of Educational Statistics (2010) provided a snapshot of the teaching work force reflected in the state of this study's institution. When disaggregated by school setting employment from these two sources, the following is revealed in Table 13.

Table 13

*Comparisons of Teaching Workforce and This Study's Participants*

2008 Employment	Number	Percentage of Workforce	Participants in This Study	Teachers in This Study's State	
Kindergarten and Elementary Teachers	1,729,000	49.7%	42.8%	56,823 (Elementary)	51.8%%
Middle School Teachers	659,500	19.0%	27.0%		
Secondary Teachers	1,087,700	31.3%	30.2%	49,063 (Secondary)	44.8%%
Total	3,476,200	100%		109,634	

(Bureau of Labor Statistics, 2010; US Department of Education, 2010)

Research Question 1B: *Is there a difference among demographic groups and the reported sense of preparedness among teacher candidates?*

In analyzing data to seek any differences among gender and racial groups in their perceptions regarding a sense of preparedness, descriptive statistics and one-way ANOVA were used. ANOVA was deemed appropriate as calculations involving unequal numbers of participants in groups were existent. To ensure an assumption of homogeneity of variance, Levene's Test of Equality of Error Variances was used. Table 14 displays means and standard deviations regarding respondents' sense of preparedness according to gender.



Table 14

*Sense of Preparedness and Gender Means and Standard Deviations*

Gender	Mean	Standard Deviation
Female	29.5015	3.30048
Male	29.2857	4.06134
Total	29.2087	3.53245

There was a difference in the reported sense of preparedness among teacher candidates regarding gender groups. Females represented approximately 77.2% of respondents while males were represented by 22.8% of respondents. ANOVA calculations revealed that there was a difference among the groups of males and females,  $F(1, 434) = 9.630, p < .05$ . However, the significance ( $p = .002$ ) and the effect size was minimal ( $\eta = .015$ ). This indicated a difference in variance between the independent variable of preparedness and the dependent variable of gender but was so low, less than 2/10 of a percent, that minimal impact was indicated.

Table 15 displays means and standard deviations regarding respondents' sense of preparedness according to racial identity. Among racial groups of white, black, and other, there was no difference indicated in a sense of preparedness.

Table 15

*Sense of Preparedness and Race Means and Standard Deviations*

<b>Race</b>	<b>Mean</b>	<b>Standard Deviation</b>
White	29.1208	3.61055
Black	29.8793	2.90237
Other	28.1600	4.06899
Total	29.1663	3.53245

## Research Question 2

*Among completers of an urban university's graduate certificate program, are there differences across and within programs of teacher preparation?*

To answer research question 2 and its two sub-questions, analysis-of-variance tests were performed in order to measure significance of variable differences among different groups of respondents. One-way ANOVA tests were conducted assuming an equality of variances in the study's population. Use of the analysis of variance allowed the researcher to make comparisons of spreads of mean scores between groups such as these identified in this study. ANOVA calculations were conducted to ascertain the relationship between exit survey completers' sense of preparedness and the particular teacher preparation program recently completed. The independent variable, the program, included one of the following: elementary, middle, or secondary. The dependent variable was the reported sense of preparedness itself.

*Research Question 2A: Is there a significant difference among the reported sense of preparedness of recent graduate certificate students in an urban public university's elementary, middle, and secondary teacher preparation programs?*

In determining the impact of a main effect for this research question, Eta Square,  $\eta^2$ , was used. An effect was deemed very small if  $\eta^2=0-0.01$ , medium if  $\eta^2=0.3-0.5$ , or large if  $\eta^2>0.5$  (Muijs, 2004). In this instance, the main effect was modest,  $F(2,441) = 6.193, p<.05$ . The relationship strength between the program completed and respondents' sense of preparedness was revealed as  $\eta^2 = .002$  indicating a small effect size. This suggests a low proportion of variance between preparedness, the dependent variable, and the level of program completed (e.g. elementary, middle, or secondary).

The *F-test* and *p*-value were used to calculate the relationship significance between teacher preparation programs and candidates' reported sense of preparedness. With a low *p*-value of .002, obviously  $<.05$ , a probability of a relationship among the groups was indicated. R Squared, measuring the level of variance in the preparedness dependent variable, was reported as .027 and the Adjusted R-Squared was reported to be .023, again indicating a somewhat modest level of predictability based on program inclusion.

To ascertain homogeneity of variances, each of the ANOVA tests were evaluated using Levene's Test of Equality of Error Variances. This would address the unequal number of participants in data groups. The significance value ( $p = .006$ ) indicated an assumption of non-equality of variances. The alpha level of 0.05 was considered the test of significance. In other words, the two variances were different. Post-hoc tests were conducted to ascertain the assumption of equal variances in order to control for possible Type I error. This included Tukey and R-E-G-W-Q with an assumption of equal variances and Dunnett's *C* with no assumption of equal variances.

Using Dunnett *C* post testing, possible differences among the three programs were examined. Significant differences were revealed between the following groups:

- Elementary and Middle Program Completers
- Elementary and Secondary Program Completers

Mean differences between elementary and other programs were significant at the .05 level. *P* values revealed significant differences between elementary and middle program completers ( $p=.015$ ) and elementary and secondary program completers ( $p=.006$ ). Table 16 below displays means and standard deviations for respondents' sense of preparedness by the three programs.

Table 16

*Means and Standard Deviations of Preparedness by Program*

Program	Mean	Std. Deviation
Elementary	29.8526	3.17720
Middle	28.7083	3.47233
Secondary	28.6343	3.96325
Total	29.1757	3.55044

Research Question 2B: *Is there a significant difference in the reported sense of preparedness between completers of a graduate certificate enrolled in a distance education teacher preparation program and those in an on campus teacher preparation program?*

For research question 2B, one-way ANOVA was again used to gain information to ascertain any difference between modes of delivery, specifically whether students were online or on-campus program completers. Program completers identified themselves as an online student or an on-campus student through course section numbers when completing the exit survey. Table 17 displays the means and standard deviations for online and on-campus completers' sense of preparedness.

Table 17

*Online and on-Campus Program Completers*

	Number	Mean	Standard Deviation
Online Program Completers	<i>N</i> =47	29.0000	3.45153
On-Campus Program Completers	<i>N</i> =387	29.1886	3.59160

No significance between groups in their perception of preparedness was evident,  $F(2, 440) = .145, p > .05$ . There was no significant differences of the two modes of

delivery, online and on-campus ( $p=.865$ ). However, the low numbers of online completer respondents was a possible factor.

### Research Question 3

*Among completers of an urban university's graduate certificate program, what percentage subsequently enrolls in a Masters of Arts in Teaching program?*

Program completers who subsequently enrolled in the Master of Arts in Teaching program were identified by the university's Graduate School. It was calculated that out of all program completers, 38.7% subsequently enrolled in a Master of Arts in Teaching program. In examining any significant difference in variances between MAT enrollment and a sense of preparedness, descriptive cross-tabulations and one-way ANOVA's were used. Results indicated no significant differences. Table 18 displays means and standard deviations for respondents' sense of preparedness who subsequently enrolled in a Master of Arts in Teaching program and those who did not.

Table 18

#### *Preparedness and Enrollment in a Subsequent MAT Program*

	Mean	Standard Deviation	Number
MAT Enrollment	29.4176	3.44813	170
Non-MAT Enrollment	29.0112	3.63759	268
Total	29.1689	3.56679	438

In looking more closely at participants who subsequently enrolled in the MAT program, Tables 19, 20, and 21, respectively, display the results by program as well as identifying factors of gender and race. Out of the 38.7% of participants who enrolled in the MAT, Table 19 summarizes the percentages of specific program respondents.

Similarly, Tables 20 and 21 summarizes percentages of respondents by gender and race out of the 38.7% of MAT enrollees.

Table 19

*Enrollment in Masters of Arts in Teaching by Program*

Program	Percentage of Specific Program Subsequently Enrolled in MAT Program
Elementary	14.61
Middle	9.58
Secondary	14.61

Table 20

*Enrollment in Master of Arts in Teaching by Gender*

Gender	Percentage by Gender Subsequently Enrolled in MAT Program
Female	29.61
Male	9.11

Table 21

*Enrollment in Master of Arts in Teaching by Race*

Race	Percentage by Race Subsequently Enrolled in MAT Program
White	31.43
Black	5.69
Other	1.59

A factorial ANOVA was calculated to ascertain possible differences among subjects. Independent factors included program (elementary, middle, and secondary) and MAT enrollment/non-enrollment. The dependent factor was preparedness. A Bonferroni Approach was used to minimize the risk of Type 1 error. Results indicated findings of a significant difference,  $F(5, 432) = 3.165, p < .05$ , with an effect size of  $\eta = .035$ . Thus the effect size was considered in the medium range suggesting a more than minimal proportion of variance between groups. Table below summarizes means and standard deviations for preparedness and subsequent enrollment in the Masters of Arts in Teaching program.

Table 22

*Preparedness and Enrollment in Master of Arts in Teaching by Licensure Program*

Licensure Program	MAT Enrollment	Mean	Standard Deviation
Elementary	MAT Enrollment	30.2344	2.74146
	Non-MAT Enrollment	29.6720	3.38110
Middle	MAT Enrollment	29.2619	3.17044
	Non-MAT Enrollment	28.3733	3.66050
Secondary	MAT Enrollment	28.7031	4.07735
	Non-MAT Enrollment	28.5000	3.90369

In calculating pair-wise comparisons, there were revealed significant differences,  $F(2, 432) = 6.399, p < .05$  with an effect size,  $\eta = .029$ . These differences were between elementary and middle program completers ( $p = .015$ ) and elementary and secondary program completers ( $p = .005$ ). No significant differences were revealed between middle and secondary program completers. In considering differences regarding subsequent

MAT enrollment and preparation, there were none indicated ( $p = .121$ ). Table 23 displays the pair-wise comparisons below.

Table 23

*Comparisons of Elementary, Middle and Secondary Program Completers and Preparedness*

Licensure Program	Licensure Program	Mean Difference	Standard Error	Significance
Elementary	Middle	1.136	.434	.009
	Secondary	1.352	.409	.001
Middle	Elementary	-1.136	.434	.009
	Secondary	.216	.458	.637
Secondary	Elementary	-1.352	.409	.001
	Middle	-.216	.458	.637

Discussion of these findings will be presented in Chapter 5.



## CHAPTER 5: DISCUSSION

This chapter will focus on conclusions and discussion of research findings in answer to the three research questions and their sub-questions.

Research Question 1: *What is the reported sense of preparedness of university graduate students who have completed their program of teacher preparation through an urban public university graduate certificate program?*

This study's alternative licensure respondents were likely to rate their program of preparation highly. On an interesting note, however, they were actually likely to rate their preparation very highly with a reported median of thirty on a possible scale of three to thirty three. Approximately 25% of the participants reported a total score of 33 with over half of respondents reporting a score of 30 or above. Less than 1% reported a score of 20 or lower. The high rate of return adds validity to the results. Candidates' high sense of preparedness bodes well for beginning their teaching careers. A positive belief in one's level of preparedness for the classroom would be a desired outcome for an educational program because it aids in the development of teacher efficacy. It would certainly benefit our schools to encourage teacher efficacy in order to improve student outcomes (Ross, 1995). Also, in providing viable alternative pathways to teacher preparation, it is possible to fulfill basic licensure requirements while also promoting teacher efficacy (Tournaki, Lyublinskaya, & Carolan, 2009).

