EVALUATING STUDENT TEACHING EXPERIENCES AT URBAN AND SUBURBAN

FIELD SITES: RELATIONSHIP TO TEACHER EFFICACY,

PREPAREDNESS AND COMMITMENT

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ABSTRACT

**Evaluating Student Teaching Experiences at Urban and Suburban
Field Sites: Relationship to Teacher Efficacy,
Preparedness and Commitment
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Doctoral Advisory Committee Chair: Joseph Ducette, Ph.D.**

Preparedness, efficacy, and commitment to a teaching career are important products of the teacher preparation process. Yet research on how the context of field experiences influences the development of these products is limited. The purpose of this study is firstly to confirm the existence of hypothesized differences between urban and suburban field placements and secondly to investigate the relationship between individual components of these contextualized field experiences and the outcomes of preparedness, efficacy, and commitment. Field experiences are examined through the lens of Bandura's (1997) sources of teacher efficacy belief development (mastery experiences, vicarious experiences, verbal persuasion, emotional arousal) and their interactions with student teaching contextual influences. The results suggest that urban-based student teachers have a qualitatively different experience from their suburban-based counterparts. Although the study did not find significant differences in resultant teacher efficacy, or preparedness for assuming fulltime teaching responsibilities, urban-based teachers report less long-term teaching commitment, but are more likely to be seeking an initial placement in an urban school. Regression analyses were performed to identify those components of

the field experience and individual student characteristics that predict preparedness, efficacy and commitment. Location and on-site school contextual variables (school climate, school poverty) play an integral role in prediction of teaching efficacy. While long-term teaching commitment was most strongly predicted by emotional interpretations of the experience (satisfaction, stress, confidence) together with feeling supported by the field supervisor, intentions regarding teaching location were more dependent on support and encouragement received from mentor teachers in those locations, and viewing the mentor as a good career model. The findings of this study have important implications for teacher education since the results confirm that student teachers have very different experiences based on field site location and that these experiences do contribute differentially to the development of preparedness, efficacy and commitment.

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DEDICATION

My Family

This study is dedicated to my parents Horace and Beryl without whom completion of this study would not have been possible. I love you both dearly. Also to my siblings, Jonathan and Heather, and my children, Lisa and Julian – you are my inspiration.

All Teachers

To that very special group of people who give of themselves day in and day out, often in less than perfect circumstances, to impart knowledge to the next generation: You are a constant source of motivation.

PREFACE

It is important that teacher education programs perform internal evaluations of the training product which they offer to ensure that the needs of their clients are met. One way of doing this is getting feedback from the student teachers about their perceptions of the effectiveness and quality of the program in preparing them for their future teaching task. This study investigates these perceptions as it relates to the clinical practice aspect of the teacher training program at a large urban university. The intention is to provide information about the positive and negative aspects of field experiences, at urban and suburban field sites, which contribute to the formation of prepared, efficacious, and committed teachers.

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CHAPTER 1

INTRODUCTION

The No Child Left Behind Act of 2001 (NCLB) has called for highly qualified teachers in every classroom, and especially in schools which serve minority and low-income children. There is much debate in the teacher education literature about the meaning of the term "Highly Qualified Teacher". In the state of Pennsylvania, within which this study is located, according to the Pennsylvania Department of Education (2008), the definition of *Highly Qualified Teacher* is one who holds a first degree, a valid teaching certificate, and who demonstrates subject matter competency for the content areas he or she teaches. However, from the perspective of educational professionals nationwide, *Highly Qualified Teacher* implies more than this. As Darling-Hammond (2007, ¶1) states, "Without teachers who have sophisticated skills for teaching challenging content to diverse learners, there is no way that children from all racial and ethnic, language, and socioeconomic backgrounds will reach the high academic standards envisioned by the law."

Research has demonstrated that more qualified teachers produce higher achieving students (Carnegie Corporation of New York, 2001; Cochran-Smith, 2003, Cochran-Smith & Zeichner, 2005; Darling-Hammond, 2006). The training of highly qualified teachers traditionally begins with the teacher preparation program. Current research on quality teacher preparation consistently argues the

value of clinical practice, that is, student teaching in the development of highly qualified teachers. Yet this is often the least attended to component of teacher education programs.

An exploration of the current literature reveals limited research on links to specific student teaching characteristics (e.g. relationships between student teacher and cooperating teacher, field supervisor and site-based school supports) which influence a preservice teacher's preparedness for the task of teaching, and levels of teacher self-efficacy (Bandura, 1997; Darling-Hammond, 2006; Knoblauch & Woolfolk Hoy, 2008; Tschannen-Moran & Woolfolk Hoy, 2001, 2002, 2006). Some studies of preservice and in-service teachers have also indicated links between teacher efficacy and preparedness for the teaching task and the student teacher's future intent and commitment to teaching as a career (Coladarci, 1992). In addition, research has shown that teachers who enter the profession with high levels of teacher efficacy, and who feel prepared for the tasks of teaching in specific contexts are more likely to opt to teach at schools that are similar in context to the one where they successfully completed their clinical practice. Perceptions of preparedness seem to be related to how well one feels that one has been taught the pedagogy and practice of teaching, that is, it is related to perceptions of program quality. Therefore if I deem that the teaching preparation that I received was adequate, I feel prepared. On the other hand, teaching efficacy is related to future action. Bandura (1977, 1986, 1997) introduces the concept of self-

efficacy as the primary motivational force behind an individual's actions. *Self-efficacy is how capable and prepared we think we are to perform a given task in a given context.* So given my acknowledgment of receiving adequate preparation how well will I retain that knowledge and how well equipped will I feel to effectively and efficiently perform the tasks of teaching.

This study addresses the relationship between the student teaching experiences of 600 preservice teachers in urban and suburban field placements and these respondents' self-reported perceptions of preparedness, efficacy, and commitment to a future in teaching. The student teachers' perceived quality of preparation is measured by the self-reported degree of preparedness for the task of fulltime teaching. Teaching efficacy is measured by scores on Gibson and Dembo's (1984) Teacher Efficacy Scale [TES].

The components of the student teaching experience are interpreted as the sources of each student teacher's individual teaching efficacy beliefs. This assumption is based on the work of Albert Bandura and the related work of Tschannen-Moran and Woolfolk Hoy. Bandura (1997) proposes that self-efficacy beliefs are context-specific, so the contextual variables at the student teaching site will impact upon the student teacher as he or she negotiates the various teaching tasks and relationships within the assigned classroom. Research by Woolfolk-Hoy and Spero (2005) and Tschannen-Moran and Woolfolk-Hoy (2001, 2002, 2006) support this hypothesis. Bandura (1977) suggests that efficacy beliefs are most malleable

early in learning, so focusing on the learning experiences of student teachers when these teacher efficacy beliefs are first being formed assumes primary importance. He further contends that beliefs about the task of teaching and personal teaching competence, are formed early in the career, and are likely to remain unchanged, unless some compelling evidence introduces the need for reevaluation. So the foundations of teacher efficacy beliefs may be found in the student teaching experiences at individual field sites which are in essence "a prolonged mastery experience with opportunities for both vicarious experiences and verbal persuasion, which serve to facilitate the development of the preservice teachers' teaching efficacy beliefs."(Fives, Hamman & Oliverez, 2007, pp.917-918). The nature of these experiences and resultant preparedness and efficacy levels were then related to the student teacher's stated intention to pursue teaching as lifelong career.

