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Closing the Gap: The Effects of Alternative Certification Programs on Intern Self-Efficacy

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LOYOLA MARYMOUNT UNIVERSITY

Closing the Gap: The Effects of Alternative Certification

Programs on Intern Self-Efficacy

by

Marianne Mitchell

A dissertation presented to the Faculty of the School of Education,

Loyola Marymount University,

in partial satisfaction of the requirements for the degree

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Certification Programs on Intern Self-Efficacy
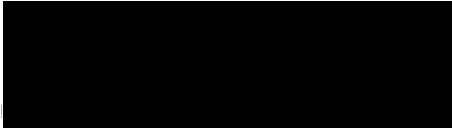
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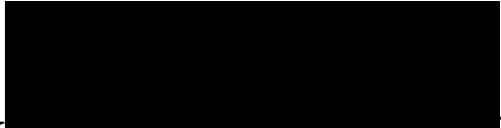
This dissertation written by Marianne Mitchell, under the direction of the Dissertation Committee, is approved and accepted by all committee members, in partial fulfillment of requirements for the degree of Doctor of Education.

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Date

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ABSTRACT

Closing the Gap: The Effects of Alternative

Certification Programs on Intern Self-Efficacy

By

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The shortage of teachers necessitates systems of certification that quickly provide teachers for the field, especially in hard to staff schools. Alternative certification programs have attempted to address the need by enlisting non-certified college graduates and offering these individuals shortcuts to certification, special assistance, or opportunities to study that prepare them for eligibility to obtain their teaching credential. (Darling-Hammond, 2000). These types of programs bring consequences with the benefits. This mixed methods study examined the effect of alternative certification programs on teacher self-efficacy. The Teacher Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) was administered to interns prior to entering the field and after four months in the field. The results demonstrated a significant drop in teacher self-efficacy from pre- to post-test. In addition, semi-structured interviews identified factors that contributed to the drop in teacher self-efficacy. Implications for teacher education programs are discussed.

CHAPTER 1

INTRODUCTION

Background

"Conventional wisdom holds that desperate circumstances require bold action" (Rosenberg & Sindelar, 2001, p.117). The desperate circumstances referred to in this quotation are the critical shortages of qualified, credentialed special education teachers across the country, a shortage of over 10,855 in 2008 (Esch et al., 2005). The National Education Association (NEA) (2006) projected that an additional 2.2 million teachers will be needed by 2011. Another study conducted by SRI International concluded that a reported California shortage of 20,000 special education teachers in 2005 will jump to 33,000 teachers in 2015 (Esch et al., 2005). This need for more special education teachers may be in part due to a 30% rise in the number of special education students over the last 10 years (NEA, 2006). This shortage will be particularly felt in hard-to-staff schools, those schools primarily in depressed socioeconomic areas. Further research conducted by The Center for the Future of Teaching and Learning (2009) found that 8% of special education teachers were underprepared, the highest of all deficit statistics. These schools have students most in need of a good teacher. According to figures released in August 2005 from the Education Commission of the States, 22% of special education teachers working in high-poverty schools were not certified to teach special education (Esch et al., 2005). Current economic issues significantly hamper the goals of recruiting and retaining teachers. Significant layoffs of teachers and massive budget cuts have occurred in many states. The necessity to cut educational expenditures has resulted in politicians, many of

whom have never been in the classroom, making decisions regarding services, programs and other related expenditures (Carlson & Billingsley, 2004).

A new system of credentialing, alternative certification was implemented in 1980 in some areas of the country, especially in urban areas with schools serving some of the most at-risk children in the nation. The "bold actions" discussed by Rosenberg and Sindelar (2001) refer to the evolution of a practice whereby unprepared teachers, lacking the pedagogy to organize and manage their classrooms, are awarded intern credentials and placed in classrooms as teachers of record. These teachers often have little or no formal preservice training.

This route to becoming a teacher, alternative certification, is a radical departure from traditional paths to teacher certification. Alternative certification routes to credentialing have been defined by the United States Department of Education (2003) as "those teacher education programs that enroll non-certificated individuals with at least a bachelor's degree offering shortcuts, special assistance, or unique curricula leading to eligibility for a standard teaching credential" (Guyton, Fox, & Sisk, 1991, p.1). These programs are usually affiliated with a university or a school district. However, the candidates enter the classroom as the teacher of record without attending a traditional university program that includes rigorous coursework and student teaching prior to entering the classroom.

Traditional candidates, on the other hand, complete coursework prior to student teaching, and are then apprenticed to a master teacher for a specified length of time, from

one semester to one year. It is only after the successful completion of the coursework and the student teaching that the candidate enters the classroom as the teacher of record.

The extreme teacher shortage and proliferation of alternative certification programs sent a deluge of novice teachers (interns) with no experience or training to the poorest and most under-resourced communities. Nationally, alternative programs certified 275 teachers between 1985-1986. In 2005-2006, that number rose to 59,000 teachers (Feistritzer, 2003). In 2005, schools with a high concentration of at-risk students (determined by eligibility free and reduced lunch) reported that 21% of teachers lacked a teaching credential. In special education settings, 14% did not have the appropriate credential (Futernick, 2007).

Within days of taking office in 2001, George Bush sent a blueprint for educational reform to Capitol Hill called "No Child Left Behind" (NCLB, 2008). This new legislation called for all states to annually test all students and report the scores. Schools who did not demonstrate acceptable performance for two years in a row would be liable for sanctions. Along with the sanctions came flexibility in spending to increase teacher quality with professional development and merit-based pay. This flexibility extended to teacher preparation. Alternative routes to certification were approved because it was thought, "many potentially highly qualified candidates would not pursue teaching if they could not find a program that was convenient, inexpensive, and which acknowledged the value of their previous non-teaching experiences" (Hess & Petrilli, 2006, p. 80). This legislation legitimized alternative routes to credentialing, but in essence prohibited the processes that states developed to provide these routes The U.S. Department of Education (2004)

clarified this provision. Teachers may gain licensure through alternative programs, but must be "highly qualified" by:

1. Receiving high-quality professional development that is sustained, intensive, and classroom focused in order to have a positive and lasting impact on classroom instruction before and while teaching.

2. Participating in a program of intensive supervision that consists of structured guidance and regular ongoing support for teachers, or a teacher-mentoring program.

3. Assume functions as a teacher only for a specified period not to exceed three years.

4. Demonstrate satisfactory progress toward full certification as prescribed by the state (U.S. Department of Education Academic Improvement and Teacher Quality Programs, 2004, p. 240).

While the Federal government was demanding more accountability and skilled teaching, using gold standard evidence-based curriculum, teachers were entering the classroom without formal preparation. The research on the best way to supply new teachers to the field, especially special education teachers, is divided in findings about the effectiveness of alternative programs producing "highly qualified" teachers. The term "highly qualified" is language from No Child Left Behind (No Child Left Behind, 2001). While this term seems somewhat simplistic, the descriptor marked a huge expansion of influence over teacher preparation, which prior to this act was under the control of the state (Hess & Petrilli, 2006). Those who are proponents of alternative routes cite the

number of new teachers prepared for the field to fill the gaps, especially in special education (Decker, Mayer, & Glazerman, 2004). These advocates state that these programs, if well developed, attract a more diverse candidate who has competency in subject matter (Hess & Petrilli, 2006; Roach & Cohen, 2002). A secondary popular belief by this same group of researchers holds that teachers knowledgeable in subject area, not pedagogy, can narrow the achievement gap (Decker et al., 2004).

The perception that alternative certification programs are able to prepare highly qualified teachers surfaced during the U.S. Secretary of Education's 2002 yearly report. In this report Secretary Rod Paige claimed that "a teacher's verbal ability and subject matter knowledge are key factors in improving student achievement, whereas the role of teacher education is questionable" (United States Department of Education, 2003, p. 242). Whereas traditional teacher education programs focus on the "how" of teaching, or pedagogy, to improve student achievement, Paige claimed that the teacher's knowledge of the content or the "what" they are teaching more closely correlates with student achievement. A reasonable conclusion to the field might be that teacher education programs are dinosaurs that impede the progress of teachers to their classrooms.

Increasingly, interns can enter a classroom after only taking a test to show content knowledge. A meta-analysis, looking at over fifty publications, was conducted by the Office of Educational Research under the guidance of Linda Darling-Hammond (2000), who is a fierce opponent of alternative certification systems and who advocates for the continued reform and support of traditional preparation programs. The review established a high positive correlation between teacher education (pedagogy and methods) and

teacher effectiveness. Teachers who have preparation in curriculum design and methods showed greater achievement gains in their students compared to those teachers in alternative certification programs. In Darling-Hammond's work, and in the work of the other researchers surveyed in this meta-analysis, "robust authority to teach" was defined as, "pedagogical knowledge, commitment to a well-understood and examined conception of good (inquiry-oriented practice, developed habits of disciplined inquiry into one's own practice, respect for professional education, and a vigorous sense of professional autonomy)" (Roosevelt, 2007, p. 112).This is a very rigorous job description for a new teacher who often has little more than content to enter the classroom.

Some suggested that alternative certification programs have more to do with leaving, than with entering the world of teaching (Miller, Brownell, & Smith, 1999). Shen and Palmer (2005) conducted a "survival analysis" to determine a longitudinal perspective on teacher attrition. This study examined the correlation between types of teacher preparations program and attrition. They found overall that 34 % of those who entered teaching left by the end of the fifth year. They found further correlation between type and length of program and attrition. After looking at this data, they found that the attrition rates for those teachers not in a traditional teaching program were 111% more than that for those completing traditional programs.

Attrition rates for special education teachers are even more significant. Darling-Hammond (2003) found that those special education teachers who went through four and five year programs were more likely to remain in teaching. She found that retention rates for those entering the classroom with a bachelor's degree and some additional pre-service

was 60% in comparison to 10% to 15% of those graduating from four-year programs alone. In addition, there appeared to be a significant difference in the overall attrition rates of special educators compared to general educators. A study by Brownell, Bishop, Langley, Sindelar, & Seo (2000) examined data from *The Schools and Staffing Survey* and found that the attrition rate for special educators was 6.1% compared to 5.7% for general educators. In the state of California, attrition of new teachers was identified as the main cause of special education teacher shortages. Twenty-two percent of teachers in California left the classroom after their first four years of teaching (Reed, Reuben, & Barbour, 2006).

Despite these harrowing statistics, alternative routes to certification now appear to be the norm, not the exception, in many parts of the country (Darling-Hammond, 2003). Once priding themselves on rigorous programs, teaching pedagogy and content to student teachers, some universities now define their programs by how quickly they can move a candidate through the program. It is a challenge for universities to develop strong, financially affordable, and efficacious programs that will assist pre-service teachers in becoming competent, effective, and knowledgeable novice teachers in shorter and shorter time periods.

Linda Darling-Hammond (2003) hypothesized that teachers who have strong pre-service preparation demonstrate increased commitment to understanding the needs of their students and the ability to differentiate their instruction. In reviewing this data, it is reasonable to hypothesize that receiving or not receiving quality pre-service training is a key variable in the significant attrition rates. Pre-service preparation programs whose

goal is to prepare and keep special education teachers in the field have grown throughout

the country, and in the literature (e.g. Billingsley, 2004; Brownell, Smith, McNellis, &

Miller, 1997; Rosenberg, Griffin, Kilgore, & Carpenter, 1997). These studies, which

address the issues of attrition, found that burnout had much to do with the novice

teacher's feelings about their own efficacy and the ability to see growth in the learning of

their students. Participants in several of these studies who engaged in traditional student

teaching, attributed the mastery experiences they received during student teaching as a

powerful motivation to stay in the field (Mulholland & Wallace, 2001).

Pre-service training and experiences contribute to the development of teacher self-

efficacy. Teacher self-efficacy is the "belief in one's capacity to organize and execute the

courses of action required to produce given attainments" (Bandura, 1997, p.3). It is a

future-directed judgment, having more to do with perceptions of one's competence rather

than the actual amount of competence. Bandura's theory of self-efficacy suggested that

new teachers' feelings about their ability to teach their students and realize gains in that

learning render self-efficacy as the most vulnerable to growth and change in the earliest

years of teaching (Hoy & Spero, 2005). Teachers' levels of self-efficacy have been tied

to student achievement levels. Teachers with a higher sense of self-efficacy may be more

willing to differentiate curriculum, encourage student autonomy, and be more open to

new techniques. A study conducted by Hoy and Spero (2005) found that planned mastery

experiences, supervised by a classroom mentor during student teaching and induction, are

some of the most powerful influences in "growing" teacher self-efficacy. Possibly, a

better method in trying to understand the best model for teacher preparation is to talk to the teachers entering the classroom with or without formal class work or other training.

However, research investigating attrition rates of teachers, both general education and special education (Brownell, Bishop, Langley, Sidebar, & Sea, 2000), has found that factors other than type of program significantly impact teacher retention in the field. Developmental factors related to the difficulties experienced in the first year of special education teachers were identified in a study by Skrtic, Harris, and Shiner (2005) as an inability to transfer learning from theory into practice, a difficulty in preparing for many of the difficulties and demands of teaching, and a reluctance to ask questions or seek help. Environmental factors compounded the experiences, such as the difficulty of the teaching assignment and inadequate resources. All these factors led to unrealistic expectations and an associated loss of efficacy (p. 157). However, in examining this study, a new topic presented for consideration: the developmental profile of a teacher.

Awareness of the developmental needs of new teachers is often overlooked within intern populations because of their rapid movement through their training programs (Brownell, Ross, Colon, & McCallum, 2005). Providing mastery experiences, teaching activities that result in successful outcomes, and vicarious experiences that explore teaching from the modeling of a classroom mentor are sources of teacher self-efficacy. Self-efficacy can directly influence new teachers' own teaching ability. Efficacious novice teachers report more feelings that are positive about remaining in the teaching field. Lack of teacher self-efficacy in the early stages of development can significantly

affect other dispositions of the novice teacher. It can enhance or undermine performance and directly affects the teacher's belief about ability to teach (Populou & Norwich, 2002*)*.

In summary, alternative routes to a teacher credential were designed in order to put new teachers into the field as quickly as possible. Even though this route to a credential provided a significant number of teachers to the field, attrition rates leveled that field and continued to rise. Teaching shortage appears to be more about leaving the field than entering it in both general education and special education, and is one of the impediments toward building a cadre of highly qualified teachers. Teachers with low teacher self-efficacy burn out and leave the field early (Emmer and Hickman, 1991) and their students do not learn as much or as well (Darling-Hammond, 1994; Skrtic et al., 2005). This is especially true in schools with at-risk learners: students with special needs and students living in poverty.

From the literature we know that teacher self-efficacy is developed and maintained by successful teaching experiences, effective mentoring and pedagogical knowledge (e.g. Goodard, Hoy, & Woolfolk Hoy, 2004). None of these experiences is readily available to interns in alternative certification programs.

Purpose of the Study

This mixed methods study addresses how training in an alternative certification program and teaching assignments in hard-to-staff schools affect the levels of teacher self-efficacy. In addition, developmental and environmental factors that impede or facilitate the development of teacher self-efficacy were explored by interviewing special education interns during their first semester in an alternative certification program and

then at the completion of the first four months of teaching. The method of this triangulation mixed methods study is to merge quantitative and qualitative data for analysis. A norm-referenced scale was used to measure the change in levels of self-efficacy at the start of intern teaching and again after a semester in the same teaching environment. At the same time, the phenomenon of teacher self-efficacy was explored using semi-structured interviews with a volunteer sample of interns. The reason for collecting both quantitative and qualitative data was to bring together the strengths of both forms of data to synthesize results.

To summarize, the purpose of this study was to investigate how the levels of teacher self-efficacy changed during the first year of teaching in an alternative certification program. The outcome of this mixed methods study was to identify factors that affect the development of teacher self-efficacy. Finally, recommendations were offered for universities that have alternative certification programs so they can better support interns during their first years of teaching in order to develop and maintain teacher self-efficacy, and keep teachers in the field.

The sample for this study was Teach for America Interns self-selected from a new cohort beginning an alternative certification program at a local private university in August of 2009.

Research Questions

The following research questions were addressed in this study:

1. How did teacher self-efficacy change from pretest to posttest during the first year of teaching as an intern in an alternative certification program?

2. What are factors in the first year of teaching in a special education alternative certification program that might be related to changes in teacher self-efficacy?

3. How can a University alternative certification program effectively support interns during their first years of teaching in order to develop, maintain, and increase positive levels of teacher self-efficacy?

The premise of this mixed methods study is that novice teachers experience a drop in self-efficacy during their early years of teaching. The question to be explored is whether that drop in self-efficacy is partially/substantially due to learning to teach through an alternative certification program. The key terms used in this study are defined in Appendix A.

Significance of the Problem

This study is important because the shortage of teachers will continue to escalate, not from the decrease of new teachers entering the field, but because new teachers are leaving the field in large numbers due to burnout (some before they complete their program). Research has established that new teachers experience diminished self-efficacy and confidence during their first year of teaching. This is turn leads to less effective teaching and lowered student achievement (Pajarea, 1992). This is a particular issue for special education teachers who often work with students with significant behaviors that impede learning—their own learning and that of peers. Available research deals with teacher development and self-efficacy issues with either traditionally prepared teachers or newly credentialed teachers. This study examined the development of self-efficacy and

the challenges faced by special education interns. From this research came

recommendations for dealing with the needs of this population.