In a review of research on teacher efficacy, Ross has concluded that teachers who see themselves as effective also implement challenging goals for both themselves and

their students, display determination in meeting challenges, and take accountability for their students' learning (1995). In considering the high sense of preparedness reported by study participants, their perceptions are certainly promising for future classroom success. However, further deliberation on the reality of respondents' perceptions must arise. In other words, is this high sense of preparedness totally accurate or possibly influenced by other extraneous factors such as previous life or teaching experiences? Additional research into post-teaching perceptions of participants would be warranted. As the future of the teaching profession will doubtless encompass a variety of transformations, it is certainly reasonable to include alternative licensure preparation programs and their completers among them.

Research Question 1A: *What are the demographic identities of teacher candidates in the graduate certificate program? How do these demographic identities compare to the national demographic identities of congruent programs?*

In comparing identities of this study's alternative licensure participants with those across the nation, there were some surprising differences. Data specific to gender revealed that the majority of this study's program completer respondents were white and female. This was certainly consistent with national identities of similar programs (Feisttister, 2010). However, in looking more closely at the numbers of female respondents, this group was actually 13% higher in comparison with the national percentage. At the same time, male respondents were 13% lower than national percentages of males in alternative licensure programs. This was unexpected and would indicate future further scrutiny.

Data specific to racial identity revealed differences as well. Although both this study's alternative licensure program and similar national programs share a majority of

white participants, there was a distinct difference of note. There was a 12% higher number of white participants in this study's respondents (80%) as compared to similar national programs (68%). Black participant identities (13%) were very similar to the national identities (12%). The greatest difference revealed concerned the non-white and non-black minority numbers of program participants (6%) as compared to similar national programs (20%). A difference of 14% fewer of this category of identity was noted. As many programs experience larger numbers of minority students in alternative licensure programs, this was a notable difference. Demographic identities and comparisons with national identities are displayed in Table 24 below.

Table 24

*Comparison of Demographic Identities of Alternative Licensure Program Completers*

Gender	This Study's Alternative Licensure Completers	National Alternative Licensure Program Completers	Difference
Female	76%	63%	+13%
Male	24%	37%	-13%
Race			
White	80%	68%	+12%
Black	13%	12%	+1%
Other	6%	20%	-14%

In making comparisons with alternative licensed teachers in similar urban areas, these numbers again are surprising. Thirty-eight percent of alternative licensed teachers in large cities with populations of at least 250,000 have reportedly been non-white (Feistmeister, 2005). This is assuredly different from the 19% of non-white participants of this study in a comparably populated city.

Research Question 1B: *Is there a difference among demographic groups and the reported sense of preparedness among teacher candidates?*

Results of the study suggest that the various identified demographic groups had little to no significant difference in regards to a sense of preparedness for the classroom. The difference between male and female groups of respondents was extremely minimal ( $p=.002$ ) with a low effect size ( $\eta^2=.015$ ). No differences were revealed among the study's racial groups.

Research Question 2: *Among completers of an urban university's graduate certificate program, are there differences across and within programs of teacher preparation?*

Displayed in Table 25 below is a summary of Graduate Certificate participants across and within elementary, middle and secondary programs over the course of the five semesters of data collection from fall 2008 and fall 2010.

Table 25

*Gender and Race Demographics of Study Participants*

Gender	Percentage
Female	76%
Male	24%
Race	
White	80%
Black	13%
Other	6%

Demographically, study participants were largely white and female. This was certainly true within elementary and middle alternative licensure programs. Secondary

program participants, however, were more equally distributed in terms of gender with males comprising 48% and females comprising 52% of the study population.

Research Question 2A: *Is there a significant difference among the reported sense of preparedness of recent graduate certificate students in an urban public university's elementary, middle, and secondary teacher preparation programs?*

Results of the study suggested that there were differences of significance between elementary and middle program completers' sense of preparedness ( $p=.015$ ). There was also a significant difference between elementary and secondary program completers ( $p=.006$ ). The effect size was modest ( $\eta^2=.027$ ) but findings were of interest and warranted investigation of the programs' actual content. Inspection revealed that the elementary alternative licensure education program actually included additional hours for initial licensure (27 hours) as opposed to both middle and secondary programs (18 hours). The reverse was true of a second phase of post-licensure programs leading to a Masters of Arts in Teaching degree. Middle and secondary programs required a greater number of hours in Phase 2 as compared to fewer required hours for the elementary program (Luce, personal communication, 2011).

According to the College of Education's academic planning sheets for the period of data collection, elementary programs included the following in its 27 hours of coursework for an alternative pathway to initial licensure:

Intensive Orientation to Teaching (6)

Teaching Literacy (3)

Teaching Mathematics (3)

Assessing, Modifying, and Integrating Literacy Instruction (3)

Assessing, Modifying, and Integrating Math Instruction (3)

Teaching and Integrating Science (3)

Teaching and Integrating Social Studies (3)

Elementary Education Clinical Experience (3)

Middle and secondary programs included 18 hours of the following coursework for an alternative initial licensure pathway plus any content area deficiencies:

Planning for K-12 Teaching (3)

Integrating Reading and Writing in the Content Area (3)

The Middle Grades Experience or Secondary Experience (3)

Diverse Learners (3)

Middle and Secondary Science Methods, Teaching Mathematics to Middle level Learners, Teaching Mathematics to Secondary learners, Middle and Secondary Social Studies, or Teaching English/Communication Skills to Middle/Secondary Learners (3)

Analysis of K-12 Teaching (3)

Thus, the elementary program participants experienced an additional nine hours of preparation prior to completing the measurement instrument (e.g. exit survey) and indicating their sense of preparation. This could be construed as a possible factor in respondents' perceptions. Furthermore, it has been reported that elementary teacher candidates are more likely to possess an initial belief in the effectiveness of their program (Book & Freeman, 1986). There is also evidence that elementary and secondary teacher candidates may vary in their attributes regarding "expectations, prior teaching experience, and reasons for choosing a teaching career" (Killian & McIntyre, 1988, p. 36). Therefore, it could be an influencing factor that elementary candidates were more open, if you will, to a program of preparation and their perception of its impact on their development.

However, again, the effect size was extremely small and should definitely be considered prior to drawing any active conclusions.

Research Question 2B: *Is there a significant difference in the reported sense of preparedness between completers of a graduate certificate enrolled in a distance education teacher preparation program and those in an on campus teacher preparation program?*

Study results further suggest that participants' sense of preparedness was not affected by the mode of delivery –online or face-to face on the university's campus ( $p=.865$ ). Comparisons of the two groups are displayed below in Table 26.

Table 26

*Online and on-Campus Program Completers*

	Number	Mean	Standard Deviation
Online Program Completers	$N=47$	29.0000	3.45153
On-Campus Program Completers	$N=387$	29.1886	3.59160

Both groups of program completers rated their preparation similarly highly. Both groups of program completers obviously had comparable means and standard deviations. As both online and on-campus groups followed the same program requirements and shared similar course content, this was not surprising. Students in both online and face-to-face modes of program delivery have reported similar experiences and satisfaction with their learning (Daves & Roberts, 2010). Also, as noted by Maeroff (2003), the integrity and values of a program must be preserved in distance education as it is in on-campus programs. The similarity in content and expectations in both modes of delivery appeared to preserve the integrity of the program thus resulting in successful preparation in delivery modes of both online and on-campus settings.

The obviously small numbers in the data set were surprising and certainly warrant further future investigation. However, it must be noted that respondents completed exit surveys used in this study in connection to their final course – either an online or an on-campus course. It would be of interest to ascertain greater information on distance education students as to the overall quantity of their online coursework prior to completion of the exit survey or, perhaps, their perceptions of structural aspects of the delivery mode as opposed to the actual delivered content.

*Research Question 3: Among completers of an urban university's graduate certificate program, what percentage subsequently enrolls in a Masters of Arts in Teaching (MAT) program?*

Out of all program completers, approximately 39% went on to enroll in the master level program offered in this college of education. Nationally, it is not unusual for teachers prepared through alternative routes of licensure to also seek subsequent Master of Arts in Teaching (Feistritzer, 2009). In this particular college of education, elementary program completers who continued in the next phase would then embark on 12 additional hours of coursework. Middle and secondary program completers who continued in the next phase would be responsible for 18 hours of further coursework. It is possible to speculate as to the reasons for continuing with a MAT program of study including a desire for additional credentials or potential for increased income for possession of a master's degree. It could also well be that respondents would enroll in a degreed program at a later date.

Regardless, however, results of the study indeed suggested that there was no significant difference in a sense of preparedness between participants who only completed the alternative licensure program of this study and those who later enrolled in



the College of Education's Master of Arts in Teaching program ( $p = .246$ ). Displayed in Table 27 below is a summary of findings.

Table 27

*Sense of Preparedness and Enrollment in a Subsequent MAT Program*

	Mean	Standard Deviation	Percentage
MAT Enrollment	29.4176	3.44813	38.7%
Non-MAT Enrollment	29.0112	3.63759	61.3%
Total	29.1689	3.56679	100%

In further examining the data by specific program, some interesting findings were revealed. Surprisingly, elementary (14.6%) and secondary (14.6%) program completers were slightly more likely to pursue the MAT degree than middle level (10%) program completers. As noted earlier, middle and secondary alternative licensure programs were very similar in their content and varied by only one course (*Middle Experience* or *Secondary Experience*). Both programs were comprised of eighteen hours of coursework as compared to twenty seven hours for the elementary program. Any other added coursework might be attributed to individual's possible content deficiency-related requirements. To complete the subsequent phase to achieve the MAT degree, an additional eighteen hours was necessary for middle and secondary participants with only twelve addition hours were required for elementary participants. Data, however, did not reveal any clear correlation to explain the differences.

It was also revealed that females were more likely to subsequently enroll in the MAT program than males. Thirty percent of females enrolled in the MAT after completion of their initial licensure program while only 9% of males did so. Lastly, white

program completers were more likely to enroll in the MAT program than other groups.

Approximately 32% of white participants enrolled in the MAT program after initial licensure as compared to other population groups in this study (black = 6%, other = 2%).

In conclusion, the majority of program completers reported a high sense of preparedness. Significant differences across programs were suggested where elementary program completers reported a very slightly higher perception of their preparedness for the classroom as compared to middle level program completers ( $p = .015$ ) and secondary program completers ( $p = .006$ ). The modes of delivery (e.g. online, on-campus) did not indicate a significant difference between middle and secondary program completers' sense of preparedness, keeping in mind that elementary program completers did not include any online completers, only face-to-face participants.

Although there was no indication of any significant difference in a sense of preparedness between programs and subsequent enrollment in the Master of Arts in Teaching degree program, there was a slightly higher percentage of elementary and secondary completers (approximately 15%) who later enrolled in the masters level program as compared to middle school completers (10%). Data also suggested that females (30% of the study's female population) were more likely than males (9% of the study's male population) to enroll in the MAT program and white program completers (31%) were more likely to do so than black program completers (6%) and other minority program completers (2%). In short, white females were more likely to subsequently enroll in the Masters of Arts program after completing their Graduate Certificate alternative licensure program. A majority of white and female enrollees certainly corresponds with national demographic identities of both programs of teaching preparation and the general teaching workforce. The most important conclusive outcome

of this study's findings remains that alternative licensed program completers reported a high sense of preparation for the classroom which indicates a higher likelihood of later teacher effectiveness.