The National Council for the Accreditation of Teacher Education [NCATE] Standard 3: Field Experiences and Clinical Practice (2008 Edition) specifies that,

> The unit and its school partners [should] design, implement, and evaluate field experiences and clinical practice so that student teachers and other school personnel develop and demonstrate the knowledge, skills, and dispositions necessary to help all students learn.

It is also expected that all candidates participate in "field experiences or clinical practice that include students with exceptionalities and students from diverse ethnic/racial,

linguistic, gender, and socioeconomic groups." (NCATE, 2008, Standard 3, Section 3c).

Field experiences, therefore, serve an important role in the preparation of new teachers especially in helping them to link the theory and research learned in their coursework to the planning, teaching, and assessment of their lessons. Student teachers must be well-prepared for the challenges of effectively differentiating instruction for often large classes of students from a wide range of achievement levels, different levels of prior knowledge and school experiences, diverse racial/ethnic and linguistic backgrounds, and varying levels of family and community support. As the National Commission on Teaching and America's Future conclude in their 2003 report *No Dream Denied. A Pledge to America's Children* "Without the integration of knowledge and skills in a well-designed and carefully supervised clinical practice location, the education and training of a new teacher is incomplete" (p.77).

Student teachers expect quality preparation and that their selection of a particular teacher training program, inclusive of the field experiences, will assist them in gaining a sense of preparedness for the task of teaching. However, the ability to use skills and apply concepts learned in the university classroom depends to a large extent on the realities of the student teaching classroom. This is reflected in availability of resources, interactions with the school administration and cooperating teachers, and other contextual and organizational factors (Darling-

Hammond, 2006; Rushton, 2003). The program should also provide the experiences that will lead to feelings of confidence that they will be efficient and effective teachers in their desired permanent teaching position.

Bandura (1997) proposed four possible sources of teacher efficacy beliefs. These sources include mastery experiences, vicarious experiences, verbal persuasion, and emotional arousal, with mastery experiences, i.e. believing that one has been successful in the context of real classrooms, assumed to contribute most to the development of these beliefs. Bandura proposes that efficacy beliefs are context-specific, so the contextual variables at the student teaching site such as field site location, poverty level, and availability of resources will influence the student teacher as he or she negotiates the various teaching tasks and relationships within the assigned classroom. As stated previously, research by Woolfolk-Hoy and Spero (2005) and Tschannen-Moran and Woolfolk-Hoy (2001, 2002, 2006) support this hypothesis.

The teacher preparation program at Temple University, a large urban university, is a major supplier of teachers to the School District of Philadelphia, the eighth largest school district in the nation with an 87% minority student population (Pennsylvania Department of Education, 2008). Temple University also trains teachers who will serve in some of the surrounding urban and suburban school districts. Given the documented disparity between urban and suburban school districts in terms of resources and

supplies, and with reference to the development of quality teachers who are efficacious, prepared and committed to teaching, this study will compare the student teaching experiences of teacher candidates who fulfilled their clinical practice (student teaching) at urban sites, particularly in the School District of Philadelphia, with those at sites in the surrounding suburbs.

This study is situated within the context of the 14-week student teaching (clinical practice) component of this program, and selected early practicum-related experiences within the program that might influence the quality of preparation of these candidates for teaching certification.

Statement of the Problem

Johnson, Berg and Donaldson's (2005) report, *"Who stays in Teaching and Why: A review of the literature on teacher retention"* highlights the "need to better understand the relationship between teachers' preparation, sense of efficacy, and subsequent decisions to continue teaching or to leave"(p.25). They see quantitative methodology as increasingly important to knowledge building in the field and warn that,

> Great care must be taken in....gathering detailed information about these teachers (e.g., age, sex, race/ethnicity, school characteristics) and their preparation experience...It would be informative to analyze a large data set ....examining the outcome variable-these teachers' career decisions-in light of different experiences with preparation [which] would yield important understandings about the relationship between preparation and retention. (p.25)

Similarly, Wilson, Floden and Ferrini-Mundy (2001) highlight the fact amongst the weaknesses in current research on clinical experiences that much of the research done is "interpretative and small scale." They call for more research on "…the impact of innovative field experiences (including collaborations…)," "the effects of ...practices and structures that enable teaching learning," and "large scale studies to evaluate the effects of various innovations in clinical experiences" (p.22).

A search of the literature reveals that research exists on the construct of teacher efficacy and measurement of preservice and in-service teacher efficacy. There is, however, little research on the relationship between the experiences of clinical practice as perceived by the student teachers at individual field sites (taking into account the structure, context and content of the field placement), and the effects of these experiences on developing teacher efficacy, preparedness to teach, and future commitment to teaching (Knoblauch& Woolfolk Hoy, 2008). There is also the need for more research on the links between opportunities to learn the tasks of teaching in the classroom, and the degree of preparedness and/or challenge experienced by the candidates when asked to put theory into action during field experiences or clinical practice.

Purpose of the Study

Hence, the purpose of this study was two-fold. Part one of the study examined differences in actual student teaching experiences at urban and suburban field locations in an attempt to identify

possible factors that might influence the development of teaching efficacy, preparedness to teach and commitment to a teaching career. It also examined differences in resultant levels of teacher efficacy, preparedness for fulltime teaching, and intention to pursue a lifelong teaching career based on these two locales.

Part two of the study examined how the structural and contextual components of the field assignments and various experiences during student teaching helped to predict the development of teaching efficacy, preparedness for a fulltime teaching position, and stated commitment to a teaching career.

The ultimate goal of the study was to make suggestions for improving the clinical experiences of student teachers, with the desired outcome of fostering feelings of preparedness for the task of teaching, increasing teaching self-efficacy, and the desire to remain in the teaching profession.

Research Questions

Research Question 1: Is there a significant difference in student teachers' scores on the self-reported predictor variables measuring sources of teaching efficacy belief and related contextual factors based on field site location?

Research Question 2: Is there a significant difference in student teachers' scores on self-reported outcome variables measuring preparedness for fulltime teaching, teaching efficacy, and teaching intentions based on field site location?

Research Question 3: Which sources of teaching efficacy beliefs, singly or in combination with demographic and contextual variables, are the best predictors of teaching efficacy?

Research Question 4: What, if any, is the differential influence of contextual variables on preparedness for fulltime teaching, the decision to pursue a teaching career, and decision to seek a teaching position in the School District of Philadelphia over and above source of efficacy beliefs alone?

Significance of the Study

The desire to understand how field experiences in real classrooms influence the development of teaching efficacy, preparedness to teach and future commitment to the teaching profession has been elucidated in past studies. This study has the potential to help fill in some of the gaps in the research on experiences of student teachers in both urban and suburban locations.

It may help to shed light on the influence of clinical practice experiences as sources of efficacy beliefs for the student teachers, and explain how clear elucidation of "theory to practice" relationships during the pre-clinical experiences aid in promoting feelings of preparedness for teaching, and the development of teacher efficacy. It also has the potential for assisting in a better understanding of the relationship between teacher preparation, sense of efficacy, and subsequent decisions to pursue a long term teaching career.