Methodology and Data Sources

Research Design

"All studies include assumptions about the world and knowledge that informs the

inquiries" (Creswell, 2007, p. 20). Prior to choosing a methodology for the study, it was

important to identify a paradigm or worldview that served as a lens through which to

conduct the mixed methods study. After reviewing various paradigms (Creswell, 2007), it

appeared that the paradigm that most closely matched the worldview mirrored in this

study is that of constructivism. While being typically associated with qualitative research

approaches, constructivists assume that individuals build their own realities, based on

their life experiences (Hatch, 2002). Therefore, multiple realities can exist and are best

explored with the researcher and the participant. "Constructivism views learning as a

process in which the learner actively constructs or builds new ideas or concepts based

upon current and past knowledge or experience. In other words, learning involves

constructing one's own knowledge from one's own experiences" (Hatch, p. 45).

Constructivism synthesizes how teachers learn and develop. Researchers such as Pajarea

(1992) contend that Albert Bandura's model of social cognition represents a type of

social constructivist view of human learning. Emerging from social cognitive theory,

Albert Bandura espouses that a sense of agency involves a person's belief in their control

over their environment and "influences how they feel, think, motivate themselves and

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behave" (Bandura, 1993, p. 118). From these various influences, teachers construct their style of teaching.

Bandura contributed greatly to the field of teacher education by defining and studying self-efficacy, and later teacher self-efficacy. Bandura's (1977) theory of self-efficacy, "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances," (p. 391) greatly influenced the choices made, how long they remained at tasks, how much effort they devoted to the task, and the degree of anxiety or confidence they brought to the tasks. Bandura found that teachers' development is shaped through vicarious experiences, modeling and social persuasion. Vicarious experiences provide learning without personal consequences. For example, a novice teacher may be observing in the classroom of a more experienced teacher. During the observation, the more experienced teacher loses control of her classroom—every teacher's nightmare. Through self and shared dialogue with the master teacher, the novice teacher can deconstruct the situation and offer suggestions to improve the classroom management. The process results in feelings of self-efficacy: the belief that they can positively affect their students' learning. This hypothesis gives them the self-efficacy to believe that they can affect what and how much their students learn. This paradigm very aptly suits a researcher that is more interested in the career journey of the participant, than measuring the level of a variable (teacher self-efficacy).

To answer the research questions a mixed methods, triangulation design convergence model was utilized. In this model, the researcher collected qualitative and quantitative data on the same phenomena at different times (Creswell, 2007). The results

were then converged during the interpretation stage of the study. This model was chosen

in order to validate or confirm qualitative data with quantitative data, thereby obtaining

valid and substantiated data around the phenomena of self-efficacy. Interns first

completed the Teacher Sense of Efficacy Scale (TSES) (Tschannen-Moran, Hoy, & Hoy,

1998) a checklist that measures the level of teacher self-efficacy, prior to beginning their

teaching assignment. Two months into the teaching assignment, eight interns were

interviewed. Four months into their assignment, the original sample again completed the

TSES.

The Instrument

The TSES was selected after a review of several checklists that measure teacher

self-efficacy. Tschannen-Moran and Woolfolk Hoy (2001) designed this checklist with

properties of a stable factor structure, good validity, and the ability to capture a variety of

capabilities that teachers deem important. The instrument is discussed in Chapter 3.

Semi-structured interviews were conducted with eight members of the sample who

also completed the TSES. These teachers were chosen by their willingness to participate

in the interviews and their placement in special education settings. Semi-structured

interviews allowed for flexibility and the ability for this interviewer to enter the world of

the intern teacher and co-construct perceptions. "This format allows the researcher to

respond to the situation at hand, to the emerging worldview of the respondent, and to new

ideas to the topic" (Merriam, 1998, p. 74). A set of questions were designed that acted as

initial probes. However, using the semi-structured method of interviewing allowed for the

interviewer to probe deeper into areas led by the informant.

In this design, qualitative and quantitative data were collected sequentially in three phases: prior to the intern entering the classroom as the teacher of record, during the first semester of fieldwork and at the end of the first semester. The rationale, as stated in Creswell (2007), for this design is that the quantitative data frames the research problem, and the qualitative data adds a richness and detail to the issue.

Limitations

Several limitations in this study significantly influence its generalizability. The very small self-selected sample is a limitation in the study. However, Patton (1990) described purposeful sampling as selection based on a particular characteristic, which is in this case was enrollment in an alternative certification program. In addition, all of these sample members were Corp members in Teach for America (TFA). "Teach For America is the national corps of outstanding recent college graduates and professionals of all academic majors and career interests who commit two years to teach in urban and rural public schools and become leaders in the effort to expand educational opportunity" (Teach for America, 2006). The goal of TFA is to narrow the achievement gap and eliminate educational inequity in America. Teach for America candidates are placed in hard-to-staff, low-income communities, in some of the hardest-to-staff schools across the country. These students are chosen for the Corp because they possess specific qualifications: "We look for individuals who have achieved results and demonstrated a range of leadership qualities, because we know those individuals will lead our students to success in the classroom and beyond" (Decker, Mayer, & Glazerman, 2004). Given that

this study utilized a very small self-selected sample with specific shared characteristics, results can be generalized to them alone.

In addition, the limitations that are inherent in many approaches; the respondents supplying the answers they feel are desirable to the interviewer, were confounded with the possibility of a dual relationship. The researcher was also an instructor at the University where the students were enrolled, and taught the interns during their first semester of their teacher education program. In addition, the administration of the TSES took place soon after the interns entered the classroom, and then again four months later. The literature (Hensen, 2001) does discuss the finding that teachers from all types of certification program reported a drop in self-efficacy soon after beginning their first teaching assignment. This limitation and its implication for further research are discussed in Chapter 5.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

Alternative certification programs are now the most common ways to certificate a

teacher in both general and special education classrooms (Futternick, 2007). This route

to certification is not only shorter than most traditional programs, but often contains

classes heavier on "learn today, use tomorrow" strategies rather than the rigorous

education in theoretical and pedagogical knowledge and preservice practicum

experiences (Darling-Hammond & Snowden, 2005). Critics of alternative certification

programs "have long assailed this method as an occupation that cannibalizes its young

and in which the initiation of new teachers is akin to a sink or swim, trial by fire or boot-

camp experience" (Ingersoll & Kralik, 2004, p.71). There has been discussion regarding

the effectiveness of and need for university-based teacher education programs, with both

sides citing powerful evidence to support their positions.

Educators are polarized regarding the efficacy of alternative certification paths vs.

traditional models. Nationally, alternative certification programs evolved from market—

driven reforms (Chin, Young, & Floyd, 2004). Two competing agendas have emerged in

the literature: the professionalization agenda and the deregulation agenda (Zeichner,

2001). Educators who espouse the professionalization agenda view teaching as a

profession on a par with other service professions such as medicine and law. Teachers'

developmental sequence is similar to service professions in the belief that teachers made,

not born. Teacher formation begins with acquisition of subject matter and educational

theories and practices. These skills are honed in controlled field settings, over the life

career of the teacher. The "how" to teach is gleaned through modeling by veteran

teachers or remembered from prior experience as a student. The best venue for training

the teacher is the university in collaboration with local districts. Certification and

credentialing is given to those who successfully complete the requirements of the training

period.

Educators who favor the deregulation agenda believe that teaching is a technical

skill learned through on-the-job training (Zeichner, 2001). The most important trait of the

teacher is a deep and comprehensive knowledge of subject matter. There is little belief in

developmental progression in becoming a teacher. There is a belief by those who

advocate this model that the employment market will recruit and hire the best and most

capable. Those who are market reformers believe that people "self-select" teaching based

on their own attributes (Ballou & Podgursky, 1998). Only subject matter and criminal

background clearance is needed prior to certification. Advocates of this model aver that

traditional requirements such as university programs impose barriers on capable potential

teachers who can't/won't "endure teacher preparation programs and bureaucratic

hurdles" (Chin et al., 2004). Advocates cite research that states that student achievement

is not positively correlated with formal preparation programs (Guskey, 1987).

Alternative certification routes to teaching candidates are different in length and

breadth from enrollment in traditional training programs. Also different is the typical

candidate that enters this type of program. Teachers tend to be older, have prior career

experience, and come from underrepresented populations. Chapter 1 discussed the other

issues that surround alternative certification programs. The emphasis has been on what kind of and how much knowledge the novice teacher must possess to enter the classroom and become an effective teacher who remains in the field. It does not look at teaching as a skill that is learned in developmental stages or the cognitive restructuring of those results from carefully chosen experiences (Bandura, 1977). This argument, while important, often does not take into account other than cognitive prerequisites of the teacher.

Structure of the Chapter

The first section of the literature review examines literature that identifies developmental theories regarding how teachers develop knowledge. The second section of this chapter reviews literature on the impact efficacy plays in teaching, the impact on learning, and ultimately whether the teacher remains in the field. The final section reviews program recommendations for routes to credentials that can be adapted to alternative certification programs. This section sought to identify actual programs as well as literature outlining the necessary components for efficacious teacher education.

The Developmental Trajectory of the Teacher

High cognitive levels of teachers are associated with high student achievement (Mumby, Russell, & Martin, 1999). There is also a body of information that links the development of teachers to student achievement. The following sections review several cognitive developmental approaches to teacher development and how they are linked to student achievement. Several authors have applied constructs of cognitive-developmental psychology to the practice of teacher education (Fuller, 1969; Glassberg & Oja, 1981; Joyce, Lamb & Sibol, 1966; Mok, 2005; Oja, 1990). They hypothesized

that teacher education programs should be designed to assist teachers with the acquisition of knowledge and skills as they move through a series of developmental stages. There are varying perceptions of how stages engage in the development of the teacher. While some theorists such as Piaget and Kohlberg perceive development as more "linear, hierarchical and progressive" (Mok, 2002, p. 56), other theorists believe that development, especially for adults, is less unorganized and sometimes random due to the influence of the individual's sense of self and environment.

All adult stage theories progress from concrete to abstract dimensions. Within teacher developmental stage theories, it is assumed that novice teachers, at the beginning of their development, will engage in more egocentric and concrete thoughts and teaching practices. More experienced teachers will function more abstractly, comprehensively and empathetically (Glassberg & Oja, 1981). This information is critical when planning coursework, professional development, and practicum experiences for teachers. In addition, knowledge of the stage of development of the teacher helps mentors and teacher trainers to understand how content and strategies are assimilated and implemented (Oja, 2002). Glassberg & Oja (1981) maintain that one of the major sources of difficulty in planning teacher education programs is the lack of awareness and practice of cognitive theory in order to promote teacher development.

Most stage theories that address teacher development are built around the tenets of such stage theorists as Jean Piaget (1970). The set of assumptions and central constructs shared by these stage theorists all focus on the types of knowledge and thinking processes possessed by human beings. Another shared aspect is that all these

theorists believe that stages are qualitatively different from each other, that there is an invariant sequence to the stages, and that the higher stages reintegrate the features of the lower stages (Glassberg & Oja, 1981). Higher stages include the ability to understand more points of view and more complex thinking and problem solving. Bruce Joyce published research in the early 1960's that connected conceptual development of teachers with their interactions with their students. Joyce found that the more conceptually abstract the thinking of the teacher, the more successful the instruction of the teacher. Subsequent research explored how teachers with different levels of conceptual development processed information about their students (Joyce, 1980). Additional research conducted in natural settings found that teachers who were more sophisticated in their concept development functioned in the classroom at a more complex level. They appeared to be more flexible, more tolerant to stress and more adaptive than teachers at a more concrete level of thinking (Joyce, 1980).

Mok (2005) examined the concerns and feelings expressed by novice teachers. Initially, teachers experienced high levels of anxiety about their ability to manage their class and their own sense of adequacy as a teacher. He conducted similar research years later to revisit these findings and discovered similarities occurred across countries (England and the United States) and classes. A sample of female novice teachers reported concerns around being liked by their students and their struggles with discipline. A sample of new teachers in England was concerned about the choices they had made regarding their job placements, aggressive attitudes of parents, and difficulties in maintaining discipline. This similarity in reporting led Mok to summarize in his data that

new teachers were "primarily concerned with class control, the situations in which they teach, their own content adequacy, and about evaluations by their supervisors, by their pupils and of their pupils by themselves" (p.210). Other interesting data returned was that some novice teachers expressed that their education classes were not relevant. One explanation offered might be that university programs offer classes that are not relevant or interesting to students. Another more plausible explanation might be that education courses are attempting to address classroom issues that students are not developmentally ready to process. Mok's study involved administering an hour-long interview evaluating an introductory education class to 100 education students; 97 were undergraduate preservice teachers and the other three students were middle aged, experienced teachers. The 97 younger students expressed very negative opinions about the class, while the other three were enthusiastic.

Mok (2005) identified some of the behaviors typical of teachers in the first stage of development. "*Concern with Self*" Teachers at this stage have very basic concerns such as "Where do I stand in the classroom?" (p.220). Overtly, they expressed significant concerns regarding their ability to manage their classroom, their ability to teach the content, and their ability to acquire enough peer and administrative support to help them survive. In addition, they reported a lack of mentoring and support from administrators and their site support providers. Mok stated that while the students openly talked about these issues during university seminars, the intensity of their concerns was usually only manifested in individual support sessions. Their ability to be perceived as competent was important not only at the school site, but also with their peers.

A Study of Teacher Stage Development: Oja and Glass

Knowledge of the stage of development can guide those engaged in teacher preparation and mentoring to the appropriate material and practices (Oja, 2002). Sharon Oja conducted extensive research regarding how teachers learn. Her work was also based on the prominent stage theorists. Her studies attempted to provide information on how teachers assimilate new information. The studies concluded:

1. Teachers operating at higher cognitive stages show greater flexibility, are able to see multiple points of view, are more effective in….group problem solving with colleagues

2. Teachers' developmental stages affect their interactions in the school setting. (Oja, 1990, p.3)

Based on extensive observation and interviews with teachers, Oja evolved four stages in teacher development; the self-protective stage, the conformist stage, the conscientious stage, and the autonomous stage. It is during the first two stages that most interns enter the classroom. During the self-protective stage, teachers are often reactive and respond in kind to student anger and aggression. They may develop a generalized negative attitude toward their students, especially when they are engaged in oppositional behaviors (Oja, 1990).

The second stage identified by Oja (1990) is the conformist stage. At this stage, the teacher is concerned with the opinions of students, colleagues, and administrators regarding efficiency as a teacher and the ability to meet expectations of school site personnel. This carries an additional implication for interns enrolled in university

programs, as they are also concerned with the opinions and expectations of university supervisors and faculty. At this stage, the teacher wants to be liked by students and colleagues. If the teacher feels rejected by students, diminished commitment may follow. "Fitting in" is an essential goal at this stage. At this stage, new teachers may stand on their authority as the teacher to solve problems with students and parents. When confronted with the need to work collaboratively, teachers at this stage may resort to stance- taking based on perceived authority, knowledge and control, rather than collaborative skills. Research by Oja and Pine (1985) conducted to correlate teacher stage development with school-based consultation, found that the absence of a teacher at this stage of development during a collaborative project was reported as beneficial by the other site team members.

The next stage of development identified by Oja (1990) is the conscientious stage. At this stage, the teacher moves away from approval seeking and toward personal goal-setting and accomplishment. Awareness of self occurs as a teacher grows and there is less motivation to identify with a group. The visage of "super-teacher" is forefront in their minds as they spend hours planning creative lessons. While the teacher at this stage is more autonomous, the sometimes exaggerated sense of responsibility for students and the intense goal orientation can lead to frustration and exhaustion. It is at this stage that teachers who enter the field with positive feelings of self-efficacy could begin to falter. Similar to the concrete operations stage of Piaget, teachers at this stage are able to internalize rules, but suffer from guilt when they break either external rules or internal codes of ethics. They often set high expectations for themselves and respond more to

these internal codes than to external approval and acceptance (Oja & Pine, 1985). It is important to understand how teachers view behavior of students at this stage. While desperately seeking the approval of their students in earlier stages, teachers at the conscientious stage view behavior in terms "of feelings, patterns, and motives, rather than by simple actions" (p.102). They are more likely to look at the function of the students' behavior and the environment in which the behavior is occurring rather than internalizing the students' actions as a personal affront. At this stage, teachers are more readily able and willing to engage in collaborative work. However, they may encounter more challenges when the agenda of the group does not match their own set of goals.

At the autonomous or individualistic stage, the teacher begins to acquire a more global perspective on teaching and the school environment (Oja, 1990). There is a greater ability to evaluate individual strengths and weaknesses in a less critical and pedantic light. Viewing students more as individuals, the teacher can now look at behavior as communicative and can consider psychological reasons for student behavior. By being less rigid in expectations of themselves and their students, teachers at the conformist stage are able to "go with the flow" both with their own goals and those of their students. They are able to engage in Plan B, and to accept the legitimacy of alternative schedules on any given day. Since teachers at this stage demonstrate more flexible thought processes, group work is more satisfying and efficient. They are able to bring different and varied perspectives to the table and can regard colleagues from an individualized perspective (Oja & Pine, 1985). These authors found that the ability to engage in

collaborative action research led to a greater number of reports of increased self-efficacy in confronting, solving and evaluating classroom instructional and behavioral issues.