## CHAPTER 6: CONCLUSIONS

In this chapter will be discussed the conclusions drawn from this study's findings. The Theoretical Framework will be revisited. Limitations, implications for stakeholders, and recommendations for future research will also be discussed.

In considering the desired outcome of our nation's schools, successful students who are prepared for the next level of their education, this study focused on the major factor of the effective teacher in the classroom. This study has purposefully focused on the roots of teacher efficacy: a sense of preparedness. Specifically, the scrutiny was placed on teacher candidates' perceived sense of preparedness after completion of an alternative licensure program. These self-reported perceptions of confidence are often key to later subsequent success in the classroom (Poutou, 2007). Results of this study certainly indicated a high degree of confidence in that sense of preparedness. In reconsidering our continuum in Figure 3 below, this study posits that in order to produce successful students who are career and college ready, effective teachers must be a commonality in classrooms.

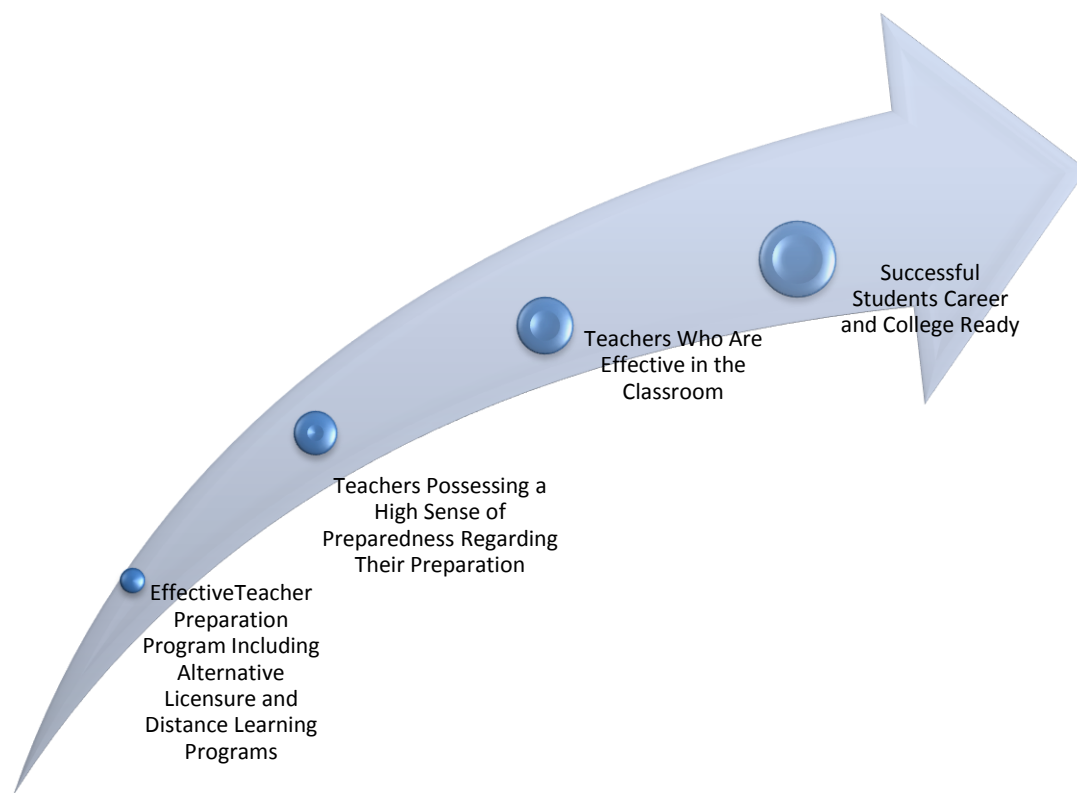


Figure 3. Revisiting a Sense of Preparedness in Relation to a Teacher Preparation Program and the Classroom

Effective teachers typically possess a degree of efficacy in their profession that is largely inspired by a sincere sense of preparedness. For this study, that sense of preparedness is reflected in respondents' self-reported perceptions regarding areas of content pedagogy, diverse learners, multiple instructional strategies, motivation and management, communications and technology, planning, assessment, professional development, and school and community involvement, and work with families. Thus, their sense of preparedness has as a foundation the principles of the INTASC standards which have been commonly accepted for novice teachers. That same sense of preparedness is nurtured largely by the program of preparation that, in turn, has the responsibility of producing effective teachers through various pathways and modes of delivery.

## The Theoretical Framework Revisited

The theoretical framework was based on two main foundations: 1) efficacy and a sense of preparedness, and 2) the principles of the Interstate New Teacher Assessment and Support Consortium (INTASC) standards. The following reflects a return to the dual foundations of this study and combines the two in discussing the construct of preparedness. The construct of preparedness created for this study successfully combined the nationally recognized INTASC standards with the concept of preparedness. The standards themselves were comprised of principles suitable for measuring this particular concept. Thus, it was acceptable that INTASC principles coupled with suitable methodology constituted a fitting standards-based construct permitting teacher educators to make decisions regarding their programs (Lang & Wilkinson, 2008). Use of this construct allowed for interpretation of program completers' sense of preparedness across and within programs and to draw conclusions on those interpretations.

Efficacy and a sense of preparedness were considered pivotal to positively affecting student success in the classroom. A sense of preparedness ignites teachers' confidence where they believe in the surety of their teaching abilities. Therefore programs preparing educators have a charge to instill this sense of preparedness. That sense of preparedness fosters the teacher self-efficacy required to prepare students successfully. This desired outcome of program completers valuing their experiences, skills and knowledge is crucial to teacher effectiveness and student success (Hoy & Woolfolk, 1990; Ashton, 1984). Teachers possessing a sense of preparedness and who are efficacious in their outlook are likely to be more creative, more reflective, and to make changes in their teaching in order to positively impact their students, particularly with students with lower achievement levels (Alderman, 2004). In short, the strength of

teacher efficacy can have profound effects over the span of a career (Tschannen-Moran & Hoy, 2001).

The principles of the INTASC standards have constituted universal understandings for novice teachers since the early 1990's. As of April of 2011, INTASC standards have been revised in order to continue guidance of beginning teachers. They certainly validate and continue the function of the original INTASC standards and expressed "what teachers should know and be able to do to ensure every K-12 student reaches the goal of being ready to enter college or the workforce in today's world" (Council of Chief State School Officers, 2011, p. 3). In this study, the tenets of INTASC were bolstered by a wealth of research supportive of the intent as well as the content of those standards.

#### Implications of Research

Implications of this research have effects on stakeholders most closely connected to classrooms, teachers, and P-12 students, but also on all of us. All stakeholders must address the vision of a more equitable education system in the United States (Petrovitch, 2005). The following summarizes implications for teacher candidates and teachers, teacher educators/researchers, and P-12 schools, students, parents, and policymakers.

Teacher Candidates/Teachers require a high sense of preparedness prior to entering the classroom. Thus, leaving a teacher education program possessing such a sense would certainly be desirable in developing an efficacious perspective towards teaching. Greater preparation for the classroom often results in classroom teachers who possess confidence and foster student success (Darling-Hammond, 2000). Most teachers who have entered the teaching profession rated their preparation program highly (89%) but also often rated those programs much lower (28%) in facing classroom challenges

after they entered the classroom (Hart, 2010). Thus, further long-term scrutiny of teachers' sense of preparation is indicated.

Teacher Educators/Researchers should view alternative licensure program completers' high sense of preparedness in two ways. First, this is a validation of the programming being offered to their students enrolled in an alternative licensure program. That these students feel that they are prepared for the P-12 classroom is testament to a valuable learning experience. Second, further assessments of programs using student feedback would be most helpful in scrutinizing current programs and making possible future revisions. As programs across the nation vary in their graduates' perceptions, it would be beneficial to self-evaluate those programs in order to further develop their effectiveness (Darling-Hammond, Chung, & Frelow, 2002). In ascertaining the reality of respondents' reported perceptions, longitudinal studies which involve further inquiry into perceptions of preparation over time would be helpful. Additionally, integrating perspectives of students in distance education programs could increase providers' understanding and assessment of online programs (Zhu, 2006).

P-12 Schools, Students and their Parents are the ultimate beneficiaries of programs whose teacher candidates have built a sense of preparedness for the classroom. Teacher preparation and experience play significant roles in student success (Aaronson, Barrow, & Sanders, 2007). Therefore, career and college readiness is certainly impacted by the caliber of effective teachers. College enrollment directly after high school graduation was 70% in 2009 with lower percentages reported for students of low income (55%) or Hispanic (62%) or Black families (63%) (Aud, Hussar, Kena, Bianco, Frohlich, & Kemp, 2011). A cumulative impact of effective teachers over time can most likely result in better prepared students.



Policy Makers charged with governance of higher institutions granting education degrees and licensure should heed the need for high quality teacher preparation programs and their regular oversight. More specifically, programs should be scrutinized for producing teachers who are well prepared to be effective in our nation's classrooms.

#### Recommendations for Future Research

There are many possibilities for future research triggered by this study. As teaching, the role of teachers, and education in the United States are currently in a state of flux, further research in teacher preparation, program assessments, and related research is paramount. The following summarizes a few recommendations for future research which could have impact on the field of education:

1. This study triggers curiosity regarding further examination of teacher candidates' perceptions from program completers' exit surveys and other measurement tools. Possibly, greater examination and cross-comparisons of other factors such as the quality of field experiences, content-related coursework, education-related coursework, or the value of advising could also be targeted. Program evaluations of those might prove informative as well.
2. Additional research on alternative licensure programs and their impact on student achievement is needed. These programs are not likely to fade. Therefore, scrutiny of their effectiveness as they continue is crucial. Longitudinal studies would deliver greater information on long-term effects of preparation and program completers' perceptions. In other words, does the highly reported sense of preparedness continue long past the point of program completion?
3. Research seeking information on perspectives from other sources such as faculty, school personnel, or P-12 students would aid in creating a fuller multi-

dimensional picture of a sense of preparedness for the classroom. As outcome based data becomes more prevalent in twenty first century American education, it would be proactive to seek possible connections between teacher candidates' and teachers' sense of preparedness and their students' academic outcomes.

4. As greater numbers of online program students complete their program, it would be of definite value to continue to ascertain their perceptions of preparedness. Using other means of comparing their perceptions with on-campus program completers would have value as well. It would also be of benefit to discover further data on distance education program completers' subsequent pursuit of Master of Arts in Teaching.
5. As this study solely focused on elementary, middle, and secondary teacher candidates, pursuing research on other program areas such as TESL, foreign languages, or special education would be informative. Pursuing similar data on programs on a state, regional or national level would produce a bigger picture of teacher preparation and preparedness for the classroom.
6. A longitudinal study of program completers' perspectives over the coming decade would encompass a larger sampling with more definitive results. This would also aid in ascertaining teachers' sense of preparation as their classroom experiences increase.
7. Using program completer's sense of preparedness with student outcomes would garner valuable information on the connection between teacher's preparation and their classroom performance.
8. Researching the theory of academic optimism as a lens through which to analyze similar studies to this one would provide rich information on classroom teacher

perspectives and impact. The construct of academic optimism refers to teacher beliefs in their own skills as well as the learning abilities of their students and the support they can expect from their students' parents (Beard, Hoy, & Hoy, 2010). Pursuit of further information on this topic would be of benefit to teacher effectiveness as well as the profession itself.

### Study Limitations

*Results of the study* pertain to a mid-sized urban university in the southeastern United States. Therefore, findings reflect the singular context and participants of this site and may not be akin to findings at other alternative licensure teacher preparation sites.