In addition, it is a quantitative study that examined whether changes in implementation of the field experiences including on-going field experiences at the same school site, assignment by the program versus self-selection of field sites, and peer cohort placements at school sites influenced preparedness, efficacy and commitment to a teaching career. These research-to-practice links are considered within the context of a large teacher preparation program situated in a urban university seeking to train more teachers who will stay in urban classrooms. In addition, the study by providing greater descriptions of the school site contexts within which the clinical practice is occurring has the capacity to address one of the criticisms of the clinical practice research that "most of the studies were not contextualized within a teacher education program and lacked description of field placement sites" (Hollins & Gutzman, 2005, p.502).

Definitions of Terms (adapted from Glossary of NCATE 2006/2008 standards and Temple University's College of Education UEC website)

Clinical/Field Site. School site at which candidates pursue student teaching experience.

Clinical Practice/Student Teaching. Student teaching experiences that provide candidates with an intensive and extensive culminating activity where they are provided opportunities to develop and demonstrate competence in the professional role for which they are preparing.

Cooperating (Mentor) Teacher. An active teacher working in a community school who allows a student teacher from the College of Education to study and work in her classroom as a student teacher at the request of the university. *The school does not have to be a collaborating school.*

University-appointed Supervisor. A fulltime or part-time professional education faculty appointed by the university to supervise student teachers in their field experiences and clinical practice. This person may be employed by the program solely for this purpose. Many of the part-time appointees are retired principals and teachers.

Early Field Experiences. A variety of early and ongoing field-based opportunities in which candidates may observe, assist, tutor, instruct, and/or conduct research. Field experiences usually occur in off-campus locations such as schools.

Student Teachers. Individuals enrolled in programs for the initial preparation of teachers.

Student Teaching. See clinical practice above.

Students. Children and youth attending P-12 schools as distinguished from student teachers.

<u>Teacher Certification Program</u>: Program designed to prepare students to meet the requirements for certification as teachers in elementary, middle/junior high, and secondary schools

<u>Urban Education Collaborative.(UEC).</u> This program was established in 2004 by the College of Education at Temple University, with support from the William Penn Foundation. Collaborating with the School District of Philadelphia, as well as with other urban districts in the Philadelphia region, the UEC is designed to correct a lack of coordination between school improvement efforts—as pursued by district leaders and staff, principals, and teachers—and educational evaluation research and professional education—as conducted in institutions of higher learning. The work of the Urban Education Collaborative is focused on improvements in teaching quality, leadership development, and school climates that are conducive to learning.

Organization of the Study

The study is divided into five chapters, a reference list and appendices. Chapter Two is a review of the current literature related to quality preservice field experiences and the link to development of teaching efficacy, preparedness to teach and commitment to teaching. This chapter also examines current thinking on teacher efficacy, its meaning and measurement. Chapter Three describes the methodology of the study. This includes a discussion of the End-of-Student-Teaching Survey instrument used to collect the

data. Information will also be provided about items from *Woolfolk and Hoy's 22-item 1990 revision of Gibson and Dembo's 1984 Teacher Efficacy Scale (TES)* which was included in the survey as a measure of teacher efficacy. It also includes the data analysis methodologies employed. Chapter Four is the results chapter which will includes the descriptive and inferential statistics, and all data analysis. Chapter Five presents a summary of the study and a discussion of the major findings. Implications of these findings and recommendations based on these findings are also presented.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

Several recent reviews of the teacher preparation research have pointed to the importance of the quality of clinical experiences, also referred to in the teacher preparation literature as field experiences, student teaching, or field placements, during teacher preparation. As Hollins and Guzman (2005) state:

> Field experiences have long been identified… as a major, if not the most important, part of student teacher preparation. It is broadly assumed that field experiences are the key components of preparation where prospective teachers learn to bridge theory and practice, work with colleagues and families, and develop pedagogical and curricular strategies for meeting the learning needs of a diverse population. (p. 493)

However, these clinical experiences may differ greatly in what the particular teacher preparation program hopes that its candidates will gain from the experience. They may also differ in the actual characteristics (e.g. duration, location, field site characteristics and climate), and structural context (e.g. cohort or single placements). Differences in the implementation of the experience (e.g. quality of supervision, quality of cooperating teacher as role model and/or mentor, and availability of resources) may also have an influence.

Several studies have confirmed Bandura's (1977) theory that teachers' self-efficacy beliefs are "related to the effort teachers invest in teaching, the goals they set, their persistence when things do not go smoothly and their resistance in the face of

setbacks" (Tschannen-Moran & Woolfolk Hoy, 2007, p.944). The literature points to the relationship between field experiences, especially student teaching, and the development of these teacher efficacy beliefs. The more prepared an individual feels, the higher the efficacy beliefs. This perception of preparedness leading to teaching efficacy belief development is related to the individual student teacher's analysis of experiences and associated feelings of success and/or failure achieved during the teacher preparation program, and especially during the student teaching experiences.

Given the diversity of possible characteristics, structure and implementation of the student teaching experiences, several questions arise concerning the relationship between these experiences and the development of teaching efficacy, feelings of preparedness for teaching, and the individual's commitment to teaching as a profession. The literature review will explore the answers to some of these questions.

The literature review will be in two parts. Part One will explore the major environmental (contextual and structural) factors that may influence the quality of the student teaching (clinical practice) experience. Part Two will explore the construct of teacher efficacy and investigate the relationship between field experiences and the development of teacher efficacy. It will explore the idea that the contextual and structural factors within the student teaching experience influence the student teacher's efficacy belief development. It will also examine the relationship between the

student teacher's personal and background factors (e.g. age, ethnicity, certification pathway, education level) and the development of preparedness and associated feelings of teacher efficacy.

Quality Field Experiences

Background on the Field Experience Model

Clinical experiences, also referred to in teacher preparation literature as field experiences or field placements, are those experiences which are part of initial teacher preparation and which take place outside of the university or college location. Here the student teachers are exposed to the realities of classroom teaching first-hand, either by observation or by taking control of a classroom themselves, or a combination of both. The field experiences may vary in length and in structure.

In the most widely used model, there is a *practicum* where students observe in certain classrooms for a few hours once or twice a week concurrently with the relevant university methods course. This is usually in the sophomore or junior year. Then in the senior year, a one or two semester *student teaching* placement occurs, where the student teacher is placed with a fulltime teacher at the school, referred to as the *cooperating teacher.* This teacher serves as a mentor. The student teacher gradually takes over full control of a classroom under the supervision of the coop teacher and a *university appointed supervisor*. For graduate student teachers with previous teaching experience, this period may be an internship with the

student teacher assuming full control of the classroom from the beginning of the clinical practice, under the supervision of the university appointed supervisor. There is no cooperating teacher in this case, although other teachers at the field site may assist with mentoring if this is deemed as necessary.

This is the model used by the teacher preparation program in this study. A more in-depth description of the teacher preparation program including practicum and student teaching requirements is given in chapter 3.

Elements of a Quality Field Placement

Before being able to understand how field experiences might influence the development of teacher self-efficacy, it is necessary to identify, based on current research, the elements that constitute quality field placements for student teachers. Darling-Hammond (2006) in a study of best practices in clinical experience found the following to be important elements: student teachers' involvement in clinical work throughout the program; careful selection of field placement sites and cooperating teachers by the university; and a combination of theoretical and practical study for student teachers. These elements need to be supported by guided analysis, reflection, and feedback from cooperating teachers, peers and university supervisors. These all contribute positively to student teachers' feelings of preparedness and high teacher efficacy, and an "intent" to pursue teaching as a career at the end of the clinical practice.