Understanding how teachers learn and develop has several implications for the field. Teacher training programs and district induction programs can be planned taking into consideration appropriate experiences and professional development based on the identified developmental patterns of teachers. Administrators and university supervisors can mentor novice teachers based on knowledge of their needs. These hypotheses were the basis of much of the research of Glassberg and Oja (1981). Utilizing the developmental theories of Kohlberg (1974), they set out to design a teacher education curriculum aligned with cognitive developmental theory. By acknowledging that effective teaching is a complex form of human behavior, they hypothesized that successful teaching requires a relatively high level of cognitive development. Their research findings led Glassberg and Oja to wonder if they could design a teacher training program that would nurture and encourage cognitive development. Furthermore, could a program move a teacher from a lower stage to a higher stage of development? These questions led the team to explore an existing program, the Sprinthall-Mosher Deliberate Psychological Education Model (Sprinthall, 1977) which attempted to apply cognitive psychology to teaching practice. In this curriculum, educational scenarios were introduced to create disequilibrium in order to maximize cognitive growth.

It was hoped that the teachers would develop cognitive thought sophistication by confronting both personal and professional issues, simultaneously with receiving direct instruction in resolution and intervention techniques. In addition, role taking, reflection,

and support were part of the program, to align with the theory of Dewey (1933), who found in his own studies that too much disequilibrium could result in a person feeling overwhelmed. This last statement was pivotal for future research that affirmed reflection and effective mentoring are two key factors in keeping teachers in the field (Darling-Hammond, 2003).

In *From Surviving to Thriving (*Bromfield, Deane, & Burnett, 2003), the authors described daily reflection and the use of a journal as one of the key methods for surviving the first year of teaching. The researchers interviewed a group of teachers, who had self-identified during a study as those who reflected on a daily basis. The teachers reported that they could plan better, articulate their needs better with their administrator, and felt better about their performance in the classroom.

Glassberg and Oja's (1981) own model consisted of a six week summer workshop for novice teachers and counselors. During the Institute, the participants were given direct instruction in pedagogy and small group sessions to develop skills to "create learning environments which would facilitate development through the stages" (p. 64). Novice teachers learned to give and receive feedback, a skill critical for reflection. They also received direct instruction in behavior management strategies. In the fall the teachers returned to their classrooms and began to implement these new tools under the weekly supervision of university faculty. The teachers received individual feedback from the supervisors and met in small focus groups with other teachers. A seminar was designed to continue the developmental process. Students met to reflect on the week in their classroom and then gave and received input from videotapes of their teaching. The

push/pull of the support-challenge and action-reflection model was meant to create disequilibrium and then challenge them to use their new cognitive tools to resolve issues presented during seminar with the hope that practice would generalize back to their classrooms. Weekly journals were also kept by the teachers with a content emphasis on awareness of their own thought processes and the professional interactions they had at the school site with other faculty/staff as well as their students. While their research did not find shifts in developmental stages based on the workshop and seminar for the teachers, they did find that learned theories and strategies can impact developmental level.

The most relevant finding for this study (Glassberg & Oja, 1981) was that effective teaching can be defined in developmental terms. The authors found that those teachers at a higher stage of development possessed more cognitive flexibility and creativity, evident in their teaching, and the learning environment of their classroom. In turn, the research showed that the students of these teachers tended to manifest higher levels of thinking and independence (Glassberg & Oja, 1981). So, while teachers themselves may not move to higher cognitive planes, their students benefited from the program design.

Self-Efficacy in Novice Teachers: Bandura

What are the characteristics of individuals who remain in teaching? "The decision to continue teaching shares the same motivating principle that led to entry into the field-namely, the perception that among all available alternate activities, teaching remains the most attractive in terms of …intrinsic rewards" (Guarino, Santibanez, & Daley, 2006).

This next section will identify and discuss the characteristic that most influences student achievement gains: self-efficacy.

Albert Bandura (1997) contributed greatly to the field of teacher education by defining and studying self-efficacy, and later teacher self-efficacy. He defined self-efficacy as "belief in one's capacity to organize and execute the courses of action required to produce given attainments" (p. 3). Grown from social cognitive theory, Bandura espouses that a sense of agency, a person's belief in their control over their environment, "influences how they feel, think, motivate themselves, and behave" (Bandura, 1993, p.118). Belief in one's ability to influence and control the environment is produced through four main processes: cognitive, motivational, affective, and selection (Bandura, 1993). Self-efficacy is a future oriented belief based on how competent a person will be in any given situation. "Self-efficacy beliefs influence thought patterns and emotions that enable actions in which people expend substantial effort in pursuit of goals, persist in the face of adversity, rebound from temporary setbacks and exercise some control over events that affect their lives" (Tschannen-Moran et al., 1998, p. 210).

Self-efficacy is set apart from other concepts of self, such as self-esteem or self-worth. Self-esteem is a more affective reflection of such traits as self-worth. It has more to do with how competent one feels about one's own ability. It is a self-judgment of how well one has achieved their goals or succeeded in a given task. Self-efficacy, on the other hand, is an evaluative statement about how well one might do on a future task. For example, a person may feel inefficacious about the ability to climb a mountain, but that feeling would probably not affect self-esteem. There has been no previous investment in

mountain climbing—in other words, no harm-no foul. On the other hand a very skilled mountain climber may experience negative feelings of self-esteem because they have set very high mountain climbing goals for themselves.

Belief in self influences which kinds of scenarios of action we visualize. People with high self-efficacy tend to visualize positive scenarios involving success and positive regard. A study involving over 660 public school teachers with less than five years of experience reported that 70% of the sample felt that being a teacher allowed them to make a difference in the lives of at-risk students (Farkas, Johnson, & Folleno, 2000). Those who have lower self-efficacy engage in scenarios of failure and often catastrophize life events. "Insidious self-doubts can easily overrule the best of skills" (Bandura, 1997, p. 35). While teachers may have the cognitive skills (content) to teach, there is no direct correlation between possessing knowledge and the ability to use it, especially under duress. Low self-efficacy is increased when stress is added to the equation. In addition, lowered self-efficacy courts depression.

Beliefs of personal efficacy often influence the environments we choose, including career paths. People avoid those life situations they believe exceed their ability to cope. By the choices made, people self-select experiences they can handle. Self-efficacy influences goal setting; the higher the sense of self-confidence, the higher the goal bar is set and the greater the dedication to achievement of those goals.

This construct was first explored with teachers in a study conducted by the RAND organization in 1976 (Tschannen-Moran et al., 1998). Two studies reported a significant relationship between self-efficacy and student achievement based on two questions added

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to an instrument the researchers designed. The data extrapolated by the researchers

isolated a new variable: teacher self-efficacy. Since that time, several studies have offered

variations on Bandura's definition, applied to teachers (e.g. Ashton, 1982). Teacher

efficacy has been defined as, "the extent to which the teacher believes he or she has the

capacity to affect student performance" (Berman, McLaughlin, Bass, Pauly, & Zellman,

1977, p.137) or as "teachers' belief or conviction that they can influence how well

students learn, even those who may be difficult or unmotivated" (Guskey & Passaro,

1994, p. 4). A related finding in the RAND study was that teachers who received low

self-efficacy scores on an evaluative instrument reported higher levels of stress. This

finding is significant when factoring in self-efficacy as a variable for staying in the field

(Tschannen-Moran et al., 1998).

Since that time, there have been many articles exploring the construct of self-

efficacy and how it applies to teachers and their students. This construct has been studied

with all populations of teachers, but more consistently with novice teachers. The next

section of this literature review will examine research evaluating how teachers' sense of

self-efficacy impacts teaching and students' learning, how this construct is measured,

manifested in novice teachers, and how it affects a teacher's ability to teach and handle

the behaviors of students, particularly students in special education. Literature examining

retention and implications for teacher education program development will also be

reviewed.

In 1981, Guskey developed a scale to measure a factor *Responsibility for Student*

Achievement (RSA). Scores on the scale measured the amount of responsibility teachers

took for their students' achievement (success or failure). He found a positive correlation between levels of teacher efficacy and teacher responsibility for student achievement, with stronger positive correlations between higher levels of teacher efficacy and student success.

Aston & Webb (1982) developed the *Webb Scale*, used in studies to determine what teachers believe about their ability to impact student behavior with reinforcement. This study has particular importance and will be discussed more in depth in a subsequent section.

Gibson and Dembo (1984) developed the *Teacher Efficacy Scale*. This scale is one of the primary measurements of teacher efficacy used in the field today. This 30 item Likert scale measures several dimensions of teacher efficacy including teacher motivation and the relationship between levels of self-efficacy and classroom management. The authors found that teachers who reported high feelings of teacher efficacy were more confident in their interactions with their students, persisted longer at teaching tasks, and used a wider variety of teaching strategies. In addition, teachers with a higher sense of teacher efficacy reported making fewer critical responses to students giving incorrect responses. This teacher sample also reported utilizing small group instruction more than large group discussion. These behaviors are similar to those outlined in a previous section discussing teacher development, with teachers at a higher stage of development exhibiting the traits listed above.

Where Teacher Self-Efficacy is Stretched to the Limit:

The Special Education Teacher

In 1992, Fuchs, Fuchs, and Bishop created a scale to measure how teacher efficacy impacts the strategies teachers choose. *The Teacher Characteristic Scale* measures variables of organization, planning, and fairness and found a positive correlation between these variables and high levels of teacher self-efficacy. In addition, this scale measured the willingness of teachers to work with students who were struggling rather than refer students for a special education evaluation. Findings revealed that teachers with high teacher efficacy ratings were more likely to keep a child with a learning problem or a behavior problem in the classroom.

Allinder (1984) explored the relationship between teacher efficacy and special education teachers' service delivery models. This is the first study that focused on previous research that found similarities in the roles of resource room special education teachers and general education teachers (Brophy & Good, 1986). Allinder (1984) assumed that degrees of self-efficacy would also be similar. Resource room teachers serve special education students either by working side by side with the general education teacher, or in a separate classroom which is staffed by the special education teacher and his/her assistants. The findings of Allinder's research positively correlated high feelings of teacher efficacy with good student achievement. Implications for special education students served by resource teachers were the same as for their general education counterparts. She cited a lack of research studying efficacy in special education teachers who served as consultants or team teachers.

Allinder also acknowledged that the second service delivery model, indirect service providers, (consultation and team-teaching) was becoming more popular. Predating the reauthorized Individuals with Disabilities Education Act (IDEA, 2007) her prediction that this model of serving students might supplant the resource room model, was very insightful. The observation was made that a similar goal for both general education and special education students exists: access to the core curriculum for all students.

However, the practices and skills needed by these teachers can be very different. While resource room teachers spend the majority of their time directly teaching small groups of students, indirect service providers spend most of their time collaborating, consulting and co-teaching (Dettmer, Thurston, & Dyck, 1993). Indirect service providers must also possess expertise in curriculum modifications, referral and other special education law processes, and classroom management (Allinder, 1984). Allinder's study addressed two questions; the relationship between efficacy and instructional components, and the effect that a particular service model had on the instructional variables. Results displayed a significant correlation between the variables, indicating that teachers who have high levels of efficacy are more likely to try multiple ways of teaching a lesson, are organized in their planning and instruction, are consistent in dealing with students with behavior issues, and demonstrate confidence and enthusiasm in their teaching. The relationship between efficacy and a specific service model was not significant. However, the indirect service model was significantly correlated with two other attributes: experimentation and assuredness (enthusiasm and clear lesson presentation). Implications

from this study for teacher education programs were to provide more preservice training in the areas of consultation, and skills that will promote flexible and innovative thinking when teaching students with disabilities.

Very little research looked at the relationship between special education referrals and teacher efficacy even though literature is available that examines at the correlation between leaving the field and increasing numbers of students being identified. The reauthorization of the Individuals with Disabilities Education Act (IDEA, 2007) resulted in a renewed emphasis on all students' rights to a free and appropriate education in the least restrictive environment, with that environment being the general education classroom in most cases. No Child Left Behind (NCLB, 2001) introduced specific criteria for certification to insure that all children will have a highly qualified teacher. In searching the literature, only two studies were found that correlated teacher referrals to special education and the levels of self-efficacy of the teachers who do the referring.

Podell and Soodak (1993) found that teachers with low efficacy are more likely to refer students to special education than teachers with high efficacy. In addition, low efficacy teachers tend to question the feasibility and workability of a student with a behavior or learning difficulty placed in their classroom. Another interesting finding was that low SES children were referred more frequently to special education by teachers with low self-efficacy. Thus, a case could be made that low SES children are more at risk for special education referrals due to teacher variables rather than student variables. More specifically, teachers are more likely to refer students with learning problems, than students with medical problems. The authors' hypothesis for this finding was that

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learning problems often have an unknown etiology; whereas medical issues have diagnoses by credible professionals and often visual features. This finding speaks to earlier research that found that teachers with low self-efficacy demonstrated fewer skills areas requiring differentiated instruction for children with special needs, a lower frustration level, and diminished sense of effectiveness (Allinder, 1994; Guskey, 1987; Tschannen-Moran, & Hoy, 2006).

Teacher efficacy was also related to the perceived ability to work with culturally and linguistically diverse students as well as teacher bias toward this population of students. Novice teachers, especially, report lower efficacy when working with these students. Tucker et al., (2005) investigated teacher efficacy in novice teachers as a variable that could be modified by providing training in working with culturally and linguistically diverse (CLD) students. Teachers attended a six-hour workshop for training in an existing research-based program. Workshop participants rated the workshop as helpful and reported an increase in their knowledge about CLD children. Ongoing consultation was provided to the teachers. A follow-up survey found that teachers who had attended the workshop reported higher feelings of self-efficacy than a control group who did not have the training.

The Gibson and Dembo Teacher Efficacy Scale was utilized by Coladarci and Breton (1997) to explore the relationship between teacher efficacy and instructional supervision of resource-room teachers. This study has particular relevance to teacher education programs and districts employing interns. Teachers who reported that the supervision was useful and helped them with their practice reported higher self-efficacy.

Although 75% of the teachers reported a formal observation by either the principal or the special education director, 17% indicated they received no formal or informal supervision/observations. Similarly, 76% of the teachers reported informal consultation that was "somewhat helpful" (p. 235).

While these were the only studies found on specific variables that impacted special education teachers' self-efficacy, Tschannen-Moran and Woolfolk Hoy (2006) conducted a study looking at factors that enhanced novice teachers' self- efficacy, including supervision. Using Bandura's (1977) theory of self- outcomes efficacy, they investigated how novice teachers' self-efficacy beliefs were related to their actions and anticipated in the classroom. They found that self-efficacy beliefs of novice teachers "can become self-fulfilling prophesies, validating beliefs either of capability or of incapacity" (Tschannen-Moran & Woolfolk Hoy, 2006, p. 945). Teachers with low self-efficacy tended to expend less time and energy in preparation and delivery of content; and tended to give up more readily when students experienced difficulties. Though not directly related to special education referral issues, it is easy to see that students who do not respond to presented instruction have a higher risk for special education referral when placed in classrooms of teachers with a low sense of efficacy.

Bandura (1977) identified four major influences on teachers' self-efficacy beliefs previously: mastery experiences, verbal persuasion, vicarious experiences, and physiological arousal. He identified the most powerful variable as mastery experiences: the successful instructional experiences teachers have with students. As discussed in a previous section, when a teacher feels that instruction has been successful, feelings of

efficacy increase and set up the expectation that future instruction will be successful as well (Tschannen-Moran & Hoy, 2006). Conversely, when teachers feel they have failed during a specific lesson, their feelings of self-efficacy diminish, and the expectations are that future instruction will fail. It is important to note that the construct of self-efficacy was a perceived self-perception of competence, not the actual measurement of the ability to teach (Bandura, 1997). This finding has significant impact on intern/novice teachers who often enter the field with overestimations of their ability to impact achievement, only to experience a *reality shock* [for emphasis] when they encounter difficulties and initial failure in their attempts. As seen in the earlier discussion of stages of teacher development, novice teachers may set the bar lower for their own expectations of their teaching in order to protect their sense of self.

In their study, three school-level variables were examined by Tschannen-Moran, Hoy, and Hoy (2001): school climate and structure, principal leadership, and collective efficacy at the school site. For the purposes of this review, the variable of principal support was studied. This variable was chosen because current research reports that one of the main reasons novice teachers leave the field is lack of support from administration (Futernick, 2007). In this study, the variable of verbal persuasion was defined as the amount and quality of interpersonal support by administrators. Tschannen-Moran and Woolfolk Hoy's (2001) study found that in schools where the principal provided inspiration to new teachers, in the form of continuous support, and where negative student behaviors were controlled, teachers reported higher self-efficacy. When principals provided resources to teachers, and minimized classroom disruptions, and gave

teachers more autonomy over their classrooms, higher self-efficacy was also reported by teachers. Moore and Esselman (1992) also found that teachers participation in the governance of the school and autonomy in their classrooms, added to their sense of self-efficacy.

The first two sections of this literature review dealt with psychological and cognitive variables surrounding entry and retention in the field. The importance of knowledge of developmental trajectories has been discussed as a way to gauge teacher growth and expectations and to provide appropriate experiences both pre-service and during the critical first years. Studies documenting the importance of high teacher efficacy and its relationship to teacher retention have been discussed. Johnson and Birkeland (2003) conducted a longitudinal study of teachers who left within the first three years of teaching. Those teachers who left reported the reason for leaving was because they "had experienced frustration or a sense of failure" (p. 188).

As discussed in Chapter 1, there is interest not only in understanding how teacher's feelings of self-efficacy impact their ability to teach academics, but also in tactics to manage their classrooms. As identified earlier, teachers report leaving the classroom early in their career due to an inability to manage their classrooms. Specifically, special education teachers cite dealing with challenging behaviors; often students with emotional disturbance (Futernick, 2007) are the most difficult. The literature regarding the relationship between levels of self-efficacy and classroom management is now discussed.