*Participants' self-reporting of their perceptions* formed the basis for the measurement instrument. Although the instrument itself is statistically valid, the personal perceptions of respondents may or may not reflect the same findings from other sources of perception such as faculty or school personnel. It may also be that respondents' beliefs and perceptions regarding their preparation program combine with personal beginning attitudes towards teaching coursework in general. For instance, Book and Freeman (1986) have suggested that elementary education pre-service teachers are more apt to be predisposed to have confidence in their preparation process. Therefore, additional study would be of benefit.

*Participants' past or current experiences* may well have had impact on their sense of preparedness. It was unknown based on the data collected for this study which alternative licensure participants were actually practicing in the classroom prior to a specific program's completion and which participants were not. This would include past teaching experiences, length of experiences, or even other experiences that would

technically be deemed non-teaching and yet involved skills that could be applicable to the classroom.

In this study, the principals of INTASC standards and a sense of preparedness were woven into a theoretical framework. Similarly, INTASC-based exit survey items were combined to comprise a single measurable construct of preparedness. Hopefully, this measurement led “to information about what students are learning and what they are not learning . . . and is “a predictor of future behavior and a tool for both individual and program improvement.” (Lang & Wilkinson, 2008, p.4). In improving the future of effectiveness in the nation’s teaching force, it is hoped that the cumulative effects over time with a continual sequence of effective teachers will result in successful students who are indeed career and college ready.

In considering teacher education programs, there will continue to be a range of avenues to teaching licensure. However, as noted by the American Educational Research Association, “although research on the impact of different types of teacher education programs does not provide clear evidence of the superiority of any particular program type (e.g., 4-year vs. 5-year, traditional vs. alternative), it does suggest that program components, such as clear and consistent vision of teaching and learning, are related to teacher quality and student achievement” (AERA, 2005).

## Conclusion

In conclusion, one response to the national dilemma of low graduation completion rates is to ensure that effective teachers with a sense of preparedness for the classroom, including those prepared via an alternative path and/or distance learning, are provided for students on elementary, middle, and high school levels. The positive connection between teacher quality and student achievement has been overwhelmingly recognized (Clotfelter,

et al., 2007). Furthermore, the case in favor of licensure, or the fulfillment of certification requirements by individual states, is strong. Students with fully licensed teachers in their classrooms are much more likely to make higher achievements than those students who are not fully certified or teaching outside their content area (Buck & O'Brien, 2005).

In preparing effective teachers, it is necessary for colleges of education to produce teachers possessing a strong sense of preparedness for the classroom. Such programs enhance “teacher confidence and efficacy, with implications for beginning teachers’ effectiveness and their commitment to teaching” (Darling-Hammond, Chung, & Frelow, 2005). In turn, this sense of preparedness contributes to the development of self-efficacy. As has been noted, teacher self-efficacy in the classroom can well produce changes in professional behavior and student academic progress (Ashton, 1984; Tschannen-Moran & Hoy, 2001). Collectively, whole school staffs of efficacious teachers may then have significant impact on students’ learning (Goddard, Hoy, & Hoy, 2000; Tschannen-Moran & Barr, 2004). Schools with a core of such active teachers can accomplish much towards affecting student outcomes. “They can help their students reach higher levels of academic performance than those students otherwise would reach. Through their teachers, then, schools can be the key mechanism for helping students meet high standards” (Wenglinsky, 2002, p. 24).

To address the challenge of reaching Secretary of Education Duncan’s goal of students leaving high school career and college ready, this study focused on an alternative licensure program for teacher preparation. Within that broad topic, this research scrutinized perceptions of alternative licensure candidates regarding their sense of preparedness for classroom teaching success. Many indications for future research persist which would build on our current knowledge base regarding teacher’s sense of

preparedness for the classroom, teacher preparation, and effective teachers. There is still much to be considered as the nation's educational system faces growing challenges amid preparing successful students who are, in fact, career and college ready. As remarked by Marian Wright Edelman, current president of the Children's Defense Fund (2011), "we are weaving a new sense of community and a sense of possibility. Education is a precondition to survival in America today. Investing in children is not a national luxury or a national choice. It's a national necessity".

To continue to address the challenges and reality of teacher preparation, we must increase understanding of this topic's significance and its impact. Future vigilance is warranted in addition to further research on the preparation of educators, impact of our teachers, and longitudinal studies regarding long-term effects of teachers prepared via distance learning, alternative licensure, and more traditional avenues of preparation. As we consider the training of these future educators, it would benefit all stakeholders to keep in mind the importance of sufficient preparation and establishment of a sense of preparedness for the classroom by our nation's teacher candidates – candidates who will one day wield such influence over students' eventual career and college readiness. "Investing in knowledgeable and skillful teachers who are both willing and able to do what is right for children is the only way to create successful education for all" (Darling-Hammond, et al., 1995, p. 167).

Finally, as spoken by the current United States Secretary of Education,

“To keep America competitive, and to make the American dream of equal educational opportunity a reality, we need to recruit, reward, train, learn from, and honor a new generation of talented teachers. But the bar must be raised for successful teacher preparation programs because we

ask much more of teachers today than even a decade ago. Today teachers are asked to achieve significant academic growth for all students at the same time that they instruct students with ever-more diverse needs.

Teaching has never been more difficult, it has never been more important, and the desperate need for more student success has never been so urgent.

Are we adequately preparing future teachers to win this critical battle?"

(Duncan, 2009).

## REFERENCES

- Aaronson, D., Barrow, L., & Sander, W. (2007). *Teachers and student achievement in the Chicago Public High Schools*. Retrieved from [www.csa.com](http://www.csa.com)
- Adams, H. (1918). The education of Henry Adams. Retrieved from <http://www.online-literature.com/henry-adams/education-of-henry-adams>
- Alban, T., Proffitt, T. D., & SySantos, C. (1998). *Defining performance based assessment within a community of learners: The challenge & the promise*. Retrieved from [www.csa.com](http://www.csa.com)
- Aldeman, C. (2010). College- and career-ready: Using outcomes data to hold high schools accountable for students success. Education Sector. Retrieved from [http://www.educationsector.org/usr\\_doc/College-Ready.pdf](http://www.educationsector.org/usr_doc/College-Ready.pdf).
- Alderman, K. (2004). *Motivation for achievement: Possibilities for teaching and learning*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Allen, I. E. & Seaman, J. (2008). Staying the course: Online education in the United States, 2008. Needham, MA: Sloan Consortium.
- Alliance for Excellent Education. (2008). *Dropouts, diplomas, and dollars: U.S. high schools and the nation's economy*. Retrieved from <http://www.all4ed.org/files/Econ2008.pdf>.
- Almy, S. & Theokas, C. A. (2010). Not prepared for class: High-poverty schools continue to have fewer in-field teachers. The Education Trust. Retrieved from <http://www.edtrust.org/sites/edtrust.org/files/publications/files/Not%20Prepared%20for%20Class.pdf>
- Ambach, G. M. (2000). Improving student learning by improving teaching. In Barth, P., (Ed.). Honor in the boxcar: Equalizing teacher quality. *Thinking K-16*, 4(1) Retrieved from [www.csa.com](http://www.csa.com)
- American Association of Colleges of Teacher Education and the Partnership for 21st Century Skills. (2010). Educator preparation: A vision for the 21<sup>st</sup> century. Retrieved from [http://aacte.org/email\\_blast/president\\_e-letter/files/02-16-2010/Educator%20Preparation%20and%2021st%20Century%20Skills%20DRAFT%20021510.pdf](http://aacte.org/email_blast/president_e-letter/files/02-16-2010/Educator%20Preparation%20and%2021st%20Century%20Skills%20DRAFT%20021510.pdf)
- American Association of Colleges of Teacher Education and the Partnership for 21st Century (2010). Evidence of teacher effectiveness by pathway to entry into teaching. Retrieved from [http://aacte.org/pdf/Publications/Reports%20\\_Studies/Evidence%20of%20Teacher%20Effectiveness%20by%20Pathway.pdf](http://aacte.org/pdf/Publications/Reports%20_Studies/Evidence%20of%20Teacher%20Effectiveness%20by%20Pathway.pdf)



- American Education Research Association. (2005). The impact of teacher education: What do we know? Retrieved from [http://www.aera.net/uploadedFiles/News\\_Media/News\\_Releases/2005/STE-WhatWeKnow1.pdf](http://www.aera.net/uploadedFiles/News_Media/News_Releases/2005/STE-WhatWeKnow1.pdf)
- Anderson, K., Allen, L., Brooks, K., DiBiase, W., Finke, J., Gallagher, S., Harris, K., Jordan, L., Post, P. Pugalee, D., Spooner, M., White, R., & Calhoun, M. (2004). Rising to the challenge: Preparing excellent professionals: The conceptual framework for professional education programs at UNC Charlotte (2<sup>nd</sup> Ed.). Retrieved from [http://education.uncc.edu/coe/Conceptual\\_Framework/conceptual%20framework.pdf](http://education.uncc.edu/coe/Conceptual_Framework/conceptual%20framework.pdf).
- Andrew, M. D. (2005). Teacher Preparation: Transition and Turmoil. In Glenn, W. J., Moss, D. M., & Schwab, R. L. (Eds.). *Portrait of a profession: Teaching and teachers in the 21st century*. Educate US. Westport, Conn: Praeger. (pp. 27-62)
- Aristotle (2010). Center for the Study of Great Ideas web site. Retrieved from <http://www.thegreatideas.org/>.
- Ashton, P. (1984). Teacher efficacy: A motivational paradigm for effective teacher education. *Journal of Teacher Education*, 35(5), 28-32. Retrieved from [www.csa.com](http://www.csa.com)
- Ashton, P. T., Webb, R. B., & Doda, N. (1983). *A study of teachers' sense of efficacy. final report, executive summary* Retrieved from [www.csa.com](http://www.csa.com)
- Aud, S., Hussar, W., Kena, G., Bianco, K., Frohlich, L., Kemp, J., & National Center for Education Statistics, (2011). The Condition of Education 2011. NCES 2011-033. *National Center for Education Statistics*, Retrieved from EBSCOhost.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Barton, P. E. (2003). Parsing the achievement gap: Baselines for tracking progress. Princeton, NJ: Educational Testing Service. Retrieved from <http://www.ets.org/research/pic/parsing.pdf>
- Beard, K., Hoy, W. K., & Hoy, A. (2010). Academic optimism of individual teachers: Confirming a new construct. *Teaching and Teacher Education: An International Journal of Research and Studies*, 26(5), 1136-1144. Retrieved from EBSCOhost.