Other studies have demonstrated the importance of the development of an on-going relationship between the university and the clinical sites. Bullough et al. (2002) found that student teachers in *collaborating* placements felt better supported when compared to the experiences of student teachers in non-collaborating placements. In addition, the cooperating teachers at collaborating schools were more open to new ideas in the planning of the lessons by the student teachers than those in non-collaborating schools. University-school collaborations allow the university to have more control in selection of cooperating teachers, and help to decrease the cooperating teacher's gap in knowledge about content and structure of the university courses. This is important since cooperating teachers have been shown to have a powerful influence (see below) on the nature of the student teaching experience (Fenton 2006; Hrncir, 2007; Wilson, Floden & Ferrini-Mundy, 2001). This type of collaboration assists in increasing the cooperating teachers' awareness of the university's expectations and performance standards, and enables them to better function in their mentoring role (Hunter-Boykin & Thompson, 1993; Graham, 2006; Kahn, 2001; Koerner, Rust & Baumgartner, 2002).

The Urban Experience

The literature shows that student teachers, especially in urban placements, who began their field experiences with initial concerns about understanding and motivating the students, and developing positive relationships with students and cooperating

teachers, are able to learn strategies that help them feel more efficacious in these locations (Groulx, 2001; Rushton, 2001). The urban field placement can be a challenging one given the disparity between resources provided in urban districts (such as the School District of Philadelphia) versus suburban districts. This is reflected in differences in the per capita student expenditure (Ducette, Sewell, & Shapiro, 1996). There are also the issues of large class sizes, inadequate facilities, possibilities of school violence, disruptive student behavior, and a much wider diversity of language, ethnicity and academic achievement levels in the urban classrooms. All of this may contribute to increased levels of anxiety and stress for the typical student teacher who is white (83.7%), female (75.2%), and from the middle class (NCES 2006; NEA 2003) and has not had much exposure to the crowded, poverty-stricken, ethnically-linguistically diverse communities in which many of the urban schools are situated.

In one of the few quantitatively-designed empirical studies comparing the relationship between the location of student teaching experiences (urban, suburban or rural) and the development of teacher efficacy beliefs, Knoblauch and Woolfolk-Hoy (2008) found that student teachers in all three locations (including urban sites, to their surprise) exhibited significant increases in efficacy scores following student teaching. More in-depth analysis revealed that these student teachers were in urban schools which had been

carefully chosen by the program as well-functioning, effective, safe schools.

Additionally, the student teachers "attended a weekly seminar where they discussed problems, opportunities, and ideas with their university supervisor and student colleagues." (p.174). Another study by Proctor, Rentz and Jackson (2001) also based on the experiences of student teachers with diverse learners in urban classrooms, concluded that there must be opportunities provided by the program for the student teachers "to share reactions to their experiences"(p.226). These sharing sessions led by course instructors and program faculty allow student teachers to air the discouragement experienced as a result of issues such as inappropriate student behaviors, safety issues, lack of parental support, and culture shock. These issues can be discussed, interpreted and reflected upon to assist the student teachers in navigating what for many of them is unknown, foreign territory.

These findings seem to confirm previous qualitative research which found that for student teachers assigned to urban sites, who have not had much personal experience in urban communities, it is vital that they are well-prepared and oriented into the realities of urban community life and the possible lack of resources in urban schools and classrooms (Weiner, 1993). They must also be supported and monitored (Zeichner & Hoeft, 1996). If this is not an integral part of the pre-student teaching experience, emotional and cognitive

dissonance, increased self-doubt and reduced efficacy beliefs may result (Foote & Cook-Cottone, 2004; Rushton, 2000, 2001, 2003).

Context of Field Placement and Efficacy Development

School Characteristics

The school and individual classroom context have also been found to be strongly related to the development of teacher efficacy beliefs and subsequent levels of teacher efficacy. Bandura (1977, 1986, 1997) contends that human behavior is dynamic and that these contextual (or environmental) factors interact with an individual's personal factors (including teaching self-efficacy in the case of a teacher) and with an individual's behavioral patterns through a process of triadic reciprocal causation.

The way in which the teacher candidate experiences the environmental contexts (community/school/classroom) of the student teaching experience will therefore affect the way in which he or she assesses and evaluates his or her behavior in this context. This in turn will affect how the individual interacts with the environment. Similarly, the results of self-assessment of competence within this context based on the interaction with the school and/or classroom environment will influence the individual's belief in self, goals and expectations for successfully completing the assigned or chosen teaching task.

School Climate

Although there is not one standard definition of school climate, researchers agree that it is a multidimensional construct, coming out of organizational research and studies in school effectiveness. Loukas (2007) describes three dimensions:

- physical (appearance, size, resource availability, safety, classroom organization);

- social (interpersonal relations between students, teachers and staff, treatment of students by teachers, competition and social understanding between students, contribution of teachers and students to decision-making); and

- academic (quality of instruction, teacher expectations for student achievement, monitoring of student progress, frequently updating parents on student's progress).

Leadership of and Support from Principal

Researchers have also examined the impact of the leadership and support provided by the school principal, i.e. the teacher-principal interactions. In schools where the principal communicates to the staff the kind of school that he or she wants, backs up staff when necessary, keeps student disorder at a minimum, models appropriate behavior, but allows teachers some flexibility, teachers were shown to demonstrate high levels of teacher efficacy (Hipp & Bredson, 1995; Lee, Dedick & Smith, 1991). Rosenholtz (1989) also found that a coordinated school-wide response to student behavior

and the involvement of parents contributed to higher teacher efficacy.

Cohesive Teaching Staff

Several studies have examined how the sense of community between the teaching staff and teacher-teacher support system influence teacher efficacy beliefs. Lee, Dedick and Smith (1991) in a study using the *High School and Beyond* data found that the greatest single predictor of the level of teacher efficacy was the sense of community that the teacher felt within the school environment. Collaboration with other teachers and receiving positive feedback on teaching performance from other teachers were found to be related to high individual teacher efficacy (Rosenholtz, 1989). Additionally, Webb & Ashford (1987) found that poor morale of teachers, and a lack of recognition and professional isolation helped weaken teachers' self-efficacy beliefs.

More recent research has also pointed to the importance of the organizational construct of collective teacher efficacy which Goddard et al (2000) define as:

> a construct measuring teachers' beliefs about the collective (not individual) capability of a faculty to influence student achievement; it refers to the perceptions of teachers that the efforts of the faculty of a school will have a positive effect on student achievement" (p.486).

Adams and Forsyth (2006) found that schools should configure their formal organizational structure to produce the type of social networks and interactions necessary for efficacy formation. So

collective teacher efficacy is enhanced by high levels of collaboration, and teacher-teacher support,

Mentor Teacher Support

When the relationships between the student teacher, the cooperating teacher and the university appointed supervisor (sometimes referred to as the student teaching triad) are examined several studies, both qualitative and quantitative, have pointed to the cooperating teacher (Chambers, 2003; Copeland, 1979; Copas, 1984, Hamman et al., 2006, Hrncir, 2007) as the person with the most influence over the student teacher's efficacy beliefs and future plans. Hoy and Woolfolk (1990) state that "student teachers are particularly open to the opinions and values of their cooperating teachers as they begin their work in public schools" (p.285). Beck and Kosnik (2002) based on interviews with preservice teachers found that the emotional support from, peer relationship with, feedback from, and collaboration with the cooperating teacher were the major factors that contributed to a student teacher's belief that the field experience was a positive one. They also found that the cooperating teacher's flexibility in allowing the student teacher to innovatively plan teaching content and methodology of lessons was also important. MacDonald (1992) found that preservice teachers experienced higher levels of stress when the relationship with the cooperating teacher was not a good one. Other qualitative studies with small numbers of student teachers in urban field placements also found that the nature of the relationship between

the cooperating teacher and student teacher (Borko & Mayfield, 1995; Dinsmore & Wenger, 2006) strongly contributes to the student teacher's perception of the clinical experience being positive or negative. The cooperating teacher needs to clearly understand his or her role as mentor and teacher, not just see the student teacher as someone to share the work (Slick, 1998).