Teacher Self-Efficacy and Positive Behavior Support

Teachers' perceptions of themselves as "disciplinarians" have been positively correlated to levels of self-efficacy. Emmer and Hickman (1991) found that the level of efficacy could predict what types of strategies teachers use when supporting the behavior of students. The authors presented 42 student teachers with various vignettes depicting children engaged in challenging classroom behaviors. Their selection of specific behavioral techniques to deal with the problems was correlated with their scores on an instrument measuring teacher efficacy designed by the authors. Their attempt to use the instrument to predict teacher preference for various behavioral strategies yielded modest success. Implications for the field included more extensive preservice training in behavioral strategies, as they found a very limited repertoire with the student teachers.

Several studies were reviewed that investigated the relationship between teacher efficacy and coping with students with special needs. Almog & Shectman (2007) investigated methods used by general education teachers in coping with the behaviors of included students and how their choices in behavioral strategies correlated with self-efficacy beliefs. They identified two models of intervention strategies used by teachers to cope with behavior problems. The "helpful model" seeks to bring about long term behavioral change though the use of direct instruction to improve students' functional skills and behaviors. This model also includes more flexible and supportive teacher behaviors (changing the instructional method and supportive dialogue). The "restrictive model" includes strategies that are more punitive in nature and are employed to suppress undesirable behaviors through the use of teacher authority stances and actions (removing

the student from the classroom, punishments such as withholding privileges). Studies by researchers such as Sugai and Horner (2007) have shown that teachers report more positive outcome and a higher preference for using helpful strategies.

As discussed above, perceived self-efficacy drives the choices teachers make in their classrooms, and is driven by the amount of control the teacher believes he/she has over the environment. Teachers with higher levels of self-efficacy believe that they have more control over their classroom and can more easily modify student behaviors that impede learning (Bandura, 1997). Teachers with lower levels of self-efficacy and teachers in earlier stages of development attribute student behavior to deficits within the student or personal attacks on the teacher (Jordan, Kircaali-Iftu, & Diamond, 1993). In addition, teacher efficacy affects how long a teacher is willing to work with a student with behaviors impeding learning, and how resilient a teacher is when faced with challenges and setbacks (Almog & Shechtman, 2007). Thirty-three elementary school teachers in inclusive settings were given the Gibson and Dembo (1984) *Teacher Efficacy Questionnaire*, interviewed by the authors, and observed in their classroom. While observing the teachers, raters categorized the behavior strategies the teachers used as helpful or restrictive. They found that the rate of restrictive approaches was higher in all classrooms.

However, they also found significant positive correlations between teacher efficacy and utilizing helpful behavioral strategies. Their two central conclusions were that teachers tend to select more restrictive strategies in inclusive classrooms, even though they had data that evidenced teachers possessed helpful strategies in their

repertoire (collected during interview). They also found a modest correlation between selecting helpful strategies and higher levels of self-efficacy. The hypothesis offered for this finding was that teachers continue to have difficulty bridging the gap from theory to practice. Implications for practice include more intensive preparation and reflection on teachers' practices by analyzing authentic scenarios and offering evidence based solutions. This will be discussed in more depth in Chapter 5.

Cunningham and Sugawara (1988) also offered this same recommendation based on their work with pre-service teachers. They studied teacher responses to problem behaviors using several variables: "teacher tolerance, attributions as to the causes of behavior, and adverse effects of costs of the problem behavior in the classroom" (p. 34). Their results were based on teacher responses to hypothetical situations. Findings included a clear pattern of attribution variables. Pre-service teachers attributed the most dysfunctional student behaviors to within–the-child-deficits. The teachers felt the student had control over their behaviors but chose to engage in them anyway, often times to upset the teacher. While not mentioned in the study, these feelings appear to correlate with previous studies discussed dealing with development of teachers and levels of teacher efficacy.

Students with challenging behaviors and their teachers need more support than the typical student (Landrum, Tankersley, & Kauffman, 2003). Research such as that conducted by Sutherland, Denny, and Gunter (2005) report that these teachers needed more support to manage students' challenging behaviors and to design instruction. This study is important because of the paucity of literature that looks at the unique and special

needs of these teachers. Mentoring programs for these teachers need to be carefully designed to provide information about disordered behavior, effective positive behavior support, and ways in which disordered behavior impacts learning.

Gold (1996) looked at relationships between teachers' perceived abilities to manage behavior and diminished self-efficacy. Managing behavior, in contrast with supporting behavior, usually denotes an authoritarian teacher. Teachers who reported difficulties with behavior management experienced greater stress and loneliness and a lower sense of personal accomplishment. Teachers of students with behavioral problems reported feeling even more isolated than their other special education colleagues. Research by Griffin, Winn, Otis-Wilborn, and Kilgore (2003) indicated these teachers generally had fewer interactions with colleagues and less on-site mentoring. This study is important in exploring ways to increase opportunities for collaboration with general educators and other special educators, and to decrease the feelings of loneliness and stress of teachers.

While classroom management is a primary concern of pre-service and new teachers, few studies examined alternative certification teachers' attitudes toward classroom management, or the impact on their own levels of teacher efficacy. Only one study was found that directly addressed this issue. Sokal, Smith, and Moat (2003) compared the attitudes toward behavior management issues among teachers in alternative certification programs with teachers trained in traditional programs. Three levels of attitudes toward classroom management were identified: low teacher control (non-interventionist), moderate levels of control, and interventionist modes. While prior

research found that pre-service teachers more often reported low teacher control, and more experienced teachers practiced interventionist models (high levels of teacher control), no previous studies were identified on the level of control that interns used in their classroom. In this study teachers in alternative certification programs were asked to complete a questionnaire regarding their beliefs about classroom control.

The results were interesting in several ways. The authors found that teachers in alternative certification program did not follow the same developmental trajectory as traditionally trained teachers in evolving attitudes toward behavior management. Teachers at the completion of their alternative certification program had fewer interventionist attitudes toward behavior management than at the beginning of the program. While this followed the developmental path discussed in the first part of this chapter, it did not correlate with prior research that found that traditionally trained teachers used strategies that were more restrictive. Implications for teacher education programs center on the need for more intensive support and theory to practice interventions for new teachers in alternative certification programs. This will be discussed at greater length in Chapter 5.

Mastropieri (2001) conducted interviews with special education teachers who left the field after fewer than five years of service. The challenges most often related were those surrounding behavior management.

> I was unprepared for the day at the school-wide assembly when one of my students began picking his warts and flicking them at girls who were sitting nearby. I was also unprepared for dealing with a student who brought his buck knife to school and began waving it at me and the other students…Most of these events represented on-the-job training for me. (p. 268)

Nougaret and Scruggs (2005) found highly significant differences between traditionally and alternatively credentialed special-education teachers' feelings of efficacy in the area of classroom management.

The preceding section of this literature review explored research dealing with the relationship between self-efficacy and the teacher's ability to create and maintain a safe and positive environment for students-and for themselves.

Environmental Factors that Influence Teacher Self-Efficacy:

Support from the Top

The final section of this review examined school environmental factors that directly impacted teacher self-efficacy; and how these factors affected teacher retention. Unsupportive school cultures created by hesitant or reluctant administrators and subsequent general lack of support reduces teacher self-efficacy and contributes to attrition (Rosenholtz, 1989). Research is available to guide administrators who wish to effectively share in the mentoring of new teachers. Whitaker (2000a) identified the following roles that administrators can perform to assist their new teachers: assign a strong special education teacher to be the mentor of the new teacher, arrange release time for the mentor and mentee for consultation and other induction activities, make the demands on these new teachers reasonable, make the needed resources available, and support and include the new teacher in becoming part of the school culture.

Besides lack of support from administrators, teachers reported that the lack of opportunities to collaborate with other teachers with similar job assignments, as well as general-education teachers, contributed to feelings of isolation and lowered efficacy.

Another issue facing these new teachers was the often hostile reactions from general-education teachers when asked to consider including a student with special needs. Mastropieri (2001) asked special education teachers to discuss their success at collaborating with general education teachers. Much of the research can be summarized with this comment, "I realized that I would need to develop working relationships with the teachers in my school if my students were going to be successful in their classes…Many teachers were openly hostile toward me about including students with special needs in their classes" (p. 69).

Whitaker (2000a) investigated the type of site support most needed by beginning special educators. The consistent report from the sample she surveyed was that emotional support was considered by the teachers to be the most critical. This finding is consistent with other studies that looked at typical development of new teachers and found that new teachers are often focused first on their personal needs and later on the developmental needs of their students. Cheney, Krajewski, and Combs (1992) found that "teachers need to gain confidence in their own abilities and adequacy as teachers before they are able to shift their focus more fully to students" (p. 23). When teachers were asked what type of emotional support would be most beneficial, 46% responded that an experienced special education teacher would be the best type of support they could receive (Whitaker, 2000a). Mentoring studies have identified the need for emotional support by on-site mentors as one of the most critical needs of new teachers (White & Mason, 2003). In addition, new teachers identified acquiring a sense of community security as one of their induction goals.

The importance of supporting new teachers through on-site mentoring appears consistently throughout induction literature (Blanton et al., 2003; Billingsley, 2004, Boyer & Gillespie, 2000; Ingersoll & Kralik, 2004; White & Mason, 2003; Whitaker, 2000a). The Education Commission of the States (Ingersoll & Kralik, 2004) authorized a study to look at the effects of induction programs on teacher retention and found that mentoring programs had a positive impact on teachers and retention. Induction programs have traditionally been constructed around the belief that regardless of the adequacy of teacher preparation, new teachers need support to learn to teach. Colbert and Wolff (1992) found that teachers who participated in a formal mentoring program were still in the classroom after three years. However, as stated above, the literature was based on the induction and mentoring for those teachers who had finished a traditional program and were entering the classroom after student teaching.

Mentoring programs surveyed in this literature search ranged from highly structured induction programs with formal training for mentors to occasional "checking in" guidelines for on-site support providers. Some of the programs were university based; others were district or organization based. Research by Klug and Salzman (1991) found that most new teachers preferred structured mentoring programs. One of the more structured programs is the Council for Exceptional Children's (CEC) 2003 Mentoring Induction Project. This three year program was funded by the Department of Education and built on past research of two year pilots in eight school districts. Two conditions were identified as key to the success of this project. The mentor, who volunteers to work with the new teacher, receives systematic formal training to understand the responsibilities of

the role of mentor and the school administration provides release time for the mentor and teacher to meet.

Whitaker (2000a) and White (1995) concluded from their work that to be effective, mentors needed to meet with their mentees at least one time per week, and needed to be in the new teachers' classroom, directly providing support by observing and modeling. They identified five distinct roles of the mentor: provider of solutions, partner in problem solving, local guide, educational companion, and agent of change (White, 1995, p. 7).

Activities to fulfill these roles could include: informally introducing the new teacher to other faculty and support staff, orienting the new teacher to school and district procedures, helping the new teacher in finding resources, meeting formally and informally to address mentee concerns, and most importantly, providing encouragement and support (Whitaker, 2000a). The mentor is viewed as the major support, both emotional and instructional, for the new teacher and should remain a constant throughout the induction period. In this program, the mentor should not have any evaluative role in the new teacher's performance. Past research has demonstrated that superior mentor programs that are tied to certification programs, especially those alternative route programs, resulted in teachers' adjusting their behaviors to meet whatever standards were necessary for a satisfactory evaluation (Ganser, 2002).

Mentoring skills are clearly identified in several pieces of literature that were reviewed. The Council for Exceptional Children (CEC) (2003) study outlined mentor proficiencies as: active listening, reflection, collaboration, and a desire to mentor, in

addition to instructional skills. Recent time in the field and knowledge of district policies were also considered important qualifications.

Although many universities are involved in program reform with school districts, the nature of the reform often focuses on the school site, not the preparation of the teachers at that site. Some universities increase participation in fieldwork, but place little focus on pedagogy. Others offer more field support but little direct involvement by university faculty. The role of the university is not well defined in literature regarding alternative certification programs. This is partially due to the variable nature of credentialing programs. Some universities provide direct support to interns in alternative certification programs; others do not. Usually, alternative programs that are university sponsored require students to attend classes while engaging in their first year of teaching. In both programs, university involvement ends when the student completes student teaching and their certification requirements. In most alternative certification programs, field-based experiences play an important role in the formation of new teachers. Some of these experiences are required by the university.

Boyer and Gillespie (2000), maintain that providing practical experiences with emphasis on real world problem solving is beneficial to new teachers. These experiences could include assessment observation, attendance at Individual Education Program meetings (IEPs) and collaboration with general education teachers. This implies some direct classroom participation by university faculty. Current research on new teacher retention, such as the research by Whitaker, Skrtic, Harris, and Shriner (2004), found that what happens in the classroom on a daily basis is an important variable in determining

whether or not the teacher stays in special education. The daily successes and failures of the new teacher shape attitudes about teaching and their students, their own efficacy as teachers and their decisions to remain teachers. Implications for intern programs should involve the faculty's providing those practical experiences in the teacher's own classroom. The College of Education at Southwest Texas State University developed an alternative certification program that increased teacher retention (Boyer & Gillespie, 2000). In this program, Students in Career Alternatives in Special Education (CASE), candidates attend a two year university program at the master's level, spending their second year in an intern position. These candidates are under the guidance of on-site mentors at their school assignments and supervisors trained and hired by the university. These supervisors are usually retired special educators who add "integrity and credibility" to the program. Longitudinal data found 92% of the program completers were still in the special education field (Boyer and Gillespie, 2000).

In addition, the authors of this study concluded that university faculty must be aware of the needs of new teachers. Again, this would imply some interface and support activities with the interns enrolled in their program. Boyer and Gillespie (2000) called for faculty to help pre-service teachers prepare for the "reality shock" of the classroom. Field support by faculty of the caliber described in this mentoring program could be utilized to support the emotional issues that could arise during internship.

University and district partnerships have delivered impressive gains in teacher retention literature. The Beginning Teacher Support and Assessment Program-Special Education (BTSA- SE) is a partnership between Los Angeles Unified School District and

California State University Northridge (Mitchell, Hendrick, Parish, Crowley, & Mitchell, 2007). It was created by Assembly Bill 1266 and based on research from the California New Teacher Project (CNTP). This project found, as did other projects mentioned above, that new teachers needed an intensive, focused induction period marked by goals and mentoring relationships with more experienced teachers. In this model, new teachers voluntarily received weekly mentoring support during the first two years of teaching. The university provided professional development and provided a stipend to purchase instructional materials.

Another program cited in the literature is an "on-the-job" (Burnstein & Sears, 1998) preparation program that hired teachers already possessing general education credentials and placed them in mild-moderate classrooms. During their assignment, the teachers attended a local university, taking one class per semester toward their special education credential. In addition, the teachers attended seminars that were jointly taught in their classrooms by university faculty and on-site mentors. Because the faculty teaching the seminars also taught the university coursework, course content could be designed to meet the needs observed in the classrooms.

The four seminars, spaced evenly over the two year program, were carefully designed to match the developmental sequence of new teachers. The initial seminar dealt with teacher beliefs and survival skills, followed by understanding factors that influence student development in the second semester. The third semester explored curriculum design responsive to the needs of special education students, and the fourth semester identified community resources and the development of a teacher's role as student

advocate. Each seminar began with the discussion of a "critical incident," defined as "a significant event that precipitated the rethinking or confirming of ideas about teaching" (p. 49). Students kept journals in which the weekly critical incident was documented, as well as other reflections on their field experiences. The use of journals and self-reflection with new teachers has been documented in research as one of the most effective strategies available to mentors (Pajarea, 1992). Data from the project collected during a five year follow up period, indicated that 94% of the teachers continued to work in special education.

More important than the impressive retention data, was the anecdotal data gathered from class sessions, student journals and rating scales administered during the program. A common thread of data that ran across the research was the identification of discussions with colleagues and the ability to address common problems. These discussions were rated as invaluable by the interns. Mentoring from the University and on-site mentors was also identified as key to emotional support. Other themes that emerged in the data were factors important to teacher satisfaction: working in a supportive school environment and developing relationships with students. The journals identified classroom management as the predominant challenge throughout the two years.

The other significant identified challenge was working with district administrators. The teachers voiced dissatisfaction with administrators who they felt arbitrarily made decisions for teachers and students without any consultation. The *Pullis Inventory of Teacher Stress* (Fimian, Pierson, & McHardy, 1986) was completed at the end of each semester. The overall ratings remained constant over the four semesters with

a mean rating of 2.7 (out of 5, with 1 being hardly ever stressed by this factor and 5 as almost always a factor that causes significant stress). The four factor scores that were above the mean also remained constant across the program: exhaustion, frustration, feeling overwhelmed and feeling guilty about not doing enough (Burnstein & Sears, 1998, p. 54).

Research suggests that the pre-service period is a critical time in the preparation of special education teachers (Billingsley, 2004, Blanton et al., 2003, Darling-Hammond, 2003). Unfortunately, alternative certification program models provide interns with a very short window, if any, of preservice experiences. While many states have preservice requirements, very few mandate specific skills to teach or field experiences. Even so, it is important for teacher education programs that prepare interns to include research regarding what *should* be part of pre-service experiences. From the studies above, it is obvious that those who prepare interns must be very familiar with developmental trajectories and the importance of fostering high levels of teacher efficacy. Throughout the studies, implications for teacher education programs were given. It is important for the new teacher to have the support to establish themselves in their classroom, to be able to engage in a variety of instructional strategies, and to develop appropriate student-teacher relationships.

Implications

This review of the literature examined research around the three questions posed in this dissertation:

1. How did teacher self-efficacy change from pretest to posttest during the first year of teaching as an intern in an alternative certification program?