- Berry, B., Daughtrey, A., & Wieder, A. (2010). Preparing to lead an effective classroom: The role of teacher training and professional development programs. Center for Teaching Quality. Retrieved July 19, 2010, from <http://www.eric.ed.gov/PDFS/ED509718.pdf>
- Boyd, D. J., Grossman, P. L., Lankford, H., Loeb, S., & Wyckoff, J. (2009). Teacher preparation and student achievement. *Educational Evaluation and Policy Analysis, 31*(4), 416-440. Retrieved from <http://ssrn.com/abstract=1264576>
- Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2004). In Hess, F. M., Rotherham, A. J. & Walsh, Kate (Eds.) *A Qualified Teacher in Every Classroom: Appraising Old Answers and New Ideas*. Cambridge, MA: Harvard Educational Press.
- Brownell, M. T., & Pajares, F. (1999). Teacher efficacy and perceived success in mainstreaming students with learning and behavior problems. *Teacher Education and Special Education, 22*(3), 154-164. Retrieved from [www.csa.com](http://www.csa.com)
- Buck, B., & O'Brien, T. (2005). *Eight questions on teacher licensure and certification: What does the research say?* Education Commission of the States. Retrieved from <http://www.ecs.org>
- Bullough, R. V. (2008). *Counternarratives: Studies of teacher education and becoming and being a teacher*. Albany, NY: State University of New York Press.
- Bullough, R. V., & Young, J. R. (2002). Learning to teach as an intern: Teaching and the emotions. In R.V. Bullough *Counternarratives: Studies of teacher education and becoming and being a teacher*. (2008). Albany, NY: State University of New York Press, 105-118.
- Burbules, N. C., & Callister, T. A., Jr. (2000). Universities in transition: The promise and the challenge of new technologies. *Teachers College Record, 102*(2), 271-293. Retrieved from [www.csa.com](http://www.csa.com)
- Bureau of Labor Statistics (2010). Teachers: Kindergarten, middle, and secondary. Occupational Outlook Handbook. Retrieved from [85  
http://www.bls.gov/oco/ocos318.htm#employ](http://www.bls.gov/oco/ocos318.htm#employ)
- Capraro, M., Cpraro, R., & Helfeldt, J. (2010). Do differing types of field experiences make a difference in teacher candidates' perceived level of competence? *Teacher Education Quarterly, 131-154*. Retrieved from <http://www.docstoc.com/docs/46939199/Do-Differing-Types-of-Field-Experiences-Make-a-Difference-in-Teacher-Candidates-Perceived-Level-of-Competence>.

- Carey, K. (2004). The real value of teachers: Using new information about teacher effectiveness to close the achievement gap. In P. Barth (Ed.) *Thinking K-16*. The Education Trust 8(1). Retrieved from [http://www.edtrust.org/sites/edtrust.org/files/publications/files/Spring04\\_0.pdf](http://www.edtrust.org/sites/edtrust.org/files/publications/files/Spring04_0.pdf)
- Carroll, T. (2010). National Commission on Teaching and America's Future. *Reinventing Teacher Preparation*. Retrieved from <http://www.ecs.org/html/offsite.asp?document=http%3A%2F%2Fwww%2Eenctaf%2Eorg%2F>
- Cartledge, G., & Johnson, C. T. (1996). Inclusive classrooms for students with emotional and behavioral disorders: Critical variables. *Theory into Practice*, 35(1), 51-57. Retrieved from <http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=2&hid=109&sid=56aff289-2ff9-45d5-91c0-6825c8a00f32%40sessionmgr111>
- Castro, A. J. (2010). Themes in the research on preservice teachers' views of cultural diversity: Implications for researching millennial preservice teachers. *Educational Researcher*, 39(3), 198-210.
- Center for Urban and Multicultural Education (no date available). Teacher licensure(certification): Research brief. Indiana University School of Education. Retrieved from <http://education.iupui.edu/cume/>
- Cibuka, J. C. (2010). Taking assessment to the next level: Incorporating new types of data-driven assessment in preparation programs. *Quality Teaching: The Newsletter of the National Council for Accreditation of Teacher Education*. Retrieved from [http://www.ncate.org/documents/QualityTeaching/NCATE\\_QT%20Spring10-Apr19.pdf](http://www.ncate.org/documents/QualityTeaching/NCATE_QT%20Spring10-Apr19.pdf)
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2007). *Teacher credentials and student achievement in high school: A cross-subject analysis with student fixed effects*. *NBER working paper no. 13617*. National Bureau of Economic Research. Retrieved from <http://www.nber.org/papers/w13617>
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2005). Who teaches whom? Race and the distribution of novice teachers. *Economics of Education Review*, 24(4), 377-392.
- College of Education (2009). Annual data report: Introduction. Retrieved from [http://education.uncc.edu/assessment/secure/2009\\_Data\\_Report.htm](http://education.uncc.edu/assessment/secure/2009_Data_Report.htm).
- Cooney, S. (2000). A middle grades message: A well-qualified teacher in every classroom matters. Southern Regional Education Board. Retrieved from [http://publications.sreb.org/2000/00V39\\_MiddleGradesMessage.pdf](http://publications.sreb.org/2000/00V39_MiddleGradesMessage.pdf).

- Council of Chief State School Officers. (2011, April). Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards: A Resource for State Dialogue. Washington, DC: Author. Retrieved from [http://www.ccsso.org/Documents/2011/InTASC\\_Model\\_Core\\_Teaching\\_Standards\\_2011.pdf](http://www.ccsso.org/Documents/2011/InTASC_Model_Core_Teaching_Standards_2011.pdf)
- Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, 61(1-2), 35-47. Retrieved from <http://dx.doi.org/10.1177/0022487109348024>
- Darling-Hammond, L. (2006). Assessing teacher education: The usefulness of multiple measures for assessing program outcomes. *Journal of Teacher Education*, 57(2), 120-138. Retrieved from <http://dx.doi.org/10.1177/0022487105283796>
- Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education*, 57(3), 300-314. Retrieved from <http://dx.doi.org/10.1177/0022487105285962>
- Darling-Hammond, L. (2006). *Powerful Teacher Education: Lessons from Exemplary Programs*. San Francisco: John Wiley & Sons.
- Darling-Hammond, L. (2003). Keeping good teachers: Why it matters, what leaders can do. *Educational Leadership*, 60(8), 6-13. Retrieved from <http://web.ebscohost.com/ehost/detail?vid=1&hid=11&sid=e7240970-1ece-456d-98e3-fa04a8f4cf9f%40sessionmgr4&bdata=JnNpdGU9ZWwhvc3QtbGl2ZQ%3d%3d#db=aph&AN=9722698>.
- Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education*, 51(3), 166-173. Retrieved from [www.csa.com](http://www.csa.com)
- Darling-Hammond, L. (1997). Doing what matters most: Investing in quality teaching. National Commission on Teaching and America's Future. Retrieved from <http://www.nctaf.org/documents/DoingWhatMattersMost.pdf>
- Darling-Hammond, L. (1996). The right to learn and the advancement of teaching: Research, policy, and practice for a democratic education. *Educational Researcher*, 25(6), 5-17.
- Darling-Hammond, L., & Bransford, J. (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L., Chung, R., & Frelow, F. (2002). Variation in teacher preparation: How well do different pathways prepare teachers to teach. *Journal of Teacher Education*, 53(4), 286-302. Retrieved from [www.csa.com](http://www.csa.com)
- Darling-Hammond, L., & McLaughlin, M. W. (1999). In Darling-Hammond, L., & Sykes, G. (Eds.) *Teaching as the learning profession: Handbook of policy and*

*practice*. The Jossey-Bass education series. San Francisco: Jossey-Bass Publishers.

Darling-Hammond, L., Wise, A. E., & Klein, S. P. (1995). *A License to Teach: Building a Profession for 21<sup>st</sup> Century Schools*. Boulder, CO: Westview Press.

Daves, D. P., & Roberts, J. G. (2010). Online teacher education programs: Social connectedness and the learning experience. *Journal of Instructional Pedagogies* Vol. 4, Retrieved from <http://www.aabri.com/jip.html>

DiGiulio, R. C. (2004). *Great teaching: What matters most in helping students succeed*. Thousand Oaks, Calif: Corwin Press.

Duncan, A. (2009). "Teacher preparation: Reforming the uncertain profession." New York: Remarks presented at Teachers College, Columbia University, October 22, 2009.

Edwards, B., Flowers, C., & Stephenson-Green, E. (2005). Comprehensive assessment system. UNC Charlotte College of Education. Retrieved from <http://education.uncc.edu/assessment/>

Emihovich, C. (2008). Preparing global educators: New challenges for teacher education. *Teacher Education and Practice*, 21(4), 446-448. Retrieved from <http://www.rowmaneducation.com/Journals/JTEP/Index.shtml>

Feistritzer, C. (2009). Teaching while learning: Alternate routes fill the gap. *Phi Delta Kappa International*. 5(2), pp. 2-15.

Feistritzer, C. (2005). Profile of alternative route teachers. National Center for Education Information. Retrieved from, <http://www.ncei.com/PART.pdf>

Fenstermacher, G. D., & Richardson, V. (2005). On making determinations of quality in teaching. *Teachers College Record*, 107(1), 186-213. Retrieved from <http://dx.doi.org/10.1111/j.1467-9620.2005.00462.x>

Fraser, J. W. (2007). *Preparing America's teachers: A history*. Reflective history series. New York: Teachers College Press.

Futernick, K. (2010). Incompetent teachers or dysfunctional systems?: Re-framing the debate on teacher quality and accountability. WestEd. Retrieved from [http://effectiveteachers.org/images/uploads/research/KenFuternicksPaper\\_021710.pdf](http://effectiveteachers.org/images/uploads/research/KenFuternicksPaper_021710.pdf)

Gall, J. P., Gall, M. D., & Borg, W. R. (2005). *Applying educational research: A practical guide*. Boston: Pearson/Allyn & Bacon.

- Gallo, R. & Little, E. (2003). Classroom behavior problems: The relationship between preparedness, classroom experiences, and self-efficacy in graduate and student teachers. *Australian Journal of educational & Developmental Psychology* (3) 21-34. Retrieved from <http://www.newcastle.edu.au/Resources/Research%20Centres/SORTI/Journals/AJEDP/Vol%203/v3-giallo-little.pdf>
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston: Allyn & Bacon.
- Gillock, K. L., & Reyes, O. (1996). High school transition-related changes in urban minority students' academic performance and perceptions of self and school environment. *Journal of Community Psychology*, 24(3), 245-261.
- Gimbert, B., & Cristol, D. (2005). A case study of a competency-driven alternative route to teacher licensure in an urban "Hard to staff" school system. *Action in Teacher Education*, 27(1), 53-71.
- Glass, G. V., & Hopkins, K. D. (1996). *Statistical methods in education and psychology*. Boston: Allyn and Bacon.
- Gliem, J. A., & Gliem, J. R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research to Practice Conference in Adult, Continuing, and Community Education. Retrieved from <https://scholarworks.iupui.edu/bitstream/handle/1805/344/Gliem+&+Gliem.pdf?sequence=1>
- Goddard, R. D. (2003). The Impact of Schools on Teacher Beliefs, Influence, and Student Achievement: The Role of Collective Efficacy Beliefs. In Rath, J. D., & McAninch, A. R. (Eds.). *Teacher beliefs and classroom performance: The impact of teacher education*. Advances in teacher education, v. 6. Greenwich, Conn: Information Age Pub. (pp. 183-202)
- Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, 37(2), 479-507.
- Goe, L. (2007). The link between teacher quality and student outcomes: A research synthesis. National Comprehensive Center for Teacher Quality. Retrieved from <http://www.tqsource.org/publications/LinkBetweenTQandStudentOutcomes.pdf>
- Goe, L. (2007). Linking teacher quality and student outcomes. In C. A. Dwyer (ed.), *America's Challenge: Effective Teachers for At-Risk Schools and Students*. National Comprehensive Center for Teacher Quality. Retrieved from <http://www.tqsource.org/publications/NCCTQBiennialReport.pdf>