With specific reference to future use of technology, Dexter and Reidel (2003) found that feedback and support from the cooperating teacher on the student teacher's design and use of technology for instruction during clinical experiences predicted use of technology and having K-12 students use technology in the classroom. This was supported by Grove, Strudler and Odell (2004) who found that the cooperating teacher needed to be knowledgeable in integrating technology into the preparation and teaching processes. The cooperating teacher needed to not only provide access to equipment and model the use of technology but be willing to collaborate with the student teacher in analyzing the use of technology in various tasks.

It is therefore vital that the cooperating teachers know what the teacher preparation program is expecting of them as supervisor and mentor to the student teacher. The studies above demonstrate that there is a definite link between the mentorship provided by the cooperating teacher, and a positive coop-student teacher relationship. However, the magnitude of the impact of the support and feedback provided by the cooperating teacher as compared to the

other member of the triad, the university supervisor, and also the effects of support and feedback from the school administration, and other teachers, has not been examined to any great extent.

Field Supervisor Support

Slick (1998) in a qualitative study of a graduate social studies secondary education supervisor's experiences as part of the student teaching triad at a large research university in the mid-west found several factors that might influence the student teacher's relationship with the supervisor. These include the lack of commitment by the teacher education program in "preparing, advising, and assisting" the supervisor in understanding and defining his or her role, the lack of direction from the program for the supervisor-led seminars, and the conflicting expectations and teaching philosophies of the university-appointed supervisor and the cooperating teacher.

Access to Needed Resources

Availability of and access to teaching resources (people, equipment and supplies) at the school are strongly related to teacher efficacy as well (Tschannen-Moran & Woolfolk-Hoy, 2006).

Structure of Field Placement and Efficacy Development

Level of School being taught

The grade levels of students serviced by the school appears to influence the development of efficacy beliefs. Several studies found that elementary school teachers exhibited higher levels of teacher efficacy than middle or high school teachers (Soodak & Podell, 1997;

Tschannen-Moran & Woolfolk-Hoy, 2002). Elementary school teachers felt more efficacious with regard to the use of appropriate instructional strategies, classroom management, and engaging students at either end of the academic spectrum (Tschannen-Moran & Woolfolk-Hoy, 2007). This is also true of collective teacher efficacy with teachers at elementary level schools exhibiting higher collective teacher efficacy than their counterparts teaching at the higher grade levels (Adams & Forsythe, 2006). This has possible implications for the on-going feedback and encouragement of preservice teachers, based on the certification level being sought, while they are at the student teaching site.

Single versus Cohort Placements

Research by Tinto (1997,1998) and others has shown that learning communities within the college location enhance the learning experience and model desirable relationships in schools such as collaboration and teamwork. Students are more likely to persist in their college careers if they feel supported and socially integrated.

Based on Tinto's research, many education programs have implemented the cohort-model as a part of their programs. Studies on the effects of placements of more than one student teacher at a site (Bullough et al., 2003; Dinsmore & Wenger, 2006), together with regular group meetings to discuss any interpersonal issues, have found that the resultant sense of community and positive teacher socialization process, which starts in the university classroom but

then extends to field experience site, contribute to a positive clinical experience for the preservice teachers.

Being a part of a cohort helps decrease the sense of professional isolation because members of the cohorts, for the most part, trust and rely on each other for feedback on ideas and support (Dinsmore & Wenger, 2006).

Why is Teacher Efficacy Development Important?

The current discussion has highlighted some of ways in which the quality and context of the field experience influence the development of teacher efficacy and related perceptions of preparedness in preservice teachers. But why is the development of teaching efficacy during student teaching important for a teacher's future career? In what specific ways might the structure and context of the student teaching experience influence the development of teacher efficacy beliefs?

Before being able to answer these questions, it is necessary to understand what teacher efficacy is, and the major developments in the study of this construct. "Grounded within social cognitive theory, teacher sense of efficacy [teacher efficacy, teaching self-efficacy] can be viewed as self-efficacy beliefs directed toward a teaching context" (Knoblauch & Woolfolk Hoy, 2008, p.167.)

Social Cognitive Theory and the Teaching Efficacy Construct

Overview

In 1977, Albert Bandura introduced the concept of self-efficacy in his seminal article, "Self-Efficacy: Toward a Unifying Theory of Behavioral Change". He introduces the concept of self-efficacy as the primary motivational force behind an individual's actions. Self-efficacy is how capable and prepared *we think we are* to perform a given task. Bandura differentiates between efficacy expectancies and outcome expectancies. He defines *outcome expectancy* as "a person's estimate that a given behavior will lead to certain outcomes" (1977, p.193) and *efficacy expectations or self-efficacy* as "the conviction [belief] that one can successfully execute the behavior required to produce the outcomes" (1977, p.193). It is, therefore, our belief that we are prepared and that we are able that motivates us to action. Over the last thirty years, since that initial article, Bandura has continued to develop and defend the idea that our beliefs in our abilities (that is, our self-efficacy beliefs) powerfully affect our behavior, motivation, and ultimately our success or failure. Incorporating Bandura's (1997) proposal that self-efficacy beliefs are context specific, the individual must also believe that he or she has the ability to use that knowledge effectively, *in the context* of his or her assigned task.

In extending self-efficacy theory to the related construct of teacher efficacy, the teacher must believe that he or she has the ability to translate the theory and methods learned in the course of

the teacher preparation program into positive student learning and achievement. This must take place in the context of the school and classroom in which he or she works. Data from two separate lines of the research have guided the current thinking concerning this construct of teacher efficacy.

Historical Development of the Construct of Teacher Efficacy

The construct of *teacher efficacy* was first conceived based on the results of two "locus of control" items on a teacher effectiveness survey administered in the Los Angeles school district and reported in landmark studies by RAND Corporation researchers (Armor et al., 1976; Berman & McLaughlin, 1977). *Locus of control* as defined by Rotter (1966) refers to the degree an individual believes that the perceived cause(s) of an intended outcome are within his or her control. Based on this perspective, several scales were developed to measure teacher efficacy. All these scales asked teachers to consider whether they held themselves personally responsible for and in control of individual student learning and success, or whether external factors outside of the teacher's control determine success or failure of individual students.

Then in 1977 when Bandura introduced the concept of self-efficacy a second strand of teacher efficacy research grounded in social cognitive theory emerged. As Bandura's self-efficacy construct impacted the conceptualization of teacher efficacy, new measures that drew from both Rotter and Bandura evolved. The most widely used of these measures is Gibson and Dembo's (1984) Teacher

Efficacy Scale (*TES*). The *TES* has undergone various modifications seeking to address issues of construct validity.