2. What are factors in the first year of teaching in a special education alternative certification program that might be related to changes in teacher self-efficacy?

3. How can a University alternative certification program effectively support interns during their first years of teaching in order to develop, maintain, and increase positive levels of teacher self-efficacy?

The implications for further research that have been formulated based on this literature review are a need for more research examining the content and delivery of good teacher preparation programs, and more significant research involving the developmental trajectory of alternatively credentialed teachers. In addition, the relationship between self-efficacy and student achievement with this population needs to be explored.

CHAPTER 3

METHODS

Introduction

The following chapter contains a description of the participants, the procedures, and the measures used in this study. This mixed methods study, as discussed in Chapter 1, explored the effects of an alternative route to credentialing on the self-efficacy of special education intern teachers. A triangulation mixed methods design was used, a type of design in which different but complementary data were collected on the same topic. The construct of teacher self-efficacy evolved from Bandura's social cognitive theory (Bandura, 1997). The theory suggests that one's beliefs about efficacy are heavily influenced by human agency and triadic reciprocal causation. Human agency holds that people are capable not only of choice, but also of pursuit of specific courses of action. These choices, in turn, impact the life of the individual. Human agency works through triadic reciprocal causation, "a multi-directional model in which behavior, internal personal factors (cognition) and environment influence each other" (Bandura, 1997, p.307).

Factors such as cognition and attitude interact with the environment to produce actual goal driven behavior. In this model, agency, behavior, and environment all impact the teacher's judgment about whether he or she is capable of the actions that will positively impact student learning (self-efficacy). As an example, assume that a general education teacher is assigned a student with moderate autism. On Monday morning, when the student enters the classroom, the teacher's behavior (how she greets the student,

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assigns his seat, introduces him to the rest of the students) interacts with her own internal factors (memories of other children she has taught with autism, her feelings about including children with disabilities in her classroom) and the classroom environment (the reactions of the other children, the look on the face of the mother "helper"). This combination of factors ultimately impacts the feelings of the teacher related to her ability to successfully include the student and teach him.

It is important when applying the construct of teacher self-efficacy, to separate the teacher's own feelings of personal efficacy from the outcomes he/she expects from the students he/she teaches. As pointed out in a previous chapter, it is important to measure the levels of teacher self-efficacy prior to entering the field. Those teachers who enter the field with lower levels of self-efficacy may expect less from their own students. Likewise, those who report higher feelings of self-efficacy will expect more from their students (Bandura, 1997). The following three questions were examined in this study:

1. How did teacher self-efficacy change from pretest to posttest during the first year of teaching as an intern in an alternative certification program?

2. What are factors in the first year of teaching in a special education alternative certification program that might be related to changes in teacher self-efficacy?

3. How can a University alternative certification program effectively support interns during their first years of teaching in order to develop, maintain, and increase positive levels of teacher self-efficacy?

Participants

Concurrent data collection procedures were used in this study. The same sample was used to collect both the qualitative and the quantitative data. The sample for this study was initially twenty-three special education interns. These graduate students were completing a two-year program to receive a mild/moderate preliminary credential and a Master's Degree in Special Education. These interns entered the classroom as teachers of record, but had little instruction in pedagogy. In the state of California, interns must take and pass an examination prior to the issuance of their intern credential. This is the predominant model for alternative routes to teacher certification. These interns belong to Teach for America (TFA). Teach for America, with Corp members concentrated in large urban and rural low-income areas, recruits high performing recent college graduates from diverse backgrounds and career interests to commit to teach for two years in America's most needy schools in urban school districts. Their mission is to "go above and beyond traditional expectations to lead their students to significant academic achievement, despite the challenges of poverty and the limited capacity of the school system" (Teach for America, 2006). The TFA Interns teach full time during the day and attend classes one to two nights a week. They are engaged in multiple service delivery models, from the traditional Special Day classroom where the teacher has the same students for the entire day (even in a secondary classroom) to a blended classroom where the special education and general education teachers co-teach.

Initially, sixteen members of the sample were female, and four were male. The age of the sample ranged from 23 to 60 years, with 91% of the sample between the ages of 22

and 27. Only two Corp members, aged 34 and 60 years, were outside of the average age range of the candidates. During the time between the first and second administrations of the scale, two students, one male and one female, withdrew from the University and Teach for America. One left for personal reasons; the other transferred to the general education program. Complete sets of data were collected for eighteen students.

Permission was granted to use TFA intern Corp members as subjects by completing and submitting a proposal outline to the managing director of research with Teach for America using the guidelines in their website. The response from TFA to the submission of the required documents contained permission and an offer to provide resources needed to complete the study. In addition, Teach for America requested a copy of the finished dissertation (http://teachforamerica.org/research/index.htm).

Prior to data collection, an approval from the Institutional Review Board was obtained. The purpose of the IRB approval is to protect the rights of human subjects participating in the study.

Study Design and Procedure

For this mixed methods study, a triangulation design was utilized. The function of this design is "to obtain different but complementary data on the same topic" (Creswell, 2007, p. 62). This design allows bringing together the preciseness of quantitative data with the depth of qualitative data. The triangulation design is most often used when the researcher desires to expand or validate quantitative data with qualitative data. In this case, the changes in self-efficacy in the intern sample over the first four months in the classroom can be quantified; and the qualitative data gives the researcher information

regarding factors in the field that negatively impacted the performance of the teacher and therefore self-efficacy. Concurrent data collection procedures were used to gather the data. In this model, both the qualitative and quantitative data were collected during the same time period, and both were considered to be of equal weight.

Site Selection and Accessibility

Qualitative research usually takes place in the natural setting (Creswell, 2007). However, due to the complicated process of obtaining permission to interview the teacher at the school site, interviews were held at a "neutral" site– that is neither at the intern's job site nor at the University where the intern attended class. Locations such as coffee shops were used for the interviews.

Procedure

The study was conducted between August 2009 and December 2009. Data were collected in two different stages. *The Ohio State Teacher Self-Efficacy Scale* (OTSES) (Tschannen-Moran & Woolfolk Hoy, 2001) was administered twice to each subject: prior to the intern entering the classroom in August and again at the completion of the first academic semester in December. A copy of the Teachers' Sense of Efficacy Scale (long form) is shown in Appendix C. Semi-structured interviews were conducted individually with eight interns between August 2009 and December 2009. A copy of the Interview Guide is shown in Appendix D.

One week prior to the first administration of the TSES, the study was explained to the complete cohort of twenty-three interns at the conclusion of an orientation meeting. During the twenty minute presentation and question period, this author presented the

"research bargain" (Hatch, 2002) which outlined the purpose and intended outcome of the study, data collection procedures to be used, the time commitment necessary from the participant to complete the checklist in August and December, and the prospect of receiving an invitation to participate in an interview and where the interviews would take place. The consent form to participate in the study was distributed to any interested TFA intern. The Informed Consent Form is shown in Appendix E and an Information Sheet is shown in Appendix F. On each of the information sheets, a number was assigned that corresponded to a number on the TSES protocol. This number was to be used as an identity code that would make pre and post comparisons on the TSES possible. Finally, a box on the form could be checked if the Intern was interested in being interviewed later. In addition, an information sheet was given to each Intern interested in participating in the study. The form asked for name, gender, birth date, level/grade taught and contact information.

The TSES was initially administered at the completion of an optional late afternoon workshop that was led by this author. This workshop was held in conjunction with Teach for America's Summer Institute. Even though Institute attendance was mandatory for the interns, participation in this particular workshop was optional. The TSES protocol was distributed to each intern that had previously signed the consent form and completed the data sheet. The second administration of the TSES was conducted at the conclusion of a seminar class in mid-December. The same procedure was followed in order to ensure that post data was correctly identified with the intern's code. The pre and

post instruments, as well as the information sheets, were placed in manila envelopes and secured at the residence of this author.

Beginning in mid-October and ending in mid-December, semi-structured interviews were completed with ten interns, yielding roughly seven hours of data. Creswell (2007) stated that qualitative research is best conducted in the natural setting, which in this case would have been the school at which the intern taught. However, due to the complicated process of obtaining permission to interview the intern at his/her school site, interviews were held at a "neutral" site. The interviews were held at various times and locations that were convenient to the interns. Three interviews were held in the coffee shop on the university campus. The remaining interviews were held at fast food restaurants and various coffee shops of the intern's choosing. This author arrived before the intern and secured a comfortable location. The intern was greeted and asked to sign a consent form to participate in the interview. The interview process was explained, permission to tape record the interview was obtained, and the intern was asked if she/he had any questions prior to beginning the interview.

At the conclusion of the interview, the intern was asked if there were any final questions and the tape recorder was turned off. In most cases, the intern remained for a period of time and spoke informally with this author. The interviews lasted from 30 to 50 minutes. The tapes were marked with the code assigned to the intern and secured at the home of this author. After transcription, the tapes were erased per the agreement on the consent form.

Instruments

The confusion around the concept of teacher self-efficacy has made developing appropriate measures of efficacy difficult. Prior to the development of the instrument chosen for this study, at least eight other scales were published. Each one used the prior scale as a reference point. The first research question, identifying the impact of an alternative certification program on teacher self-efficacy, was investigated through the administration of the *Ohio State Teacher Efficacy Scale* (OSTES) (Appendix D). This measurement of teacher self-efficacy was developed by Megan Tschannen-Moran and Anita Woolfolk Hoy at Ohio State University. Because the instrument was developed at the Ohio State University, it is sometimes referred to as the *Ohio State Teacher Efficacy Scale* .The authors prefer the name, *Teachers' Sense of Efficacy Scale (TSES).* Prior to developing the instrument, the authors reviewed many of the major instruments that were intended to capture and measure the construct of self-efficacy (Ashton &Webb, 1982; Gibson & Dembo, 1984; Emmer, 1990; Guskey & Passaro, 1994; Coladarci & Breton, 1997). The one common factor among all of these scales is the attempt to define, capture and quantify teacher self-efficacy. At the conclusion of their review, these researchers reported that none of the instruments they reviewed actually assessed teachers' performance on the activities and tasks that teachers routinely performed. Even Bandura's (1977) instrument examined by a group of graduate students at the University of Ohio, did not define and measure the types of activities that made up the work life of the teacher. Their model of teacher efficacy needed a measure of this construct that actually assessed "both personal competence and an analysis of the tasks (performed by teachers) in terms

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of the resources and constraints in particular teaching contexts" (Tschannen-Moran &

Woolfolk Hoy, 2001, p. 795). The TSES was designed as "a valid measure of teacher

efficacy that assesses both personal competence and an analysis of the task in terms of the

resources and constraints in particular teaching contexts" (p. 800). The TSES was chosen

for this study because it is the only scale that provides a measure of comparison between

beliefs of pre-service teachers and in-service teachers of students with disabilities. The

TSES was refined over the course of three studies during which the number of items was

reduced from 52 items to 24 items. The authors conducted a factor analysis which resulted

in three moderately correlated factors: efficacy for student engagement (8 items), efficacy

for instructional strategies (8 items), and efficacy for classroom management *(*8 items).

However, these three factors are best used as a measurement for in-service teachers only.

The authors of the TSES believe that the total score is the best gauge of teacher self-

efficacy for pre-service teachers. The final instrument exists in two forms: a scale of 18

(short form) and one of 24 (long form) items. The long form was used in this study.

The TSES is unique in that it taps more effectively into the construct of teacher

self-efficacy by including scenarios of typical teaching tasks. The scale has ratings from

one to nine with anchors of nothing (1); very little (3); some influence (5); quite a bit (7)

and a great deal (9). A rating of *a great deal* indicated that the respondent felt that he/she

was capable of bringing about a positive result; whereas a rating of *none at all* indicated

that the intern felt that he/she could do nothing or was incapable of producing a desired

result.

Internal consistency/ reliability for the three identified subscales (engagement, instruction, and management) were computed yielding a high level of reliability. Construct validity for the TSES was established by having participants in a class at Ohio State University complete four other scales including the *Rand* (1980) and the *Teacher Efficacy Scale* (Gibson & Dembo, 1984). Total scores on the TSES were positively related to *Rand* items (*r=0.35, p<0.01),*to the personal teaching efficacy subscale (r=0.64), and general teaching efficacy subscale (*r*=0.16, *p*<0.01) of the Gibson and Dembo scale.

As described above, reliability for the subscales was established (see Tables 1 and 2).

Table 1

Long Form Reliabilities of TSES

	Mean	SD	Alpha
Engagement	7.1	.94	.87
Instruction	7.3	1.1	.91
Management	6.7	1.1	.90

Internal reliability checks were run on the sample subscale scores. Cronbach's Alpha subscale scores were similar to those of the normed subscale scores. For this reason, both subscale scores and the total score can be interpreted. The overall alpha was good (.88). The result indicates that for the purposes of this study, we can consider the scale as a composite of efficacy.

Table 2

Long Form Reliabilities of the TSES Compared to Alpha Scores on Study Sample

	Mean	SD	Alpha Norm	Alpha Study
Engagement	7.1	.94	.87	.88
Instruction	7.3	1.1	.91	.80
Management	6.7	1.1	.90	.85

The results of these studies verify that the TSES can be considered reasonably reliable and valid. Permission by the authors has been granted to use the TSES in this study (Appendix B).

The second research question, identifying factors that impact teacher self-efficacy, was investigated with semi-structured interviews (see Appendix D) conducted in order to identify resources and restraints experienced by the interns in their first semester of teaching.

In addition, the interviews were conducted to more thoroughly understand how the experiences of a new special education teacher impacted self-efficacy, which in turn would impact teacher expectations of their students. The interviews also investigated what interns believed were attributes of successful special education teachers. Interviews were conducted because they provide the chance to gather data that is rich and detailed in scope. An open-ended interview protocol was developed to give some structure to the interview. The probes on the protocol were extensions on the items from the TSES. For example, several items on the TSES asked about teachers' feelings regarding their ability

to manage the behavior of their students. A probe on the interview protocol asked the respondent to quantify and discuss their challenges in managing classroom behavior.

The final research question, implications for teacher education programs, was answered through the interviews, as well as the review of the literature. These findings will be discussed in Chapter 5.

Qualitative and Quantitative Data Analysis Methodology

"Data analysis is a systematic search for learning" (Hatch, 2002, p. 148). It is the asking of questions and analysis of data. Concurrent data analysis, as discussed in Creswell (2007), was used in this study. In this model, both the qualitative and quantitative data were collected during the same time period, and both were considered to be of equal weight.

Preparing the Data

I began by converting the raw demographic data after assigning each intern a code and each piece of data a numeric value. I used IBM SPSS Statistics 18 (formerly SPSS Statistics) software for all computing. In addition, I developed a codebook that listed the variables, their definitions, and the variable numbers for each. In addition, the codebook listed codes for the database. For the qualitative data, the semi structured interview, I developed a series of prompts while looking at the TSES. The qualitative data was transcribed and checked for accuracy. Transcribing the data shortly after the interview allowed for context and nonverbal information to be added. In addition, the data were kept in a secure location (Hatch, 2002).

Exploring the Data

All of the data was examined in order to identify trends and patterns. Using the software, the quantitative data yielded descriptives around the age and gender of the subjects. Composites were yielded that identified respondents with high total efficacy scores. Likewise, respondents with low efficacy scores were identified. A paired sample t-test was run to compare the mean response for each respondent across administrations of the scale.

I read the qualitative data to develop a general understanding of the data; I recorded initial thoughts in the log and then began to analyze the data. Next, I hand-coded the data and divided it into small units and assigned a label to each unit. The coding was written directly on the transcript, with the code words to data segments in the left margin and larger themes in the right margin. Words or phrases that were repeated in the transcripts were highlighted, using colored highlighter markers.

Validating the Data

Usually data must be validated so that the researcher can draw meaningful inferences from the results to a population. However, since the sample size was so small, and the data were collected over such a short period of time, generalization to the population of special education interns cannot be made. These data are best used to suggest implications and recommendations for teacher education programs. These recommendations will be discussed in Chapter 5.

Ethical Considerations

Ethical considerations were made in the development of the research questions as well as in the identification of participants and data collection. The purpose of the study was to identify the effects of self-efficacy that were encountered by special education interns. Informed consent procedures mandate notifying the participant of this purpose. Presenting the informed consent form contained an extra dimension of emotional support from the researcher.

The possibility of a dual relationship between the subject and the researcher must be acknowledged. This researcher is employed by the University as clinical faculty. As such, duties included professional advising and teaching of all special education interns. It was important that the intern felt assured that nothing said during the interview, or in filling out the scale would be used in consideration of grades or standing in the program. This was explicitly stated to the intern prior to engaging in the interview. In addition, the climate developed during the interview was one of unconditional regard from the researcher toward the intern. As will be discussed more thoroughly in Chapter 4, the climate during the interview was one of parity, where the intern shared successes and challenges with an interested friend. Since most of the interns had a previously established positive relationship with the researcher, this climate was easy to create and maintain. The only issue that did arise during the interview was the expectation that something might be done to improve the experiences that new interns had when entering the field.

Summary

This chapter provided information about the methodology of the proposed research study. The methodology and data collection strategies were identified and ethical considerations were explored. This study was designed to explore the development of efficacy beliefs of a small sample of intern special education teachers. In addition, the difference between the levels of teacher efficacy before entering the classroom and then four months after entering the classroom was computed.

To collect the quantitative data, the *Teachers' Sense of Efficacy Scale,* developed by Tschannen-Moran and Woolfolk Hoy (2001), was used to survey the sample of the target population. Semi-structured interviews yielded rich data about the successes and challenges in the field. The participants were a sample of convenience from the most recent cohort of Teach for America interns.