- Goe, L. ,& Stickler, L. M. (2008). Teacher quality and student achievement: Making the most of recent research. National Comprehensive Center for Teacher Quality. from <http://www.tqsource.org/publications/March2008Brief.pdf>
- Goldberger, S. "Doing the Math: What It Means to Double the Numbers of Low-Income College Graduates." In N. Hoffman, J. Vargas, A. Venezia, and M. Miller (eds.), *Minding the Gap: Why Integrating High School with College Makes Sense and How to Do It*. Cambridge, Mass.: Harvard Education Press, 2007.
- Graduate Certificate in Teaching. (2010). OVERVIEW: Master of Arts in Teaching and Graduate Certificate in Teaching. Retrieved from <http://education.uncc.edu/mat/Graduate%20Certificate.htm>.
- Hanushek, E. A., & Rivkin, S. G. (2010). *Using value-added measures of teacher quality. brief 9*National Center for Analysis of Longitudinal Data in Education Research. The Urban Institute. Retrieved from [www.csa.com](http://www.csa.com)
- Hanushek, E. A., & Rivkin, S. G. (2004). How to improve the supply of high-quality teachers. *Brookings Papers on Education Policy*. Retrieved from <http://edpro.stanford.edu/hanushek/admin/pages/files/uploads/Hanushek+Rivkin%202004%20BrookPapEduPol%202004.pdf>
- Hart, P. D. (2010). Career changes in the classroom: A national portrait. The Woodrow Wilson National Fellowship Foundation. from [http://www.woodrow.org/images/pdf/policy/CareerChangersClassroom\\_0210.pdf](http://www.woodrow.org/images/pdf/policy/CareerChangersClassroom_0210.pdf)
- Hart, P. D. (2008). Teaching as a second career. The Woodrow Wilson National Fellowship Foundation. Retrieved from [http://www.woodrow.org/images/pdf/policy/Teaching2ndCareer\\_0908.pdf](http://www.woodrow.org/images/pdf/policy/Teaching2ndCareer_0908.pdf)
- Hess, F. M., Rotherham, A. J., & Walsh, K. (2004). *A qualified teacher in every classroom?: Appraising old answers and new ideas*. Cambridge, MA: Harvard Education Press.
- Higher Education Policymaking and Analysis Information Center. (2009). Public high school graduation rates: 2008. Retrieved from <http://www.higheredinfo.org/dbrowser/index.php?measure=23>
- Hollister, C. D., McGahey, L., & Mehrotra, C. (2001). *Distance learning: Principles for effective design, delivery, and evaluation*. Thousand Oaks, Calif: Sage Publications.
- Houston, P. D. (2000). Finding the best. In Barth, P., (Ed.). (2000). Honor in the boxcar: Equalizing teacher quality. *Thinking K-16*, 4(1) Retrieved from [www.csa.com](http://www.csa.com)
- Hoy, W. K., & Woolfolk, A. E. (1990). Socialization of Student Teachers. *American Educational Research Journal*, 27(2), 279-300. Retrieved from EBSCOhost.

- Imig, D. G. (2000). Partnerships to address this national tragedy. In Barth, P., (Ed.). (2000). Honor in the boxcar: Equalizing teacher quality. *Thinking K-16*, 4(1) Retrieved from [www.csa.com](http://www.csa.com)
- Initial Licensure Completers Exit Survey. (n.d.). College of Education and College of Arts and Sciences. UNC Charlotte.
- Institute for Higher Education Policy (1999). *What's the difference? A review of contemporary research on the effectiveness of distance learning in higher education*. Washington, DC: National Education Association. Retrieved from <http://www.ihep.org/assets/files/publications/s-z/WhatDifference.pdf>.
- Interstate Teacher Assessment and Support Consortium (2010). Official website. Retrieved from [http://www.ccsso.org/Resources/Programs/Interstate\\_Teacher\\_Assessment\\_Consortium\\_\(InTASC\).html](http://www.ccsso.org/Resources/Programs/Interstate_Teacher_Assessment_Consortium_(InTASC).html)
- Interstate New Teacher Assessment and Support Consortium (1992). Model standards for beginning teacher licensing, assessment and development: A resource for state dialogue. Council of Chief State School Officers: Washington, DC.
- Jacobson, L., & Mokher, C. (2009). *Pathways to boosting the earnings of low-income students by increasing their educational attainment*. Hudson Institute. Retrieved from [www.csa.com](http://www.csa.com)
- Jerald, C. D. & Ingersoll, R. M. (2002). All talk, no action: Putting an end to out-of-field teaching, Education Trust, Retrieved from <http://www2.edtrust.org/NR/rdonlyres/8DE64524-592E-4C83-A13A-6B1DF1CF8D3E/0/AllTalk.pdf>
- Johnson, J. L. (2003). *Distance education: The complete guide to design, delivery, and improvement*. New York: Teachers College Press.
- Kannapel, P. J., Clements, S. K., Taylor, D., & Hibpshman, T. (2005). Inside the black box of high-performing high-poverty schools. Lexington, KY: Prichard Committee for Academic Excellence. Retrieved from <http://www.prichardcommittee.org/Ford%20Study/FordReportJE.pdf>.
- Killian, J., & McIntyre, D. (1988). Grade level as a factor in participation during early field experiences. *Journal of Teacher Education* 1988 39: 36. Retrieved from <http://jte.sagepub.com/content/39/2/36.full.pdf>
- Kodrzycki, Y. K. (2002). Education in the 21<sup>st</sup> century: Meeting the challenges of a changing world. Conference Paper. Conference Series 47. Education in the 21st Century: Meeting the Challenges of a Changing World. Retrieved from <http://www.bos.frb.org/economic/conf/conf47/conf47b.pdf>
- Kozol, J. (2005). *The shame of the nation: The restoration of apartheid schooling in America*. New York: Crown Publishers.



- Labaree, D. F. (2004). *The trouble with ed schools*. New Haven: Yale University Press.
- Lang, W., & Wilkinson, J. (2008). Measuring teacher dispositions with different item structures: an Application of the Rasch model to a complex accreditation requirement. Paper presented at annual meeting of the American Educational Research Association New York, March 2008-03-11.
- Leedy, P., & Ormrod, J. (2001). *Practical research: Planning and design*. Columbus, Ohio: Merrill Prentice Hall.
- Legters, N., & Balfanz, R. (2010). Do we have what it takes to put all students on the graduation path? *New Directions for Youth Development*, (127), 11-24. Retrieved from <http://dx.doi.org/10.1002/yd.359>
- Levine, A. (2006). *Educating School Teachers*. Washington, D.C.: Education Schools Project.
- Liston D. P., & Zeichner, K. M. (1996). *Culture and Teaching*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Ludvig, M., Kirshstein, R., Sidana, A., Ardila-Rey, A., & Bae, Y. (2010). An emerging picture of the teacher preparation pipeline: A report by the American Association of Colleges for Teacher Education and the American Institutes for Research. Retrieved from <http://aacte.org/pdf/Publications/Resources/PEDS%20Report%20-%20An%20Emerging%20Picture%20of%20the%20Teacher%20Preparation%20Pipeline.pdf>.
- Maeroff, G. I. (2003). *A classroom of one: How online learning is changing our schools and colleges*. New York: Palgrave Macmillan.
- McClanahan, L., & Buly, M. R. (2009). Purposeful partnerships: Linking preservice teachers with diverse K-12 students. *Multicultural Education*, 16(3), 55-59. Retrieved from <http://caddogap.com/periodicals.shtml>
- McEwin, K. (2007). Certification/Licensure by state. National Middle School Association. Retrieved from <http://nmsa.org/ProfessionalPreparation/CertificationLicensurebyState/tabid/1235/Default.aspx>
- McEwin, C. K., Dickinson, T.S., & Smith, T.W. (2002). The role of teacher preparation, licensure, and retention in creating high-performing middle schools. In Thompson, S. C. (Ed.) *Reforming middle level education: Considerations for policymakers*. Greenwich, Conn: Information Age Pub.
- Mehrotra, C. M., Hollister, C. D., & McGahey, L. (2001). *Distance learning: Principles for Effective Design, Delivery, and Evaluation*. Thousand Oaks: Sage Publications.

- Merton, A. G. (2002). Improving education outcomes: In colleges, universities, and beyond. Panel Discussion. Conference Series 47. Education in the 21st Century: Meeting the Challenges of a Changing World. Retrieved from <http://www.bos.frb.org/economic/conf/conf47/conf47u.pdf>
- Met Life Survey of the American Teacher: Collaborating for Student Success (2010). Retrieved from [http://www.metlife.com/assets/cao/contributions/foundation/american-teacher/MetLife\\_Teacher\\_Survey\\_2009.pdf](http://www.metlife.com/assets/cao/contributions/foundation/american-teacher/MetLife_Teacher_Survey_2009.pdf).
- Middle Grades Task Force (2004). Last best chance 2004: Educating young adolescents in the 21<sup>st</sup> century. Raleigh, NC: NC Department of Public Instruction.
- Miller, M. (2009). Teaching for a new world: Preparing high school educators to deliver college- and career-ready instruction. Alliance for Excellent Education. Retrieved from <http://www.all4ed.org/files/TeachingForANewWorld.pdf>.
- Minor, L. C., Onwuegbuzie, A. J., Witcher, A. E., & James, T. L. (2002). Preservice teachers' educational beliefs and their perceptions of characteristics of effective teachers. *Journal of Educational Research*, 96(2), 116-127. Retrieved from [www.csa.com](http://www.csa.com)
- Mizelle, N. B., & Irwin, J.L. (2000). Transition from middle school into high school. Retrieved from <http://www.nmsa.org>.
- Muijs, D. (2004). Doing quantitative research in education with SPSS. London: Sage Publications.
- Mulholland, J., & Wallace, J. (2001). Teacher induction and elementary science teaching: Enhancing efficacy. *Teaching and Teacher Education*, 17, 241-261. Retrieved from, [http://www.sciencedirect.com/science?\\_ob=ArticleURL&\\_udi=B6VD8-4280YVN-9&\\_user=628632&\\_coverDate=02%2F28%2F2001&\\_rdoc=1&\\_fmt=high&\\_orig=search&\\_origin=search&\\_sort=d&\\_docanchor=&view=c&\\_acct=C000033138&\\_version=1&\\_urlVersion=0&\\_userid=628632&md5=3b3379f36817380e9e6c79fb66da0fe2&searchtype=a](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6VD8-4280YVN-9&_user=628632&_coverDate=02%2F28%2F2001&_rdoc=1&_fmt=high&_orig=search&_origin=search&_sort=d&_docanchor=&view=c&_acct=C000033138&_version=1&_urlVersion=0&_userid=628632&md5=3b3379f36817380e9e6c79fb66da0fe2&searchtype=a)
- National Board for Professional Teaching Standards. (2002). What teachers should know and be able to do. Retrieved from [http://www.nbpts.org/UserFiles/File/what\\_teachers.pdf](http://www.nbpts.org/UserFiles/File/what_teachers.pdf)
- National Center for Alternative Licensure. (2010). A state by state analysis: Introduction. Retrieved from, <http://www.teach-now.org/intro.cfm>
- National Center for Education Statistics (2010). State education reforms. US Department of Education. Retrieved from [http://nces.ed.gov/programs/statereform/tab3\\_10.asp](http://nces.ed.gov/programs/statereform/tab3_10.asp)