In an effort to address some of these measurement concerns, Woolfolk and Hoy (1990) created a revision of Gibson and Dembo's (1984) *TES. (This is the measure that will be used in this study.)* Other aspects of the debate surrounding the conceptualization and measurement of teacher efficacy include issues concerning its domain specificity and transferability across contexts (Pintrich & Schunk, 1996; Tschannen-Moran & Hoy, 2001). However, despite all the debate about the conceptualization and measurement of teacher efficacy, research and results obtained from several administrations of various instruments to measure teacher efficacy have revealed some common threads.

Measurement of Teacher Efficacy: Current Perspectives

The most current understanding of teacher efficacy comes from the work of Tschannen-Moran, Woolfolk-Hoy, and Hoy (1998, 2001) based on Bandura's (1977, 1986, 1993, 1997) work. Teaching efficacy appears to have two independent components. The first component, conceptualized as *personal teaching efficacy [PTE]* is one's individual belief in one's own ability to advance the learning and achievement of one's students. It is a teacher's "belief that one has the skills and abilities to bring about student learning" (Gibson & Dembo, 1984, p.573). Soodak and Podall (1996) define PTE as "a teacher's belief about his or her ability to perform actions needed to promote learning or manage student behavior successfully"

(p.406). As Tschannen-Moran et al. (1998, p.206) state it is the belief that "I can." Personal teaching efficacy using the *TES* taps into positive assessments of competencies but not into perceived inadequacies. Tschannen-Moran, Woolfolk-Hoy, and Hoy, (1998) have re-conceptualized PTE as *analysis of the personal teaching competence* through judgment of one's ability to plan and execute actions necessary to achieve the desired outcome. In making judgments about self-efficacy, teachers weigh their self-perceived personal teaching competence in light of the assumed requirements of the anticipated teaching task. This judgment is influenced by *knowledge* gained through the four sources of efficacy beliefs, i.e. mastery experiences, vicarious experiences, verbal persuasion and emotional arousal (Bandura, 1986, 1997; Hagen, Gutkin, Wilson, & Oats, 1998; Li & Zhang, 2000; Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998).

Assessment of personal competence to meet the demands of the teaching task is a judgment of whether one's current knowledge and skill-set are adequate for the teaching task and context in question (Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998), but also whether the person believes that training and experience can improve the knowledge and skill-set (Bandura, 1993). Therefore the level of teacher efficacy developed will influence the goals, effort and persistence teachers employ in approaching the tasks of teaching. The results of this performance then serve as a new mastery experience for the next efficacy judgment. So "a teacher's efficacy

belief is a judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (Tschannen-Moran & Hoy, 2001, p. 783).

The second, conceptualized as *General Teaching Efficacy [GTE or TE]* is the belief that teaching and the educational system are capable of fostering student academic achievement despite negative influences external to the teacher. It is "teachers' expectations that teachers can influence student learning" (Ashton & Webb, 1986, p.4) or a teacher's "belief that any teacher's ability to bring about change is significantly limited by factors external to the teacher" (Gibson & Dembo, 1984, p.574). This is now viewed to be more of an assessment of locus of control.

According to Tschannen-Moran et al. (1998) general teaching efficacy using the *TES* does not tap into positive environmental influences such as availability of resources, principal leadership, and support from colleagues. So GTE as measured by the *TES* is only a partial analysis of the teaching task. *Analysis of the teaching task* produces inferences about the difficulty of the task and what it would take to be successful in this context. Included in this assessment are factors such as students' motivation, the use of appropriate instructional strategies, classroom management issues, the availability of resources and instructional materials, access to technology, and the physical conditions of the teaching space. Contextual factors like the leadership and support of the school

principal, the school climate, and the supportiveness of other teachers are all a part of the analysis of the teaching task.

The following section will examine how various components of the teacher preparation program and the student teaching experience might contribute to the development of teacher efficacy beliefs.

Sources of Teacher Efficacy Beliefs

Bandura (1997) contends that beliefs about the task of teaching and personal teaching competence are formed early in the career, and are likely to remain unchanged, unless some compelling evidence introduces the need for reevaluation. Bandura (1977) suggests that efficacy beliefs are most malleable early in learning, so focusing on the learning experiences of student teachers when these teacher efficacy beliefs are first being formed assumes primary importance. Consequently, the foundations of teacher efficacy beliefs may be found in the student teaching experiences at individual field sites. These are in essence "a prolonged mastery experience with opportunities for both vicarious experiences and verbal persuasion, which serve to facilitate the development of the preservice teachers' teaching efficacy beliefs."(Fives, Hamman & Oliverez, 2007, pp.917-918).

As mentioned previously, Bandura (1986, 1997) postulated that there are four sources of efficacy beliefs. When these sources are interpreted in the context of teacher efficacy development then the experiences of the university classroom, early field experiences and student teaching become sources of teacher efficacy beliefs.

Mastery experiences such as those provided in early field experiences (service learning and practica) and the student teaching experience itself provide information on which student teachers can develop their efficacy beliefs. These are the most powerful sources of efficacy information. Student teaching is, in fact, the first real mastery experience for teacher candidates in most teacher preparation programs. The quality of the student teaching experience and the student teacher leaving the field experience feeling that the effort he or she expended contributed to a positive learning experience for the students in the classroom are, therefore, of primary importance. Bandura (1997) contends that these mastery experiences are particularly powerful when individuals succeed in challenging tasks. Usher and Pajares (2008) warn that to be consistent with Bandura's initial conceptualization of mastery experience, measures used must assess "the interpretations individuals make of experienced events rather than the objective performances themselves" p.756.)

The power of *vicarious experiences* depends on the similarity of the model observed to the observer and the actions observed. The more closely the student teacher identifies with the cooperating teacher, the stronger will be the impact on efficacy. These observations are a major source of information in the efficacy beliefs that are formed by individuals (Bandura, 1977, 1997). This has great implications for the selection of the cooperating teachers, and of the other students who will be members of the

student teaching cohort, who will initially serve as the models for these preservice teachers. This also has implications for the selection of student teaching sites, since the availability of resources and support within the school and surrounding community may influence upon the performance of cooperating teachers. The authenticity of models of teaching presented during methods classes is also of great importance.

Verbal or social persuasion, that is, the verbal support or lack thereof (Bandura, 1982, 1997) received from students, parents, cooperating teacher, school administration, other student teachers and/or university faculty and supervisors also greatly influence the development of the student teacher's teaching efficacy. These sources of persuasion may be in the form of specific feedback from the cooperating teacher, university supervisor, school administration, other student teachers, or students; or it might just be a motivational chat. The degree of impact of this persuasion depends on the credibility, trustworthiness and expertise of the persuader in the eyes of the student teacher (Bandura, 1986).

Finally, the *emotional arousal* that the student teacher is experiencing will influence the development of teaching efficacy. If a student teacher feels confident that the lessons learned in the university classroom, early field experiences, and previous personal experiences in similar environments have been excellent preparation for the student teaching classroom, there is likely to be less anxiety and stress and more positive emotional arousal during

clinical practice. Similarly if the student teacher feels happy and confident about the decision to pursue a teaching career, the development of teacher efficacy will be enhanced.