CHAPTER 4

ANALYSIS OF DATA

Introduction

This chapter presents the analysis of data collected during this study. It contains a description of the participants and recounts research findings, including presentation of the data and methods and procedures used. The mixed methods, concurrent triangulation design utilized for this study was a one-phase design in which the quantitative and qualitative data collection methods occurred during the same timeframe and with equal weight. The rationale for this approach is that the researcher may validate quantitative results with qualitative findings, resulting in valid and well-substantiated conclusions about a single phenomenon, which for this study was teaching in an alternative certification program. This chapter presents an analysis of quantitative data using the Teachers' Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Woolfolk Hoy (2001). The TSES was administered to 18 special education interns. The TSES Long Form is a 24-item scale assessed along a nine-point continuum with anchors ranging from Nothing—1, to A Great Deal—9. The TSES was designed to help acquire a deeper knowledge of the kinds of activities that constitute teachers' jobs. The development of the instrument assessed teachers' beliefs about their own abilities in working with students (Tschannen-Moran & Woolfolk Hoy, 2001).

Qualitative data, in the form of semi-structured interviews, were completed with eight respondents. The interview questioned three significant factors that have been identified as affecting a novice teachers' teaching. The three factors were student

motivation, classroom management, and instruction, which are the three subscales on the TSES. A copy of the interview questions is included in the appendix (Appendix D). Research question number one and number two (listed below) were answered by analyzing the interns' responses to the interview questions. The final research question for this study, implications for teacher education programs will be discussed in Chapter 5. The three research questions were:

1. How did teacher self-efficacy change from pretest to posttest during the first year of teaching as an intern in an alternative certification program?

2. What are factors in the first year of teaching in a special education alternative certification program that might be related to changes in teacher self-efficacy?

3. How can a University alternative certification program effectively support interns during their first years of teaching in order to develop, maintain, and increase positive levels of teacher self-efficacy?

Organization of Data Analysis

Prior to the discussion of the findings to address research question numbers one and two, demographic characteristics were provided for the reader in order to provide a portrait of the respondents. Then, the quantitative and qualitative data were woven into a concurrent design using the three subscales of the TSES: instruction, classroom management, and, student motivation (Tschannen-Moran & Woolfolk Hoy (2001).

According to Creswell (2007), both qualitative and quantitative data undergo five basic steps: preparing data for analysis, exploring data, analyzing data, representing data and validating data. The quantitative data were prepared for analysis through the use of a

codebook. This codebook contained raw information about the interns, such as their birthdates, codes for the study, notes regarding setting up times and dates for interviews, and other miscellaneous information. The quantitative data were entered into SPSS, a computer software program, and were explored by conducting descriptive analyses (the means and standard deviations on the TSES). This provided a look at the distribution of the data. The quantitative data were further analyzed by conducting statistical tests to address the research questions. Inferential analyses were used to answer the first research question, "How does teacher self-efficacy change during the first year of teaching as an intern in an alternative certification program?" A paired sample t test was run to determine whether the means of the two administrations of the TSES were statistically different from each other.

The qualitative data were explored by reading through all of the transcriptions to get an overall feel for the data. Initial thoughts were written in the margins of the transcriptions to fill in gaps and to get a primary sense of themes that might emerge. This initial coding was done with highlighters; each color represented one of the emergent themes. Notes were also written in the codebook. Data analysis, the next step, may employ many methods and definitions. The one used in this study is from Merriam (1998). "Data analysis is the process used to answer your research question(s)" (p.176). The data were analyzed by coding and dividing responses into smaller units (sentences, phrases). The units were then examined and coded with the highlighter into the categories (based on their relationship with other units). After going through all of the transcriptions and coding, I then again went back to the codings and moved them onto a graphic

organizer. Each web on the graphic organizer represented a category of information. As the categories were built, repetitive themes began to emerge. For example, one of the themes that emerged in this data was that interns needed a mentor that could help them in the field. I continued to observe this theme across the data. This category was named "support in the field".

Demographic Characteristics

Gender and Age

To provide a portrait of the interns who were the respondents of the TSES, an information sheet was completed as part of the research bargain. Using SPSS software, gender and age were tabulated. Ages of the participants ranged from 23 to 60 years of age, with a mean age of 23 years old. Table 3 shows the distribution of ages.

Table 3

Age of Participants in the Study (N= 18)

Age	Frequency	%
23	10	50
24	6	27
25	1	5
26	1	5
34	1	5
69	1	5
Total	20	100.0

Scale/Subscale Analysis

An analysis of the TSES was conducted by processing the total efficacy scores for each respondent. The highest and lowest efficacy scores were identified as well as their frequency and percentages (Table 3). The range of possible scores on the TSES is from 24-216 points if the respondent replied to all 24 items. The authors created ranges for Low (1-72), Medium (73-145), and High (146-216) levels (Tschannen-Moran & Woolfolk Hoy, 2001). The respondents who completed the scale for this study scored from 142 points to 208 points on the pretest and from 117 to 202 points on the post test. On the initial administration of the TSES, prior to entering the classroom, all of the male respondents (n=4) received scores in the high range. Sixty-five percent of the female students received scores in the medium range and thirty-five percent of the women received scores in the high range. On the post test, after being in the classroom for 4 months, three of the male interns scored in the high range, and one in the medium range. All of the women scored in the medium range. Table 4 shows the distribution of scores for the pretest and Table 5 shows the distribution for the posttest.

Table 4

Pre Test TSES Scores Ranking for All Participants by Gender

Gender	Medium (73-145)		High (146-216)		Total N=20	
	f	*%*	*f*	*%*	*f*	*%*
Male	0	0	4	20	4	20
Female	13	65	3	15	16	80
Total	13	65	7	35	20	100.0

Table 5

Post Test TSES Scores Ranking for All Participants by Gender

Gender	Medium (73-145)		High (146-216)		Total N=20	
	f	*%*	*f*	*%*	*f*	*%*
Male	1	5	3	15	4	20
Female	16	80	0	0	16	80
Total	17	85	3	15	20	100.0

Research Questions and Analysis of Data: Research Question 1

This section will discuss the findings of this study in relation to the research questions. The discussion of findings is in two parts and correlates with each of the research questions. The first question is addressed as follows:

Research Question 1: How does teacher self-efficacy change

during the first year of teaching as an intern in an Alternative

Certification Program?

Pre and Posttest Subscale Analyses

These concurrent triangulation data findings are discussed by pairing qualitative

and quantitative data for each of the three teacher subscales. As described above, the

TSES has three 8-item subscales that have established validity and reliability. Each of the

three teacher perception subscales was run in order to test the reliability of using this data

and interpreting these scales in this study. The discussion of the findings for the first

research question were conducted by concurrently discussing the findings from the

administration of the TSES and then the interview data from the study. Creswell (2007)

discussed the format for concurrently analyzing data. "In this method, the researcher will

report a statistical result (subscale scores for the TSES) and then follow it up with

specific quotes or information about a theme that confirms or disconfirms the quantitative

results" (p.142-143).

I conducted the interviews in October, November, and December of 2009 with ten

interns. Subsequently, one student left the program and one student withdrew permission

for using the interview data. The interview contained four questions, with follow-up

probes as needed. The open-ended questions were: Can you describe what it means to be

an effective teacher? What supports does a teacher need to be effective? What aspects of

your intern experience have helped you to be an effective teacher? For the last question,

the interns were asked to rank areas that researchers have found to be areas of challenge.

These questions were designed to correlate with the three subscales of the TSES: efficacy for instructions, efficacy for classroom management, and efficacy for motivation.

Three themes emerged during the coding of the qualitative data and fit within the subscales of the TSES. These themes and their coding abbreviations are efficacy judgment (ej), classroom management (cm), and physiological and emotional arousal (pec).

Instructional Strategies Subscale

The efficacy for instructional strategies subscale on the TSES asks questions about the respondents' ability to evaluate their efficacy in providing effective, alternative instruction to their students (i.e. "To what extent can you provide an alternative explanation or example when students are confused?"). A paired sample t test for the *instruction subscale* was run to examine efficacy before and after the interns began teaching. The mean on the pretest was 7.40 (*SD=.59)* and the mean on the posttest was 6.80 (*SD=.99).* A significant decrease in efficacy for instruction from pretest to posttest was found (t[17]=2.13, p<.05).

The first question on the semi-structured interview asked the intern "What does it mean to be an effective teacher?" In examining the interview data for that question there appeared to be a significant emphasis in the area of instruction. The interns that were interviewed associated an effective teacher with one who was able to teach the content and have their students make significant progress. The emphasis in the answers to these questions appeared to respond more to the outcome of the students than the input from the teacher. There is more of an efficacy judgment (Bandura, 1997) at play in these

answers. Efficacy judgments refer to one's ability to perform successfully in a task" (Henson, 2001).The quotes discussed in this area are coded as "efficacy judgments" (ej) because the interns defined an efficacious teacher as one who could evidence growth in his/her students. For example *"I really think that an effective teacher is one who can see the growth in their students, one who can insure that their students have the skills that allow them to move to the next grade"* (ej).

Six of the eight interns referred to "closing the achievement gap" with their students. While this is a major goal of NCLB, it is an even greater focus of the Teach for America mission, stated as, "Armed with this knowledge (content), our corps members and alumni work relentlessly to increase academic achievement" (Teach for America, 2006). Many of the interviewed interns were significantly concerned about the well-below- average in reading and writing *"He can't read! What now?"* (ej); but were already feeling that their best efforts at raising scores were not enough, and that they were responsible for the lack of progress. "It's really frustrating for me watching my kids suffer (reading) and I can't do anything to help them" (ej). The interns also stated that they struggled with finding the match between the learners' needs and the content that they had in their repertoire. "I don't have a plan B! I know that someday I will; but I don't have one now- and I need one" (ej).

"I feel unprepared" efficacy judgments: All but one of the interviewed interns expressed feeling frustrated because they believed they did not have the content to teach in a special education setting. "This isn't what I signed up for" (ej). There was no difference in the intensity of those feelings whether or not the interns were placed in a

special day classroom or in a co-teaching situation. The feelings of being unprepared appeared to be in the ability to *teach* [for emphasis] the content; not the content itself. "I can read, oh yeah, I know how to read. But that doesn't mean I know how to teach someone else how to read" (ej). When asked to elaborate on the previous comment, the interns said, "It's like I said, in our summer classes we were given some materials that had accommodations and modifications for students, but most of the time they were not talking about my kids. My kids can't blend sounds or decode words. They can't segment words. I don't know what to do because they are way more behind than the kids. I taught during the summer" (ej). The above quotes were also coded as efficacy judgments (ej*)* because the emphasis was on student outcomes. Reading, specifically phonemic analysis—what is often referred to as decoding, appeared to be the main area of academic concern. Three of the interns specifically targeted reading as an area of concern.

Another unit within the theme of efficacy judgments that emerged during the interviews was the issue of pre-service training "My summer training did not prepare me to be an RSP teacher. I can teach math. I know math, but, social studies!? I don't know what I am doing and high school kids—they know when that happens. So, I also can't keep my classes under control (ej)—they did teach us that during the summer, but I get so rattled that I can't remember any of it." This idea of not knowing the content was pervasive and discussed throughout the interviews. Again, along with the notion of not having the level of content knowledge they felt was necessary, several of the interviewees voiced a concern that they did not know *how* to teach, which significantly affected student outcomes. "Sure, I know a lot about reading. I am a good reader, always was.

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But, I can't help my students. I use the text: I try to implement anything my supervisor and P.D. (program director) suggest, but then I am told I will learn how to teach reading in my spring classes. That is spring! This is fall! What am I supposed to do till then?" (ej).

The third area related to instruction that emerged during these interviews was dealing with the amount of time spent preparing lessons and completing the additional paperwork that comes with being a special education teacher. "I struggle with paperwork. I am up all night, and still do not get it done," and "How do you balance the paperwork with the energy that we all need? That goes back to support from the University. It takes me at least five hours every night to plan and more than that on the weekend. I have no life! I do take a lot of paperwork home every night and I do it, but I stay up all night doing an IEP *(*Individualized Education Program) and get up and go to work." Another intern states, "I am tired. I am not energetic and I'm not an engaging person to interact with!" (ej). All of the interns expressed varying degrees of frustration with the amount of time they spent preparing lessons. There was a sense in many of the responses that more resources would in some way ameliorate the issues. "If only I had the resources to teach these kids. I need to have more materials, more time, support from the administration, and someone to teach me what I am supposed to do." This response was one of only several that looked at externalizing the difficulties in teaching. Most of the comments provided internal or within-the-teacher reasons for struggling with their job. In summary, all of the interns that were interviewed stated that they felt that they did not have the skills or the resources to teach their students in such a way as to achieve standards' goals.

The qualitative data correlated with the quantitative data in evidencing a significant decrease in teacher efficacy in the area of instruction.

Classroom Management Subscale

The efficacy for classroom management subscale asked the respondents to evaluate their ability to deal with individual and group behavior that impedes learning in the classroom (i.e. "How much can you do to calm a student who is disruptive or noisy?"). A paired sample t test for the classroom management subscale was run before the interns entered the classroom and after four months in the classroom. The mean on the pretest was 7.37 (*SD=.90)* and the mean on the posttest was 6.07 (*SD=1.23).*A significant decrease in efficacy for classroom management from pretest to posttest was found (*t[17])*=2.06, *p=*.05).

Classroom management continues to be a primary concern for first year teachers according to the literature (Emmer & Hickman, 1991) and as observed in the interviews for this study. Teachers' beliefs about their abilities to influence student behavior have been identified as predictors of teacher effort, attitudes and perceptions, and of teacher success in promoting student achievement (Billingsly, 2004). Five of the eight interviewees stated that they were having difficulty managing their classroom (for example "We were not trained to deal with these kinds of behaviors! What do I do when I lose control?"). Additionally they felt at a loss when asked for help with mainstreamed students' behavior by the general education teacher (for example "I've never taught before and they want me to deal with all kinds of behavior in their classrooms"). Nine of the 20 interns were placed in a special day class setting. This meant nine of the interns

were the teacher of record and had their "own" classroom. The remainder of the interns either had a co-teaching situation with the primary teacher being a general education teacher, or worked in a learning center as the primary or secondary teacher. In the sample interviewed, the special day class interns expressed behavior problems as one of the greatest obstacles to their teaching. One of the interns with a special day class, complained that students with behavioral issues from other classrooms were put into her classrooms. "They send me the problem kids; like I know what to do with them. I am just as lost as everybody else. They tell me that they are sending me these kids cuz I know what to do with them, but I don't." Responses from the interns that dealt with either handling student behaviors or teaching new behaviors to their students were coded as classroom management or cm. The qualitative data correlated with the quantitative data in evidencing a significant decrease in teacher efficacy in the area of classroom management.

Student Engagement Subscale

The efficacy for student engagement subscale asks the respondents to evaluate their ability to motivate their students (i.e. How much can you do to get students to believe they can do well in school work?"). The paired sample t test for this subscale was run before the interns entered the classroom and after four months as teacher of record in the classroom. The mean on the pretest was 7.56 (*SD=.66)* and the mean on the posttest was 6.28 (SD=*1.05).* A significant decrease in efficacy for student engagement from pretest to posttest was found *(t [17]=4.71, p<.001).* The interns voiced a significant concern about their ability to invest their students in the curriculum, a curriculum that

they, themselves, felt was irrelevant at times. The interns shared stories of their concerns

for their students both in school and out of school. One intern, in particular shared her

concern and the difficulties she encounters in motivating her students to learn:

> These kids come from places like they're telling me where they are hiding their
> blade when they're walking around the neighborhood. I don't know what to say.
> Like 'Where did you get these?' and 'How often do you carry these'? They are
> like, 'What do I do, Miss, if someone is pointing a gun at me? I need to have
> something.' It's hard to argue…How do you invest them when they're worried
> about their cousin who just got shot and this gang is going to retaliate and their
> mom is selling baked goods out of their house because she knows everyone on
> their block is a pot head and that's their only source of income? So, how do you
> get them to go home and sit in that and do anything?...I would not be motivated to
> do my homework if I was one of them and was used to having a safe place at
> school. I do not know how to inspire them to see beyond what they see every day,
> like if they go to college there is something else—yes, their father did x, y, and z
> without a high school diploma and he is doing OK, but you still live in a gang
> infested neighborhood. It's boring to sit in algebra class where you don't
> understand what's going on, but you have to do it to get them motivated? I don't
> know how to do that and I know it has to be slow and I can tell myself that till I
> am blue in the face, and I want it now. I want my kids to know how much they are
> worth, and what they can do, and it is frustrating. (pec) (Intern respondent)

The process discussed above was repeated in all of the interviews to a greater or

lesser degree. All of the interns interviewed felt challenged in motivating their students to

learn, especially those students who were trying to survive in a community devastated by

violence. One strategy offered in this area by one intern was to "be passionate about the

subject matter, even if there is a disconnect" (pec). All of the quotations discussed above

touched on physiological and emotional arousal. Bandura (1997) defined this source of

efficacy information as "the level of emotional and physiological arousal a person

experiences in a teaching situation that adds to self-perceptions of teaching competence.