- National Center for Education Statistics (2010). Teacher attrition and mobility: Results from the 2008-09 teacher follow-up survey. Retrieved from <http://nces.ed.gov/pubs2010/2010353.pdf>
- National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform*. Retrieved from <http://www2.ed.gov/pubs/NatAtRisk/risk.html>
- National Commission on Teaching and America's Future (1996). What matters most: Teaching for America's future. Retrieved from <http://www.nctaf.org/documents/WhatMattersMost.pdf>
- National Education Goals Panel (2000). *Policy Recommendations and Examples Regarding State Professional Development Programs Linked to Student Standard*. Retrieved from <http://govinfo.library.unt.edu/negp/page9-3.htm#goalsGeon>
- North Carolina Department of Instruction (2010). AYP Subgroups Results. Retrieved from <http://ayp.ncpublicschools.org/>
- North Carolina State Board of Education (2006). Policy Manual. Retrieved from <http://www.ncpublicschools.org/docs/recruitment/beginning/policysupportprogram.pdf>.
- Oakes J. & Gamoran, A. & Page, R.N. (1992). Curriculum differentiation: Opportunities, outcomes, and meanings. In P.W. Jackson (Ed.) *Handbook of Research on Curriculum*. Washington, DC: American Educational Research Association, pp. 570-608.
- Organization for Economic Co-operation and Development, "Education at a Glance: OECD Indicators. (2006), Table A1.2. Retrieved from [http://www.oecd.org/document/24/0,3343,en\\_2649\\_39263238\\_43586328\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/24/0,3343,en_2649_39263238_43586328_1_1_1_1,00.html).
- Paquette, G. (2004). *Instructional engineering in networked environments*. Instructional technology & training series. San Francisco: Pfeiffer.
- Parsad, B., Lewis, L., & Tice, P. (2008). Distance education at degree-granting postsecondary institutions: 2006-07: First look. National Center for Education Statistics. Retrieved from <http://nces.ed.gov/pubs2009/2009044.pdf>.
- Partnership for 21<sup>st</sup> Century learning Skills (2004). Framework for 21<sup>st</sup> century learning. Retrieved from [http://www.p21.org/index.php?option=com\\_content&task=view&id=254&Itemid=120](http://www.p21.org/index.php?option=com_content&task=view&id=254&Itemid=120)
- Petrovitch, J. (2005). The shifting terrain of educational policy: Why we must bring equity back. In J. Petrovitch & A. S. Wells (Eds.) *Bringing equity back: Research for a new era in American Educational policy*. New York: Teachers College, pp. 3-15.

- Phillips, M. (1997). What makes schools effective? A comparison of the relationships of communitarian climate and academic climate to mathematics achievement and attendance during middle school. *American Educational Research Journal*, 34(4), 633-662.
- Plecki, M., & Loeb, H. (2004). Teacher preparation and the improvement of teacher education. In Smylie, M. A., Miretzky, D. (Eds.), & National Society for the Study of Education. (2004). *Developing the teacher workforce*. Chicago: NSSE.
- Poulou, M. (2007). Personal Teaching Efficacy and Its Sources: Student Teachers' Perceptions. *Educational Psychology*, 27(2), 191-218. Retrieved from EBSCOhost.
- Princiotta, D., & Reyna, R. (2009). *Achieving graduation for all: A governor's guide to dropout prevention and recovery*. NGA Center for Best Practices. Retrieved from www.csa.com
- Pushkin, D. (2001). *Teacher training: A reference handbook*. Contemporary education issues. Santa Barbara, Calif: ABC-CLIO.
- Ramirez, H. A. (2004) The shift from hands-off: The federal role in supporting and defining teacher quality. In Hess, F. M., Rotherham, A. J. & Walsh, Kate (Eds.) *A Qualified Teacher in Every Classroom?: Appraising Old Answers and New Ideas*. Cambridge, MA: Harvard Educational Press.
- Ricardson, V. (2003). Preservice Teachers' Beliefs. In Raths, J. D., & McAninch, A. R. (Eds.). *Teacher beliefs and classroom performance: The impact of teacher education*. Advances in teacher education, v. 6. Greenwich, Conn: Information Age Pub. (pp. 1-22)
- Richardson, V., & Roosevelt, D. (2004) Teacher preparation and the improvement of teacher education. In Smylie, M. A., Miretzky, D. (Eds.), & National Society for the Study of Education. (2004). *Developing the teacher workforce*. Chicago: NSSE.
- Rinaldo, V. J., Denig, S. J., Sheeran, T. J., Cramer-Benjamin, R., Vermette, P. J., Foote, C. J., & Smith, R. (2009). Developing the intangible qualities of good teaching: A self-study. *Education*, 130(1), 42-52. Retrived from EBSCO host.
- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417-458. Retrieved from <http://www.economics.harvard.edu/faculty/staiger/files/HanushekRivkinKain%2BEcta%2B2005.pdf>

- Rivers, J. C., & Sanders, W. L. (2002). Teacher quality and equity in educational opportunity: Findings and policy implications. In L. T. & W. M. Evers (Eds.), *Teacher quality* (pp. 13-23). Stanford, CA: Hoover Press. Retrieved from [http://media.hoover.org/sites/default/files/documents/0817929320\\_13.pdf](http://media.hoover.org/sites/default/files/documents/0817929320_13.pdf)
- Rochkind, J., Ott, A., Immerwahr, J., Doble, J., & Johnson, J. (2008). *Lessons learned: New teachers talk about their jobs, challenges and long-range plans. teaching in changing times issue no. 3*. Public Agenda. Retrieved from [www.csa.com](http://www.csa.com)
- Rochkind, J., Ott, A., Immerwahr, J., Doble, J., & Johnson, J. (2007). *Lessons learned: New teachers talk about their jobs, challenges and long-range plans. They're not little kids any more: The special challenges of new teachers in high schools and middle schools issue no. 1*. National Comprehensive Center for Teacher Quality and Public Agenda. Retrieved from [www.publicagenda.org](http://www.publicagenda.org)
- Ross, J. A. (1995). Strategies for enhancing teachers' beliefs in their effectiveness: Research on a school improvement hypothesis. *Teachers College Record*, 97(2), 227-251.
- Rotherham, A. J., & Mead, S. (2004). In Hess, F. M., Rotherham, A. J. & Walsh, Kate (Eds.) *A Qualified Teacher in Every Classroom: Appraising Old Answers and New Ideas*. Cambridge, MA: Harvard Educational Press.
- Sanders, W., & Rivers, J. (1996). Cumulative and residual effects of teachers on future academic achievement. University of Tennessee Value-Added Research and Assessment Center. Retrieved from <http://www.mccsc.edu/~curriculum/cumulative%20and%20residual%20effects%20of%20teachers.pdf>.
- Sanger, M. N., & Osguthorpe, R. O. (2010). Teacher education, preservice teacher beliefs, and the moral work of teaching. *Teaching and Teaching Education*, 27(3), 569-578. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0742051X10001861>
- Schulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14. Retrieved from <http://www.jstor.org/stable/1175860>
- Schrum, L., Burbank, M. D., & Capps, R. (2007). Preparing future teachers for diverse schools in an online learning community: Perceptions and practice. *Internet and Higher Education*, 10(3), 204-211. Retrieved from <http://dx.doi.org/10.1016/j.iheduc.2007.06.002>
- Silberman, T. (2005) Board oks exit exams, project. Raleigh, NC: News Observer. Retrieved from <http://www.newsobserver.com/news>.
- Simkins, M. (2005). Accelerating learning. *Leadership*, 34(3), 24-33.

- Singer, N., Catapano, S., & Huisman, S. (2010) 'The university's role in preparing teachers for urban schools, *Teaching Education*, 21: 2, 119 — 130. Retrieved from [http://pdfserve.informaworld.com/327741\\_\\_922092631.pdf](http://pdfserve.informaworld.com/327741__922092631.pdf)
- Sirkin, (2005). *Statistics for the Social Sciences*. 3<sup>rd</sup> edition. Sage Publications. Retrieved from <http://www.sagepub.com/books/Book226722?siteId=sage-us&prodTypes=any&q=sirkin&pageTitle=productsSearch#tabview=sample>
- Stanley, K. R., Spradlin, T. E., & Plucker, J. A. (2008). *Calculating high school graduation rates. education policy brief. volume 6, number 5, spring 2008*. Center for Evaluation and Education Policy. Retrieved from [www.csa.com](http://www.csa.com)
- Sum, A., Khatiwada, I., McLaughlin, J., & Palma, S. (2009). The Consequences of dropping out of high school: Joblessness and jailing for high school dropouts and the high cost for taxpayers. Boston, MA: Northeastern University, Retrieved from [http://www.clms.neu.edu/publication/documents/The\\_Consequences\\_of\\_Dropping\\_Out\\_of\\_High\\_School.pdf](http://www.clms.neu.edu/publication/documents/The_Consequences_of_Dropping_Out_of_High_School.pdf) .
- Task Force on Teaching as a Profession (1986). *A Nation prepared: Teachers for the 21<sup>st</sup> century*. Carnegie Forum on Education and the Economy.
- Tschannen-Moran, M., & Barr, M. (2004). Fostering Student Learning: The Relationship of Collective Teacher Efficacy and Student Achievement. *Leadership and Policy in Schools*, 3(3), 189-209. Retrieved from EBSCOhost.
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an Elusive construct, *Teaching and Teacher Education* 17 (2001), pp. 783–805
- Tournaki, N., Lyublinskaya, I., & Carolan, B. V. (2009). Pathways to teacher certification: Does it really matter when it comes to efficacy and effectiveness? *Action in Teacher Education*, 30(4), 96-109. Retrieved from <http://www.rowmaneducation.com/Journals/ATE/Winter09.shtml>
- U.S. Department of Education (2010). National Center for Education Statistics. Public elementary and secondary teachers by level and state or jurisdiction: Selected years, fall 2000 through fall 2008. Retrieved from [http://nces.ed.gov/programs/digest/d10/tables/dt10\\_069.asp?referrer=list](http://nces.ed.gov/programs/digest/d10/tables/dt10_069.asp?referrer=list)
- US Department of Education (2009). Race to the top application for initial funding. Retrieved from <http://www2.ed.gov/programs/racetothetop/phase1-applications/minnesota.pdf>.
- US Department of Education (2009). Race to the top application for initial funding. Retrieved from <http://www2.ed.gov/programs/racetothetop/phase1-applications/minnesota.pdf>.
- US Department of Education (ED). (2008). *A nation accountable: Twenty-five years after "A nation at risk"*. US Department of Education. Retrieved from [www.csa.com](http://www.csa.com)

- US Department of Education (2003). Meeting the highly qualified teachers challenge: The secretary's second annual report on teacher quality. Retrieved from <http://www2.ed.gov/about/reports/annual/teachprep/2003title-ii-report.pdf>.
- US Department of Education (2001). Elementary and Secondary Education Act. Retrieved from <http://www2.ed.gov/policy/elsec/leg/esea02/pg2.html#sec1119>.
- Wenglinsky, H. (2002). How schools matter: The link between teacher classroom practices and student academic performance. *Education Policy Analysis Archives*, 10(12) Retrieved from [www.csa.com](http://www.csa.com)
- Wenglinsky, H. (2000). How teaching matters: Bringing the classroom back into discussions of teacher quality. Policy Information Center, Mail Stop 04-R, Educational Testing Service, Retrieved from [www.csa.com](http://www.csa.com).
- Wenglinsky, H. (2000). *Teaching the teachers: Different settings, different results. policy information report*. Policy Information Center, Retrieved from [www.csa.com](http://www.csa.com)
- White, M.E., Makkonen, R., & Stewart, K.B. (2009). *A multistate review of professional teaching standards* (Issues & Answers Report, REL 2009–No. 075). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West. Retrieved from [http://ies.ed.gov/ncee/edlabs/regions/west/pdf/REL\\_2009075.pdf](http://ies.ed.gov/ncee/edlabs/regions/west/pdf/REL_2009075.pdf)
- Wilson, S.M., Floden, R. E., & Ferrini-Mundy, J. (2002). Teacher preparation research: An insider's view from the outside. Sage Journals Online. Retrieved from <http://jte.sagepub.com/content/53/3/190.full.pdf+html>
- Wilson, S.M., Floden, R. E., & Ferrini-Mundy, J. (2001). Teacher preparation research: Current knowledge, gaps, and recommendations. A Research Report Prepared for the US Department of Education by the Center for the Study of Teaching and Policy in collaboration with Michigan State University. Retrieved from <http://depts.washington.edu/ctpmail/PDFs/TeacherPrep-WFFM-02-2001.pdf>
- Wolthuis, R. (2004). In Mezeske, R. J., & Mezeske, B. A. (Eds.). Preparing preservice teachers for teaching at-risk children. (pp. 185-196) *Finding our way: Reforming teacher education in the liberal arts setting*. Higher ed, v. 13. New York: P. Lang.
- Wright, S. P. Horn, S. P. & Sanders, W. L., (1997). Teacher and classroom context effects on student achievement: Implications for teacher evaluation. University of Tennessee Value-Added Research and Assessment Center. Journal of Personnel Evaluation in Education. Retrieved from [http://www.sas.com/govedu/edu/teacher\\_eval.pdf](http://www.sas.com/govedu/edu/teacher_eval.pdf).