Based on this discussion, incorporating Bandura's (1997) proposal that self-efficacy beliefs are context specific, the student teacher must believe that he or she has the ability to effectively use the knowledge gained during classroom and early field preparation in the context of the assigned classroom at the clinical site. Extending this conceptualization to new graduates of the teacher certification program, the more similar the structure and context of the new teaching task to the previously completed successful teaching task, i.e. student teaching, the higher the efficacy beliefs of the beginning teacher. This has implications for the structure and context of field experiences designed to prepare teachers for urban and suburban classroom environments.

Teacher and Student Variables Related to High Teacher Efficacy

When the literature on teacher quality and retention is examined, the importance of preservice and beginning teachers teaching self-efficacy is evident. Teaching efficacy and its two dimensions, (despite all the debate about the meaning and measurement of the two dimensions), has been found to be correlated with a number of important variables.

Teacher Outcomes

It is a well documented fact that a teacher's sense of efficacy is a powerful predictor of teacher effectiveness, teacher commitment, and teacher behavior (Darling-Hammond, 2006). Several empirical studies have demonstrated that a teacher's sense of efficacy is a powerful predictor of teacher persistence and resilience when faced with difficult students or demanding situations (Bandura, 1986, Dembo & Gibson, 1985; Gibson & Dembo, 1984; Tuckman & Sexton, 1990; Woolfolk et al, 1990). Teacher efficacy was also found to be linked to willingness to work with children who had learning problems, behavior problems or both (Meijer & Foster, 1988; Soodak & Podell, 1993).

Other research found that high levels of teaching efficacy have been linked to lower levels of teacher stress (Greenwood, Olejnik, & Parkay, 1990; Parkay, Greenwood, Olejnik, & Proller, 1988) and less negative affect in teaching (Ashton, Olejnik, Crocker, & McAuliffe, 1982). Yetkin (2003) found that teaching efficacy was the only significant predictor of teaching anxiety, in a regression equation that included variables such as prior teaching experience, number of teaching methods courses taken and teacher efficacy, and Li and Zhang (2000) found that student teachers with high teaching anxiety had significantly lower personal teaching efficacy.

High teacher efficacy has been linked to teacher commitment and the teacher's desire to remain in teaching (Burley, Hall,

Villeme, & Brockeier, 1991; Glickman & Tamashiro, 1982). Measures based on social cognitive theory (Gibson & Dembo, 1984; Hoy & Woolfolk, 1990) have found teacher efficacy to be linked to professional commitment for both in-service (Colardarci,1992) and preservice (Evans & Tribble, 1986) teachers.

In addition, teacher efficacy has been linked to enthusiasm for teaching (Allinder, 1994) and particular teacher behaviors including willingness to try new instructional approaches and implement new innovations (Berman et al., 1977; Guskey, 1984). Ross, Cousins and Gadalla (1996) found that this willingness to try new innovations and strategies resulted from a reduced fear of failure or the heightened belief that "I can" based on my past experiences and my personal history. There are links to increased levels of planning and organization, and use of effective, hands-on techniques as well (Allinder, 1994; Ashton & Webb, 1986; Guskey, 1988; Meijer & Foster, 1988; Soodak & Poodall, 1993; Woolfolk, Rosoff, & Hoy, 1990). Research also shows that field experiences may positively affect student teachers' attitudes, knowledge and beliefs about teaching culturally diverse learners (Cochran-Smith & Zeichner, 2005; Parameswaren, 1998).

Student Outcomes

Research using measures based on locus of control theory has linked a teacher's sense of efficacy to student outcomes such as student motivation to learn (Dusek, 1985; Midgley, Feldlaufer, & Eccles, 1989), academic achievement levels (Armor et al., 1976;

Ashton & Webb, 1986; Berman & McLaughlin, 1977; Ross, 1992), and student self-efficacy (Anderson, Greene, & Loewen, 1988). Measures based on social cognitive theory have also found strong correlations between teacher efficacy and student achievement, attitude and affective growth (Woolfolk, Rosoff, & Hoy, 1990).

Relationship of Teacher Efficacy to Personal/Demographic and Background Characteristics of Teachers

Several studies have sought to establish a relationship between teacher's personal characteristics such as age, ethnicity, years of teaching experience, and level of education and the level of teacher efficacy. Campbell (1996) found that the only characteristic to predict levels of personal teaching efficacy is educational level, and no characteristic significantly predicted general teacher efficacy. Other studies (Anderson, Greene, & Loewen, 1988; Evans & Tribble, 1986; Greenwood, Olejnik, & Parkay, 1990; Housego, 1992) found that female teachers had significantly higher levels of personal teacher efficacy than male teachers.

There are several demographic and background educational factors which are also related to the development of teacher efficacy beliefs. If these factors are known then the program can design their field experiences and clinical practice to try to address those "groups" who traditionally have been found to have lower levels of teacher efficacy, i.e. male teachers, persons with little or no previous teaching experience, and undergraduate teacher candidates.

Relationship between Coursework, Quality of Student Teaching Experiences, and Decision to Teach

As this review of the teacher preparation literature has shown, the preservice teachers' field experiences form an integral part of both quality preparation and growth in self-efficacy (Darling-Hammond, 2006; Rushton, 2003; Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998; Woolfolk-Hoy & Spero, 2005). However, Bandura (1997) contends that once efficacy beliefs are established, they become resistant to change, so the creation and fostering of high levels of teaching efficacy during the pre-clinical teacher preparation and student teaching experience assumes importance in the ongoing efficacy beliefs of the young teacher.

Also important to this discussion is the correlation between a teacher's sense of preparedness and his or her sense of efficacy (Darling-Hammond, 2006; Darling-Hammond, Chung, & Frelow, 2002; Raudenbush, Rowen, & Cheong, 1992), where the better prepared a teacher feels to perform a certain task, the higher the teacher's sense of efficacy. The teacher's sense of control over his or her classroom and the sense of preparedness to teach in the assigned or chosen environmental context (Raudenbush, Rowen, & Cheong, 1992) are integral components of efficacy development. In-service and preservice teachers who were given in-depth, hands-on training experiences with special populations such as culturally diverse classes (Parameswaran, 1998), inclusive classrooms (Minke et al., 1996), working with ADHD students (Reid et al., 1994) all reported high levels of personal teacher efficacy for that teaching task.

Related to this is the finding that better prepared teachers are more likely to remain in teaching. It is well documented in the literature that teachers' preparation for the task influences their confidence and satisfaction with teaching as a career choice, which in turn influences decisions to remain in teaching or to leave (Johnson, Berg & Donaldson, 2005). Darling-Hammond and Sykes (2003) in looking at the 1999-2000 Schools and Staffing Survey (SASS) and the SASS Teacher Follow-up data found "big differences in plans to stay in teaching between first year teachers who felt well-prepared and those who felt poorly prepared" (p.18). Commenting on a survey of 3000 teachers in New York City, they found that "recruits who felt better prepared were more inclined to stay in teaching, [and] to feel effective" (p.19).

Ingersoll (2003), as quoted in the *National Commission on Teaching and America's Future (NCTAF) "No dream denied: a pledge to America's children" Report*, found that the attrition rate was halved when compared to those who received no such preparation for first year teachers who had training in the selection and use of instructional materials as well as training in child psychology/learning theory. He also found that beginning teachers who had observed other teachers or preservice teachers teaching during their clinical practice, who received feedback on their teaching, and who had extensive clinical practice in schools and with students who were similar in type to the students at the

schools they serve in were all factors that positively influenced plans of these beginning teachers to stay in teaching.