Studies looking at this source of efficacy information have found that novice teachers,

especially, improve their own performance by focusing attention and energy on the teaching task. However, high levels of arousal can impair the ability to motivate students on academic task (Bandura, 1997). It is difficult to communicate this level of intensity in the written word. The long quotation cited above is such a case. As the intern was relating the information about her students and their environment, her fists were clenched and she was crying. It was easy to see the passion and energy expended in just the telling of the situation. If good portions of her attentional resources were devoted to the state of her students' lives, then little may be left for teaching them. All of the quotations discussed in this section are coded as *"physiological and emotional cues or (pec)"* because all of the quotations in the section contained implicit or explicit emotional arousal.

Summary for Research Question 1

All three of these subscales load on a single factor, efficacy. A paired sample *t* test was calculated to compare the total mean pretest score to the total mean posttest score. The mean on the pretest was 7.4 (*SD =.53*), and the mean on the posttest was 6.6 (*SD=.93*). A significant decrease was found (*t[17]=3.43, p<.01.* Teacher self-efficacy, as measured by the TSES, dropped significantly for this group of interns from the beginning of the first semester of their alternative certification program to the end of their first four months as teachers of record.

The first research question was addressed by the quantitative and qualitative data. For this sample of special education teachers in an alternative certification program, a significant negative discrepancy was evident between the beginning of their teaching assignment and four months later, at the end of their first university semester. This

discrepancy was also measured for all three of the subscales of the TSES: instruction, classroom management, and classroom management.

Research Question and Analysis of Data: Research Question 2

The second research question was addressed through the qualitative data culled from the interviews. The question is: What are possible factors in the first year of teaching in a Special Education Alternative Certification Program that might be related to changes in teacher self-efficacy? This question is also addressed by looking at the interview data. Besides the quantitative data discussed above, three other themes emerged and were coded as: social persuasion (sp), self-perception of competence (spc), and personal teaching efficacy (pte). The qualitative data identified specific factors that might be related to changes in teacher self-efficacy. Chapter 5 discusses the factors from a developmental perspective, and through the lens of the construct of self-efficacy.

I need a mentor: social persuasion (sp): Six of the eight interns interviewed expressed the need for support at their school site, support that provided both modeling and feedback. Within the context of self-efficacy, social persuasion is feedback that acts as a sort of efficacy boost. It often counters self-doubt. "There is no one here to answer questions. I am the special education "expert," yet I know so little about special education," "If there was just someone I could watch; a really good special education teacher, someone who could tell me if I was hitting the mark, doing it right, you know teaching…"(sp). Of the eight interns interviewed, three were placed at new charter schools where they are the only special education teacher. All of these teachers strongly felt that they were "all alone", "on a boat without a captain," afraid to ask for help

because no one knew about special education, even if someone offered to help me."

These examples were coded as (sp) because all of the responses quoted, and others that were not quoted indicated that the interns felt they needed support at their schools, and some had no/little support at their school site.

Not only quantitative or amount of support, but quality of interaction was at play. Three of the eight interns expressed concern that there was none/minimal support nor feedback that was explicit to their jobs as a special education teacher. In addition, they reported that their university supervisors did give them support; but it was sometimes not directed or specific. "Telling me I did a good job is fine, but when I am told that and then see that my kids are barely passing my tests or the standards evals is not very helpful. I need more specific feedback" (sp). In addition, the interns commented that the administrators did not appear to be particularly interested in what they were doing in their classrooms. Two of the interns commented:

> Sometimes I don't think he even knows where my classroom is. I made a big deal about inviting him to a "read off" award day. Six of my kids read three books over the quarter and completed story boards. This is a big deal because one of them told me that this was only the second time he read an entire chapter book. And, you know what, he never showed. I guess he got busy or something (sp).

"I can't get it all done!" self-perception of competence: All of the eight interns interviewed reported feeling overwhelmed. The reason for the feeling was sometimes given; if not, it was prompted:

Intern C: "I feel overwhelmed!"

Interviewer: "What parts of your job are overwhelming you?"

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Intern C: "The paperwork, the IEPs. If I knew what I was doing, it may not take so long. But the reality is, I don't know what I am doing a lot of the time."

To these interns, all of whom mentioned paperwork as being one of the tasks that resulted in feeling overwhelmed, the focus should be more on the fact that they were taking so long to do the paperwork because they did not feel competent. This quote is an example of efficacy expectation, the individual's belief that the necessary actions can result from the necessary energy expenditure (Bandura, 1997). Carrying it one step further, another intern discussed the results from the mountain of paperwork taken home. This intern voiced her frustration regarding the amount of paperwork, and the impact it has had on her as a person, and a teacher. "I'm tired." I am not energetic and I'm not an engaging person to interact with. And my kids honestly don't learn as much when I am tired. It takes so much energy to teach them." Four of the eight stated that paperwork substantially influenced their energy level and their teaching. These examples were coded as "self-perception of competence" (spc) because the quotes indicated that the interns felt they were not available emotionally or physically to effectively teach. "I am always tired anymore and I know that I could be a better teacher, if I could just get some sleep at night" (spc).

"So, am I better than no teacher at all?" personal teaching efficacy, (pte). Five of the eight interns referred to the culture of poverty that surrounded the students they taught; financial, academic, cultural, and emotional poverty. "I try to enter their world. These kids come from places like they're telling me where they are hiding their blade".

The interns expressed the belief that they should, in some way, ameliorate the conditions they see, but do not have the resources to carry out this mission. "I don't know how to help them. I should. It is my job to help them." Many of them were dealing with an initial plunge into the world of poverty, a cultural plunge in the truest sense of the word, by staying late after school to tutor their students, getting up early to start a cheerleading squad, and taking on the school administration. "So, I told my principal, you can't just put a kid in my special ed classroom as a punishment. My classroom is not a 'time out' for kids whose teachers don't want them." There was quite a wide disparity between the two interns who were determined to "rock the system" and the other six who saw themselves in a much less powerful place, wondering about their place in their classroom, the school and the community. "I feel like I am screwing those kids up. I spend so many nights trying to figure out how to help them. But academically and socially. Sometimes the gen ed kids (and their teachers) make fun of them. I just don't know what to do" (pte). Two of the six interns who openly questioned their own efficacy in the classroom expressed ambivalence about their mission. "If they didn't have me, they'd have nothing. So, am I better than no teacher at all" (pte). The examples from the interview data quoted here were coded as "personal teaching efficacy" (pte) because the quotes indicated that the interns possessed varying levels of belief in their ability to somehow/in some way transform the lives of their students.

Summary of Research Question 2

The second research question was answered through the qualitative data culled from the interviews. The question was: What are possible factors in the first year of

teaching in a Special Education Alternative Certification Program that might be related to changes in teacher self-efficacy? Besides the qualitative data that is paired with the quantitative data for research question one above, three other themes emerged and were coded as: social persuasion (sp), self-perception of competence (spc), and personal teaching efficacy (pte).The qualitative data identified specific factors that might be related to changes in teacher self-efficacy. Chapter 5 will continue to discuss the factors with a developmental perspective, and through the lens of the construct of self-efficacy.

CHAPTER 5

DISCUSSION AND IMPLICATIONS

Introduction

Teaching is the only profession in which there is so little concern for
clients that we are willing to give new practitioners the most difficult and
burdensome assignment, leave them without teaching materials, close the
door, and tell them to sink or swim on their own. *(*Whitaker, 2000b, p.
165)

The purpose of this mixed methods study was to understand how the self- efficacy

of special education intern teachers is impacted by an alternative certification route to

credentialing. Research has found a significant correlation between low teacher self-

efficacy and teacher attrition. As discussed in Chapter 1, teacher retention and attrition is

a significant problem in the field of special education. This study examined the factors

that lead to negative changes in teacher self-efficacy, which can, in turn, lead to

premature burn out and teacher attrition. To accomplish this goal, the Teacher Sense of

Efficacy Scale (TSES) was administered to 20 first semester interns at the beginning of

their program, and again at the end of the first semester, roughly four months into their

teaching placement. In addition, factors that impede or facilitate the growth of teacher

self-efficacy were explored by conducting semi-structured interviews with eight special

education interns in their first semester of a university alternative certification program.

From the factors that have been identified, recommendations are made to improve

university special education teacher education programs. These recommendations may

infuse new practices into programs that will develop and maintain high self-efficacy in

interns, which will increase retention in the field. In order to address the purpose of this study, three research questions were framed; the third one is addressed in this chapter:

1. How does teacher self-efficacy change during the first year of teaching as an Intern in an Alternative Certification Program?

2. What are factors in the first year of teaching in a Special Education Alternative Certification Program that might be related to changes in teacher self-efficacy?

3. How can a University Alternative Certification program effectively support Interns during their first year of teaching in order to promote, maintain, and increase positive levels of teacher self-efficacy?

This chapter provides information regarding (a) the methodology used in this mixed method study; (b) a discussion of the findings; (c) a correlation of the findings with the literature; (d) implications for university programs; and (e) recommendations for further study.

Methodology

In order to address these three research questions, a mixed methods triangulation concurrent design was used with 20 interns enrolled who were enrolled in their first semester in an alternative certification program at a private university. This type of design was selected because it allowed this researcher to "directly compare and contrast quantitative statistical results with qualitative findings and to validate and expand quantitative results with qualitative data" (Creswell, 2007, p.62). A convergence model

was utilized. Both the qualitative and quantitative data were presented and analyzed

discreetly. Then, the data were converged through comparing and contrasting the results.

This model helps the reader to understand the phenomenon of the intern experience, an

alternative certification program, and its effect on teacher self-efficacy. The

understanding was achieved by studying the effects on self-efficacy by measuring this

construct prior to entering the classroom and after four months/one semester in the

program, and by studying the responses of eight participants during semi-structured

interviews. Per Creswell and Clarke (2007), the results of studying this data will allow

the researcher to "end up with valid and well-substantiated conclusions about a single

phenomenon" (p. 65).

The procedures of the mixed methods triangulation convergence design as

outlined by Creswell and Clarke (2007) were utilized. They included implementing

qualitative and quantitative methods during the same timeframe and with equal weight.

After the data was collected, it was merged to facilitate analysis. The quantitative data

were collected through two administrations of the Teacher Sense of Efficacy Scale

(TSES) (Tschannen-Moran et al., 1998), one time prior to beginning a teaching

placement as an intern and after four months/one semester. The qualitative data was

collected through semi-structured interviews. The qualitative data was then transcribed,

hand-coded, and transferred to a graphic organizer for analysis. The data collection took

place from August through December, 2009.

Findings

The findings in this study are organized by discussing each of the research questions.

Research Question 1: How does teacher self-efficacy change during the first year of teaching as an Intern in an Alternative Certification Program? The quantitative findings showed significant decreases in the teacher self-efficacy of the sample over a period of four months as measured by the TSES. In addition, significant decreases were found in all three subscales of the instrument (classroom management, instructional strategies, student engagement) during this same timeframe. While the qualitative data from the semi-structured interviews did not provide a baseline prior to entering the classroom which could reflect change over time, it did reveal data that led this researcher to conclude that there was negative change in the teacher's self-efficacy feelings. The interns made numerous negative statements about their own teaching, and the achievement of their students.

Research question 2: What are factors in the first year of teaching in a Special Education Alternative Certification Program that might be related to changes in teacher self-efficacy?

Table 6 reflects factors that emerged during the interviews. The left column lists the subscale labels (also the categories from the coding of the interview) from the TSES; classroom management, instructional strategies, and student engagement. The remaining factors are those factors that Bandura (1997) found to be the sources of self-efficacy for teachers. The subcategory (unit) column reflects the coding labels that were initially

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given to the units. The right column shows sample responses from the interns who were part of the interview process.

Table 6

Factors Related to Changes in Teacher Self-Efficacy

Category	Sub Category	Sample Statements from Research Interviews
Classroom Management	Providing management scheduling, guidance ideas	We were not trained to deal with these kinds of behaviors
Instruction	Teaching, instruction guidance, differentiation assessing	My kids can't read I need a mentor
Engagement	Investing, involving, caring, motivating	I want my kids to know how much they are worth
Efficacy Judgment	Flexible, concerned with student outcomes	I don't have a Plan B!
Social Persuasion	Alone, lonely, no support	I feel alone; I am on a boat without a Captain
Physiological & Emotional Arousal	Labile, disequilibrium, enthusiastic, overwhelmed	Passionate about the subject matter
Self-perception Of Confidence	Confident, determined	It's my job to help them
Personal Teaching Efficacy	Powerful, visionary	If they didn't have me, they'd have not one

Each of the factors will be briefly discussed to synthesize the findings from the interviews.

Classroom Management

The data revealed that all of the interns felt they lacked the tools to manage the behaviors that occurred in their classrooms. The behaviors that were described in the interviews were more disordered than disruptive, and thereby more significant in their potential impact to stop instruction. These behaviors did not respond to the interventions and methods that were provided to the interns in their preservice instruction. The interns identified these behaviors as traits of the students, and ones they felt were not under the control of the students. The literature (Mok, 2005) postulated that interns in this first stage of development tend to personalize negative student behavior; they see it as a way to *disrespect* [for emphasis] the teacher. However, these interns attributed the student behavior to the behaviors that were modeled in their community, absolving their students of responsibility. Whatever the etiology of the behavior, data from both qualitative and quantitative sources evidenced a feeling that the interns did not know how to effectively manage their classrooms. Literature has found that difficulty in managing behavior negatively affects teacher self-efficacy. Teachers with low self-efficacy more often resort to punitive consequences for behavior impeding learning rather than providing support to the student.

Instruction

This is the factor that most affected the self-efficacy of the interns as indicated by their responses during the interviews. They reported feelings of being ineffective as teachers, and that their ineffectiveness resulted in lower student achievement gains. While they attributed some of the responsibility to inadequate preservice instruction, they also expressed their shock and dismay at the very low academic functioning skills of their students. External attributions such as the ones expressed are indicative of teachers with low self-efficacy. The data also revealed that they felt they had the "content" to teach their students, but did not have the pedagogy or methods with which to deliver the content. In addition, the interns discussed the significantly below average reading skills that their students had. Statements about their own inadequacy and disbelief at the level at which their students read were pervasive across the data. This is one of the areas that is referred to as "shock and disbelief" in the data.

Engagement

This area was less problematic than the other two above. Even though the quantitative data showed a significant discrepancy, the interns reported that they were able to engage their students, but on a personal level. Engagement to them, when probed, meant "relationship and trust." This is a different concept from that factor in the assessment instrument. The interns were able to engage their students on a personal level- to "get them to trust me," but this engagement did not correspond to an engagement with the curriculum. The remaining six factors correspond to the sources for self-efficacy as discussed by Bandura (1997).

Efficacy Judgment

The data in this area revealed a rigidity of thought in the interns' ability to consider alternate ways to deliver the curriculum. Not "having a plan B" resulted in an inability to efficiently deliver the content in a way that met the needs of their students. This in turn, affected their ability to see progress in the academic growth of their students, and negatively impacted their self-efficacy. The interns saw themselves as alternately a "confidant" and a teacher. However, the majority of their efficacy were negative-They saw themselves as a more capable friend and advocator than a teacher. When asked about their performance as a teacher, all of the interns used negative verbiage to discuss their own progress.

Social Persuasion

This is the most significant factor in the impact of their self-efficacy. All of the interns reported either no or very ineffective support at their school site. They discussed the need for effective feedback, i.e., any kind of feedback to assist them in their teaching. Specifically, the need for a mentor was brought up repeatedly. This factor is discussed later in this chapter as need for a mentor.

Physiological and Emotional Arousal

The interns were very passionate in discussing their teaching, their students, and their own ability to work with special needs students. As documented in the literature, some emotional investment is good, but over arousal can result in burnout. Many of them reported not sleeping or eating due to the stress and time needed to prepare their lessons. It is hoped that as they become more proficient in teaching, this time

commitment will lessen. Not seeing the progress will do more toward deteriorating their efficacy than any other factor.

Self-Perception of Confidence

Lack of confidence is typical for any novice. The interns reported that they felt that with the appropriate support they could teach. By externally projecting some of their perceived failure, they are able to continue in their jobs with their egos relatively intact. This is considered an appropriate developmental trait of a novice teacher, but at the same time, it could lower their self-efficacy.

<div align="center">

Relationship to the Literature

</div>

I looked at literature that described the beliefs of traditionally prepared new teachers and compared it to the data obtained from the interns in this study. In the literature, studies demonstrated that traditionally prepared novice teachers did experienced a drop in the level of self-efficacy; a negative change was most often reversed after the first three years in studies that looked at development longitudinally. No such basis for comparison is available in the literature for intern populations. In addition, there is a concern that the literature from traditionally prepared teachers involving the developmental stages might not be a valid basis for comparison with intern populations. An area for further study could be the comparisons of the developmental trajectories of both groups to see if they are similar.

A study by Woolfolk Hoy and Burke-Spero, (2005) looked at changes in teacher efficacy in the early years of teaching. They cited mastery experiences, the type of classroom teaching experiences that leave the teacher with positive feelings of self-regard

and efficacy in their teaching, as the most powerful source of efficacy information. When a teacher instructs well, it raises the hopes that students will evidence achievement gains, unless the success required such massive amounts of planning and effort that the effort cannot regularly be sustained. Five of the eight interns reported high stress levels, "I don't sleep very well, when I actually go to bed. I think about the kids—what I need to do for them, what I can do for them" and "I don't know how I made it through this far with school and teaching. I hope next semester is not as difficult with my school classes." What we are seeing is the impact of *starting* to teach, at the same time the intern is learning *how* to teach. Traditionally trained teachers have usually completed their university classes prior to entering the classroom

An area of concern that emerged with this data is addressed by the literature for novice traditionally prepared teachers. Friedman (2000) studied novice teachers and refers to the "unrealistic optimism" of this group, describing it as "shattered dreams of impeccable professional performance" (p. 595). Friedman linked early burnout to the discrepancy between what is expected and what is experienced. Data from this study evidenced findings that the interns were overwhelmed with their job, felt unprepared, and felt as if they were not getting the gains from their students that they had anticipated. Behaviors commensurate with early burnout were manifested by the interns during their interviews. One said, "It just isn't what I thought it would be—I mean, I love my kids— but it just is so overwhelming at times." Two of the other interns referred to "being overwhelmed, but better now."