- Wright Edelman, M. (2011). Interview with Marian Wright Edelman. Ewing Marion Kauffman Foundation. Retrieved from <http://www.kauffman.org/education/marian-wright-edelman.aspx>
- Wu, S. C. & Chang, Y. L. (2006). Elementary Teacher Education and teacher efficacy toward mathematics and science. Retrieved from <http://www.emis.de/proceedings/PME30/5/417.pdf>
- Zhu, E. (2006). Interaction and cognitive engagement: An analysis of four asynchronous online discussions. *Instructional Science*, 34(6), 451-480. Retrieved from <http://innovations.oise.utoronto.ca/~jhewitt/ctl1602/papers/Zhu%202006.pdf>.
- Zurawsky, C. (2004). Closing the gap: High achievement for students of color. *American Educational Research Association Research Points*, 2(3). Retrieved from <http://www.aera.net/ResearchPoints.htm>



## Appendix A

### UNC Charlotte

#### College of Education and College of Arts and Sciences Candidate Self-Reflective Exit Survey



Dear Program Completer,

**Congratulations! You have just completed a rigorous licensure program designed to prepare you for a career in education. To maintain excellence in our programs, the faculty and staff in teacher education at UNC Charlotte request your self reflections about your licensure program.**

**Your feedback regarding the strengths and weaknesses of your program will help us define appropriate modifications for the future. Please assist future students and us by completing the survey below carefully and thoughtfully.**

**Your responses are greatly appreciated!**

**Sincerely,**

**Mary Lynne Calhoun, Ph. D.**

**Dean, College of Education**

**Samuel Nixon, M.A.**

**Director, Teacher Education Advising and Licensure**

### Survey of Students Completing Initial Licensure

Semester of Student Teaching / Graduate Internship	<input type="text" value="Please Select"/>
Gender	<input type="radio"/> Male <input type="radio"/> Female
Status	<input type="radio"/> Undergraduate student <input type="radio"/> Second degree undergraduate or post-baccalaureate student taking undergraduate courses <input type="radio"/> Graduate Certificate, Fast-track or other post-baccalaureate student taking graduate courses <input type="radio"/> Master of Arts in Teaching: Phase One <input type="radio"/> Master of Education in Child and Family Studies: Phase One <input type="radio"/> RALC student completing student teaching requirement <input type="radio"/> Other
What specific licensure program(s) did you just complete?	<input type="checkbox"/> Art Education (K-12) <input type="checkbox"/> Biology Education (9-12) <input type="checkbox"/> Birth-Kindergarten (B-K) <input type="checkbox"/> Chemistry Education (9-12) <input type="checkbox"/> Comprehensive Science (9-12) <input type="checkbox"/> Dance Education (K-12) <input type="checkbox"/> Earth Science Education (9-12) <input type="checkbox"/> Elementary Education (K-6) <input type="checkbox"/> English Education (9-12) <input type="checkbox"/> French Education (K-12) <input type="checkbox"/> German Education (K-12) <input type="checkbox"/> History/Social Education (9-12) <input type="checkbox"/> Mathematics Education (9-12) <input type="checkbox"/> Middle Grades English Language Arts (6-9) <input type="checkbox"/> Middle Grades Mathematics (6-9) <input type="checkbox"/> Middle Grades Science (6-9) <input type="checkbox"/> Middle Grades Social Studies (6-9) <input type="checkbox"/> Music Education (K-12) <input type="checkbox"/> Physics Education (9-12) <input type="checkbox"/> Spanish Education (K-12) <input type="checkbox"/> Special education: Adapted Curriculum(K-12) <input type="checkbox"/> Special Education: General Curriculum (K-12)

	<input type="checkbox"/> Special education: Other <input type="checkbox"/> Theatre Education (K-12) <input type="checkbox"/> Teaching English as Second Language (K-12)
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Please rate how well each of the following experiences at UNC Charlotte contributed to your preparation to become a teacher.

Please use the following scale:

**N/A: Not relevant, didn't take at UNC Charlotte.**

**1: Very few or none of these courses/experiences contributed to my preparation.**

**2: Some of these courses/experiences contributed to my preparation.**

**3: Most of these courses/experiences contributed to my preparation.**

General Education Courses.	<input type="text" value="N/A"/>
Major (Content) or Background Deficiency Courses.	<input type="text" value="N/A"/>
Academic Concentration Courses (ELED, SPED, MDLG undergraduate only).	<input type="text" value="N/A"/>
Professional Education Courses.	<input type="text" value="N/A"/>
Clinical Experiences in the Schools.	<input type="text" value="N/A"/>
Student Teaching/Internship.	<input type="text" value="N/A"/>

### Survey Items

Please rate your readiness to demonstrate each of the following national INTASC and North Carolina licensing standards for beginning teachers.

Choose the rating that most characterizes your self-assessment in relationship to each standard at this time:

**1 : I do not yet have the knowledge, skills, or dispositions to meet this standard..**

**2 : I have developed adequate knowledge, skills, and dispositions to meet this standard.**

**3 : I have developed exceptionally effective knowledge, skills, and dispositions in relationship to this standard.**

<p><b>Content Pedagogy:</b>          Understands the central concepts, tools of inquiry, and structures of the discipline(s) she/he teaches and can create learning experiences that make these aspects of subject matter meaningful to students.</p>	<input type="text" value="1"/>
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<b>Student Development:</b> Understands how children learn and develop and creates learning opportunities to support their intellectual, social, and personal development.	<input type="text" value="1"/>
<b>Diverse Learners:</b> Understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners.	<input type="text" value="1"/>
<b>Multiple Instructional Strategies:</b> Understands and uses a variety of instructional strategies to encourage student development of critical thinking, problem solving, and performance skills.	<input type="text" value="1"/>
<b>Motivation and Management:</b> Understands individual and group motivation and behavior to create a learning environment that encourages social interaction, active engagement in learning, and self motivation.	<input type="text" value="1"/>
<b>Communication and Technology:</b> Uses effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.	<input type="text" value="1"/>
<b>Planning:</b> Plans based upon knowledge of subject matter, students, the community, and curriculum goals.	<input type="text" value="1"/>
<b>Assessment:</b> Understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.	<input type="text" value="1"/>
<b>Professional Development:</b> As a reflective practitioner, continually evaluates the effects of choices and actions on students, parents, and other professionals in the learning community and actively seeks	<input type="text" value="1"/>

<p>out opportunities to grow professionally.</p> <p><b>School and Community Involvement:</b> Fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well being.</p>	<input type="text" value="1"/>
<p><b>Work with Families:</b> Understands differences in families and creates opportunities to involve families in supporting student learning.</p> <p>Having completed your student teaching/graduate internship, please enter any suggestions you believe would strengthen your selected program of study for future teacher education candidates.</p>	<input type="text" value="1"/> <p>Rich formatting &gt;&gt;</p> <div data-bbox="634 722 992 890"> </div>

### Support Services During Teacher Education Program at UNC Charlotte

#### Part I: Quality of INFORMATION provided

Please rate the quality of the information provided by the following support services during your teacher education program at UNC Charlotte. Use the following scale:

**N/A:** Not applicable. I rarely or never used these services.

**1:** The information provided was frequently incomplete or inaccurate.

**2:** The information provided was usually complete, accurate, and relevant.

**3:** The information provided was exceptionally complete, accurate, and relevant.

<p>Academic advising provided by staff in the Office of Teacher Education Advising and Licensure (TEAL).</p>	<input type="text" value="N/A"/>
<p>Academic advising provided by faculty advisors after admission to a teacher education program.</p>	<input type="text" value="N/A"/>
<p>Clinical placement services, including student teaching or internship placement, provided by staff in the Office of Field Experiences.</p>	<input type="text" value="N/A"/>
<p>Computer laboratories and other technology support services in the College of Education.</p>	<input type="text" value="N/A"/>

Licensure advising provided by staff in the Office of Teacher Education Advising and Licensure (TEAL).	<input type="text" value="NA"/>
Licensure application assistance provided by staff in the Office of Field Experiences.	<input type="text" value="NA"/>

## **Part II: Quality of CUSTOMER SERVICE orientation**

**Please rate the quality of the service provided by the following support services during your teacher education program at UNC Charlotte. Use the following scale:**

**N/A: Not applicable. I rarely or never used these services.**

**1: People were typically difficult to find and/or treated me with impatience or indifference.**

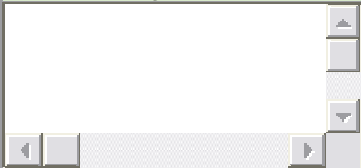
**2: People were typically available during posted hours and were welcoming and helpful.**

**3: People were typically available during posted hours or made arrangements for other meeting times. People were welcoming, helpful, and clearly committed to provide support and problem-solving.**

Academic advising provided by staff in the Office of Teacher education Advising and Licensure (TEAL).	<input type="text" value="NA"/>
Academic advising provided by faculty advisors after admission to a teacher education program.	<input type="text" value="NA"/>
Clinical placement services, including Student Teaching or internship placement, provided by staff in the Office of Field Experiences.	<input type="text" value="NA"/>
Computer laboratories and other technology support services in the College of Education.	<input type="text" value="NA"/>
Licensure advising provided by staff in the Office of Teacher Education Advising and Licensure (TEAL).	<input type="text" value="NA"/>
Licensure application assistance provided by staff in the Office of Field Experiences.	<input type="text" value="NA"/>

Please rate how well your overall licensure program at UNC Charlotte prepared you to enter teaching profession

- 1: I was not well-prepared.  
2: I was adequately prepared.  
3: I was exceptionally well-prepared.

<p>Over-All Rating</p> <p>Please enter any comments you wish to share about positive aspects of your teacher education preparation:</p>	<p>1</p> <p>Rich formatting &gt;&gt;</p> 
<p>Please enter any comments you wish to share about aspects of your teacher education preparation that needed improvement:</p>	<p>Rich formatting &gt;&gt;</p> 