A factor discussed in literature and mentioned often in the interviews is the amount of paperwork required of interns and their traditionally prepared counterparts. Looking at the paperwork issue, there appears to be a significant difference between the amount of paperwork that general education teachers complete in comparison with special education teachers. Regardless of their preparation, special education teachers have a mountain of paperwork when compared with general education teachers. Whitaker (2000a) discusses the paperwork unique to special educators, "They consistently reported feeling overwhelmed by the demands of IEPs and other procedural matters and by the task of having to work around the schedules of regular classroom teachers and related service providers" (p. 43).

This data clearly showed that the interns did not feel that their preservice training prepared them to successfully enter their classrooms Whitaker (2000a) found that efficacious beginning teachers rated the quality of their pre service training high and the difficulty of teaching lower. The sample for this study did not rate the quality of their training as high, neither the training they received in preservice, nor their first semester classes. "My (preservice) training did not help me at all." From this study, the concern over the quality of preservice preparation emerged as a factor that impeded development of efficacy.

The interns reported that they knew the content, but had difficulty teaching it to their students. In addition, all interns stated that they needed a mentor to help them learn how to teach, by showing them and by observing them.

The last subscale, engagement, provided a more affective factor that impeded their self-efficacy. They attributed their own lack of skills to the lack of progress and effort their students demonstrated. This last factor is documented in literature as providing the most direct correlation between teacher self-efficacy and student achievement/engagement.

The third research question was, "How can a university alternative certification program effectively support interns during their first year of teaching in order to promote, maintain, and increase positive levels of teacher self-efficacy? It was answered by looking at the third column of the table above and providing recommendations for the field. This was is an important task for two reasons. First and foremost, teacher self-efficacy is the one variable that is consistently linked to student achievement in the literature (Guskey, 1987; Mulholland & Wallace, 2001;Whitaker, 2000a; Woolfolk Hoy & Burke-Spero, 2005). In addition, numerous studies have pointed to lower levels of self-efficacy as one of the primary reasons for teachers leaving the classroom (Darling-Hammond, 1986; Whitaker, 2000a). The remarks in the third column of the above table contain language that clearly indicated expressions of negative self-efficacy. The language in the third column came from the qualitative data of the study and a laundry list of improvements that can be made a program levels; some immediately.

More research needs to be conducted that looks at the difficulties and failures reported by the interns in comparison to the amount and quality of support offered on their campus. All of the interns in this study stated that the presence of a mentor on their school campus would give them feedback on their teaching, help them to understand their

students' needs better, and assist them in understanding the mountain of paperwork that is part of their jobs. This type of support, while ongoing during the early years of the teacher, is especially critical during the first months of teaching. Universities should prioritize collaboration between the university support resources (faculty and university supervisors) and the support provided at school site (on-site support providers and administrators). Dual training programs and professional development for both university supervisor and on-site supervisor could be a first step to implementing wrap around support for the intern. Woolfolk Hoy and Burke-Spero (2005) raised a question in their study of efficacy changes in interns: "Does mentoring provide the kind of support that protects and builds efficacy?" (p. 354). Results from subsequent studies conducted at universities (Billingsley, 2004; Darling-Hammond, 2003) agree that the answer is a most definitive "Yes." Their research conducted with interns both in the field and at university sites found an increase in reported efficacy, and an increase in student achievement when good mentors were assigned to new teachers.

The involvement of school as an agency for building teacher self-efficacy is critical. Teachers should operate collectively as a support system rather than as isolates. Isolation was mentioned more than once in this study as the reality of the interns' day. The belief systems of the administrator frames the school culture. Professional development in training "mentors" for the interns should involve all faculty staff. A cliché that truly works to illustrate this point: "It takes a village to raise a teacher." Another area for study could be the development of mentoring programs that involve university faculty and school site faculty. The administrator adds sustained assistance in

the form of resources and release time for staff, as well as their own involvement in

mentoring the intern. To be effective, mentoring programs must be systematic, planned,

and sustained (Whitaker 2000a). The outcomes of such a program could be the anecdote

to the low self-efficacy during the first year of teaching and high turnover chronicled in

the literature (Woolfolk Hoy & Burke-Spero, 2005).

The other area that could be further explored by universities is their role in

developing the novice teacher (intern). Novice teachers who feel they have been trained

to teach are more likely to stay in the field, provided their field assignment gives them

positive experiences (Brownell et al., 2000). A thorough examination of existing course

work should be conducted in an attempt to include more emphasis on the real-life

problem solving. This should be done through vicarious experiences, shared by their

mentor, and experiences framed and conducted around the real-life problems they are

likely to encounter. In addition, they should have added professional development for

faculty who teach interns in the area of development and awareness of the needs of their

interns, both systemically and individually. Thus, curriculum revision is an integral part

of creating an intern support system.

The final recommendation for universities would be the need to establish periodic

"reality checks" for the interns. Rather than allowing the day-to-day reality shocks of

their situation to destroy the enthusiasm they initially possess, they need to be aware of

the "missiles" that will detonate in their classrooms. Missiles such as disordered student

behavior, the need to "teach it again" because their students did not demonstrate mastery,

the mountain of paperwork that pervades their sleeping and waking moments. Journaling

is a very well documented method of establishing two-way communication between the intern and their mentors. The information in their data should in some way drive the development of the content of frequent and regular support sessions.

The implications for further research that have been formulated based on this literature review are a need for more research examining the content and delivery of good teacher preparation programs and more significant research involving the developmental trajectory of alternatively credentialed teachers.

Limitations

Several significant limitations are recognized in this study on the self-efficacy of special education teachers in an alternative certification program. The results of this study were limited by the sample size. Per Creswell and Clarke (2007), samples for mixed methods studies should demonstrate a robust representation of the population being studied. The sample for this study was composed of 18 Teach for America interns at a private university. Two confounding issues are present here. The sample is too small (n=18). Theses interns, though they made up over 95% of this university's special education intern population, were not a representative sample of all the interns enrolled in a teacher preparation program at a university. As such, the results may be generalized only to the interns who also belong to Teach for America. These students had specific characteristics that were been discussed above. A positive development for this sample of students is the recent development of a strong relationship between Teach for America and the university. By sharing resources and support across organizations, these interns have a better chance of developing stronger self-efficacy. In addition, this study only

included participants from a single university. The results could be replicated using a larger sample, consisting of varied programs at multiple universities.

The time frame during which the data was collected was four months. Though this is agreed in literature to be a critical time in the development of a teacher, it is too short a time frame to validate the quantitative findings. Rather, the decrease in teacher self-efficacy should be considered a developmental trend, a state rather than a stable trait.

Final Thoughts

The purpose of this mixed methods study was to understand how the self-efficacy of intern teachers is impacted by an alternative certification route to credentialing. Throughout the study of this phenomenon, "internship," quantitative and qualitative data were obtained that provided a very clear picture of the struggles, disappointments, and victories of developing special education teachers. To keep these teachers passionate and dedicated, it is imperative that the programs that teach and support them are continuously evaluated and retooled to meet their needs. Special education teachers spend much time assessing their students, monitoring the progress, changing the program, and determining the needs of their students so that they will have access to the material that will foster their growth as the whole person—that will self-actualize them. In that same way we, as teacher educators, must be willing to do whatever is needed in order meet the needs of the interns.

Future research is definitely needed in this area. While good data were harvested from this study, it was conducted in too short a time period. I would like to continue with this project by following this group of interns as they begin their second year in their

classrooms and in their university program. The first research question for this study could be modified to identify the trajectory of self-efficacy with this sample. Data for this continuation would be gathered from another administration of the TSES. The publisher of this instrument would be contacted to inquire about test-retest issues. Teach for America would also be contacted to determine if extended numbers of their Corp members in university internships can be included.

In closing, I would like to provide one last snapshot from an intern whose passion and dedication to her students is amazing—*simply amazing* :

> I have found that I must enter their world (students). These students are living in a community that constantly is telling them to turn their backs on their education. And many times, I wonder why they don't. They tell me that it (studying) is too hard, that what they are learning won't help them to survive. I would not be motivated if I was them. And sometimes it is too much for me too. And I ask myself, why am I doing this? I could walk away tomorrow—the paycheck truly sucks—and no one at my school seems to care about me or my students. But, I can't walk away- I won't walk away. I may not be the best teacher, I wonder if I am even a good teacher. But, I am their teacher, and when one of them calls me on my cell at 11:00 to ask for help with a homework problem, it reminds me that I am a teacher.

APPENDICES

APPENDIX A

KEY TERMS

1. Alternative Certification: "Those teacher education programs that enroll non-certificated individuals with at least a bachelor's degree offering shortcuts, special assistance, or unique curricula leading to eligibility for a standard teaching credential (US Dept. Of Education, 2000).

2. Corp member: In this context, a member of Teach for America, recruited to teach and lead in educational communities (Teach For America, 2006).

3. Human Agency: The capacity to maintain control over one's own thought processes (Bandura, 1993).

4. Intern: In this context, the Intern is a teacher of record in a classroom, but does not have a standard preliminary or clear credential. Interns usually begin teaching with a small amount of background or procedural knowledge. This model closely resembles a medical intern model (Darling-Hammond, 1994).

5. Mastery Experience: Activities that result in successful outcomes (Bandura, 1997)

6. Reciprocal determinism: the view that personal factors in the form of cognition, affect and environmental influences (Pajarea, 2002).

7. Research bargain: A document between the researcher and the participant that outlines the responsibilities of the researcher and the participant. The bargain explains what the researcher will be doing when and for how long (Hatch, 2002).

8. Self-efficacy: a belief in one's capacity to organize and execute the courses of action required to produce given attainments (Bandura, 1996).

9. Special Day Class: A homogenous special education placement that includes a self-contained classroom with low adult/children ratios and other services necessary for students with disabilities.

10. Triadic reciprocity: the result of environmental influences creating interactions (Pajarea, 2002).

11. Vicarious Experience: permits individuals to learn a new behavior without undergoing the trial and error process of performing it (Pajarea, 2002).

APPENDIX B

PERMISSION TO USE SCALE

COLLEGE OF
EDUCATION AND
HUMAN ECOLOGY

ANITA WOOLFOLK HOY, PH.D.

PROFESSOR
PSYCHOLOGICAL STUDIES IN EDUCATION

Dear

You have my permission to use the *Teachers' Sense of Efficacy Scale* in your research. A copy of both the long and short forms of the instrument as well as scoring instructions can be found at:

http://www.coe.ohio-state.edu/ahoy/researchinstruments.htm

Best wishes in your work,

Anita Woolfolk Hoy, Ph.D.
Professor

APPENDIX C

TEACHERS' SENSE OF EFFICACY SCALE (long form)

Teacher Beliefs		How much can you do?								
Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.		Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
1. How much can you do to get through to the most difficult students?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. How much can you do to help your students think critically?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3. How much can you do to control disruptive behavior in the classroom?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4. How much can you do to motivate students who show low interest in school work?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5. To what extent can you make your expectations clear about student behavior?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6. How much can you do to get students to believe they can do well in school work?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7. How well can you respond to difficult questions from your students?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
8. How well can you establish routines to keep activities running smoothly?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9. How much can you do to help your students value learning?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10. How much can you gauge student comprehension of what you have taught?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11. To what extent can you craft good questions for your students?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12. How much can you do to foster student creativity?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
13. How much can you do to get children to follow classroom rules?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
14. How much can you do to improve the understanding of a student who is failing?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
15. How much can you do to calm a student who is disruptive or noisy?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
16. How well can you establish a classroom management system with each group of students?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
17. How much can you do to adjust your lessons to the proper level for individual students?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
18. How much can you use a variety of assessment strategies?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
19. How well can you keep a few problem students form ruining an entire lesson?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
20. To what extent can you provide an alternative explanation or example when students are confused?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
21. How well can you respond to defiant students?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
22. How much can you assist families in helping their children do well in school?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
23. How well can you implement alternative strategies in your classroom?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
24. How well can you provide appropriate challenges for very capable students?		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

APPENDIX D

INTERVIEW GUIDE

Briefing: *Thank you, _____ for your willingness to be interviewed for my dissertation. I will be tape recording our interview. Are you still in agreement with this?*

I want to reiterate that I am conducting this interview as a doctoral student. Agreeing to participate in this study in no way impacts your grade in any class you are now enrolled in, or may be enrolled in at a future time.

Great, before we get going I would like to tell you a little about my study. I am studying how being an Intern helps or hinders learning to become a teacher and affects teacher self-efficacy. Teacher self-efficacy is a teacher's belief in his/her ability to impact student learning and achievement.

Do you have any questions before we begin?

1. *Can you describe to me what it means to be an **effective teacher?***

2. *What supports does a teacher need to be effective?*

3. *What aspects of your Intern experience has helped you to be an effective teacher so far?*
   a. *Probe: administration*
      i. *Probe for positive and negative*
   b. *Probe: field/site mentoring*
      i. *Probe for positive and negative*
   c. *Probe: University Program*
      i. *Probe for positive and negative*

4. *I am going to name some areas that researchers have found to be areas of challenge for new teachers: instructional strategies, classroom management, paperwork, support, ability to motivate students. Can you rank those in order of challenge, with 1 being your biggest challenge, two the next, and three the last?*

    (hand interviewee prompt card, Probe for feelings in each areas)

5. *Can you name one or two areas where you feel that you have positively impacted your student' achievement?*

Is there anything else you would like to bring up before we end the interview?

Debriefing: *I have no further questions. I am going to turn off the tape recorder (turn off tape recorder).* Do you have any questions for me? What are your feelings about the interview?

INFORMED CONSENT FORM

Loyola Marymount University

Consent to Participate in Research Study

1) I hereby authorize Marianne Mitchell, M.A., LEP. include me in the following research study:

Trying to Close the Gap: The Effects of Alternative Certification Programs on Intern Self-Efficacy

2) I have been asked to participate on a research project which is designed to investigate factors that improve or reduce teacher self-efficacy of Interns and to recommend practices to improve teacher self-efficacy to Universities and which will last for approximately 1 hour.

3) It has been explained to me that the reason for my inclusion in this project is because I am a University Intern.

4) I understand that if I am a subject, I will participate in an individual interview with the Principal Investigator. The investigator will conduct the interview with me at a public off campus location (i.e. Starbucks) These procedures have been explained to me by Marianne Mitchell, M.A. LEP.

5) I understand that I will be audiotaped in the process of these research procedures. It has been explained to me that these tapes will be used for research purposes only and that my identity will not be disclosed. I have been assured that the tapes will be destroyed after their use in this research project is completed. I understand that I have the right to review the tapes made as part of the study to determine whether they should be edited or erased in whole or in part.

6) I understand that the study described above may involve the following risks and/or discomforts: possible embarrassment during the interview.

7) I understand that I will receive no direct benefit from my participation in this study; however, the possible benefits to humanity include identification of University supports and/or practices to assist candidates in special education teacher preparation programs.

8) I understand that Marianne Mitchell M.A., LEP who can be reached at 310 625-4522 will answer any questions I may have at any time concerning details of the procedures performed as part of this study.

9) If the study design or the use of the information is to be changed, I will be so informed and my consent be obtained.

10) I understand that I have the right to refuse to participate in, or to withdraw from this research at any time without prejudice to status as a student.

11) I understand that circumstances may arise which might cause the investigator to terminate my participation before the completion of the study.

12) I understand that no information that identifies me will be released without my separate consent except as specifically required by law.

13) I understand that I have the right to refuse to answer any question that I may not wish to answer.

14) I understand that if I have any further questions, comments, or concerns about the study or the informed consent process, I may contact *Victoria Graf, Ph.D., Dissertation Chair @ vgraf@lmu.edu* or John Carfora, *Ed.D.* Chair, Institutional Review Board, 1 LMU Drive, Suite 3000, Loyola Marymount University, Los Angeles CA 90045-2659 (310) 338-4599, John.Carfora@lmu.edu.

15) In signing this consent form, I acknowledge receipt of a copy of the form, and a copy of the "Subject's Bill of Rights".

16) In signing this consent form, I acknowledge receipt of a copy of this form.

17) Subject's Signature_____ Date _____

INFORMATION SHEET

Accompanying Consent to Participate in a Doctoral Dissertation Study:

Trying to Close the Gap: The Effects of Alternative Certification Programs

on Intern Self-Efficacy

Note: This information will be used only by the Principle Investigator: Marianne Mitchell

To select and contact Candidates for an invitation to participate in an hour long interview.

This information will not be used in any way to disclose the identity of Subjects participating in this study.

Name:_____

E-mail address:_____

School Site Assignment:_____

Type of Assignment: Select 1

☐ Special Day Class   ☐ Learning Center   ☐ Resource ☐ I do not know ☐ Other

Are you willing to participate in one hour individual interview? During the interview, you will be asked your feelings about the qualities of effective teachers, what

is necessary at school sites to sustain teachers, and what has helped you to be effective so far in the field.

The interviews will be conducted in mid-December.

<u>Checking this box indicates an interest in participating in the interview. It does NOT obligate you.</u>

☐Yes, I am interested in participating in an interview. Please contact

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