Gaps in Knowledge based on the Research Literature

As stated in Chapter 1, recent reviews of current teacher preparation research indicate the prevalence of qualitative methodology in much of the research on the field experiences of student teachers (Cochran-Smith & Zeichner, 2005; Johnson, Berg & Donaldson, 2005). There is the need for more research on "the effects of...practices and structures that enable teaching learning," "the relative impact of various types of field experiences," and "large scale studies to evaluate the effects of various innovations in clinical experiences" (Wilson, Floden & Ferrini-Mundy, 2001, p.22). There is also the need for studies to be contextualized within a teacher education program with a detailed description of field placement sites (Hollins & Gutzman, 2005).

Based on the review there is a lack of knowledge and empirical evidence concerning the sources of teachers' self-efficacy beliefs (Labone, 2004; Tschannen-Moran & Woolfolk Hoy, 2006; Usher & Pajares, 2008). Reviews also point to the lack of empirical evidence concerning specific factors and strategies that might influence the development of a student teacher's sense of teacher efficacy during the field experiences including the effects of various innovations such as university-school collaborations, cohort field placements, and increased length and variety of field experiences. Other gaps in the knowledge include the relationship between preservice teachers'

sense of efficacy, feelings of preparedness and commitment to a teaching career.

Chapter Summary

Teacher efficacy is a two component construct. The first component is personal teaching efficacy or teacher self-efficacy (PTE) the belief that I, as an individual teacher, possess the knowledge and skills that will allow me to achieve success in the teaching task. It includes belief about my ability to effectively and efficiently implement this knowledge and use these skills to facilitate positive student achievement. This dimension of teaching efficacy is therefore an *assessment of personal teaching competence* within the specific context of my classroom and school. The second component is general teaching efficacy (GTE/TE). This is an individual teacher's belief that teachers and schools, in general, can overcome the limitations of students' home environment and family background, and build upon the positive environmental factors in the context of the school and community to promote successful learning. This is especially applicable to "difficult" students in the school system. This dimension of teaching efficacy, therefore, includes *analysis of the teaching task* at hand and its contextual influences. It is related to, but not the same thing as, collective teacher efficacy because it is an individual teacher's belief in the power of the collective, as compared to the aggregated teachers' perceptions at a given site (Bandura, 1997; Goddard, 2000; Hoy & Woolfolk Hoy (2000)).

Within the context of clinical practice, the experiences and feelings of student teaching play a vital role in the development of teacher efficacy beliefs for the novice teacher. The task of the teacher preparation program is to provide the quality and diversity of pre-clinical and student teaching experiences that will enhance the development of high levels of teaching efficacy. This is important since it is well established that teacher efficacy is linked to positive teacher and student outcomes. The quality of the student teaching experience is determined by the contextual and structural factors of the student teaching placement and how the experience is implemented and monitored by the teacher preparation program.

The literature review has given greater clarity and detail about current research findings with regard to the influence of teacher preparation field experiences, with an emphasis on student teaching in urban and suburban locations. It has examined the relationships between the components of quality field experiences and the development of personal and general teaching efficacy, teacher preparedness and commitment to teaching as a career. There are, however, some questions that still remain to be answered and this study will attempt to fill in some of those gaps.

CHAPTER 3

METHODOLOGY

Introduction

As indicated in Chapter 1, the major mission of the teacher preparation program in this study is to provide highly qualified teachers for the Commonwealth of Pennsylvania, particularly southeastern Pennsylvania, including the metropolis of Philadelphia. As is the case in many school districts, classrooms in metropolitan Philadelphia are becoming increasingly diverse in terms of the students' ethnic backgrounds, academic performance levels, types and levels of learning and other disabilities, and the ability to speak and use English as a first language, while the pool of student teachers remains mainly female, middle-class and Caucasian. As is also the case in many urban school districts the task of recruiting the graduates of the program to the urban classrooms of Philadelphia and then retaining these graduates continues to be a daunting task.

The Temple University College of Education identifies its core mission as the preparation and ongoing development of quality school professionals. According to the National Commission on Teaching and America's Future, teachers who are well prepared for their profession and well supported stand out. Just as teacher quality significantly influences student achievement, the quality of teacher preparation correlates highly with teacher quality. The College of Education seeks to distinguish itself by holding teacher candidates, to a high standard of quality and supporting them throughout their

years of study. The goal of the administration of the College of Education is to offer a teacher preparation program whose outcomes for the preservice teachers are three-fold. The first outcome for the student teachers is high levels of preparedness for the tasks of teaching in all classrooms. Secondly, the program should result in high levels of teaching efficacy where the student teachers believe that they have the personal competence, ability, and skill-set to effect successful learning with their own students, where the student teachers have faith in the power of the school system to succeed in bringing about high student achievement, despite the environmental constraints. Finally the program seeks to produce prepared and efficacious graduates who intend to pursue teaching as a life-long career. Additionally, given the urban location of the city of Philadelphia within which it is situated, the program further seeks to interest students in pursuing their career in the urban classrooms of Philadelphia.

Background: Teacher Preparation Program Requirements

Elementary Education

Undergraduate students must meet the requirements for teacher candidacy in order to register for methods courses and become eligible for student teaching. Throughout the sequence of courses undergraduate elementary teacher candidates develop content and pedagogical knowledge as they are guided to assume increased

responsibility in observation, planning, teaching, and assessment of learning.

To be approved for candidacy, students must:

- Complete 48 credits, 12 of which must be taken at Temple University, with a minimum grade point average of 3.0

- Receive a C+ or higher in two courses, '*Development across the Lifespan'* and '*Field Experience(Practicum)'*

- Receive a C- or better in all University core courses and a C or better in all General Education and Professional Education courses

- Pass all three parts of the Praxis I series (Reading, Writing and Math)

- Complete six credits of college level math and six credits of English (including both composition and literature)

- Pass a speech screening conducted by an academic advisor

- Complete the library skills test.

Most students apply for candidacy in their sophomore or junior years.

Secondary Education: Bachelor's Degree / Certification Program

Students concentrating in secondary education choose a content area specialty and pursue a dual major in their content area and in education. Students can pursue a teaching certificate in secondary education in English, social studies, foreign language, mathematics or science (general science, biology, chemistry or physics). Although each area of concentration has its own specific goals, the

programs that prepare students for secondary school teaching aim to produce high quality professionals with the skills required to engage adolescents and help them take control of their own learning. Secondary education at the undergraduate level requires a double major and leaves little space in the curriculum for electives, some students prefer to consider the College's five-year teacher preparation.

5-Year Dual-Degree Program

The Dual-Degree Program (also known as the 5-Year Program) offers the opportunity for undergraduate non-education majors to complete their undergraduate degree in their own college while simultaneously pursuing a Masters in Education degree and Pennsylvania Teacher Certification. Students planning to major in a liberal arts or a science and technology discipline who are interested in becoming certified teachers can apply during their sophomore year to this competitive fifth-year master's degree program. Both degrees are earned in just five years. Students must have a major in Biology, Chemistry, Physics, Mathematics, Geology, English, Foreign Languages, Geography and Urban Studies, or History.

Students who are admitted will take four graduate education courses (one each semester) beginning in the fall semester of the student's junior year through the spring semester of their senior year. Courses are from a prescribed list and will be determined according to the student's chosen specialization. Graduate courses taken while an undergraduate will count for both the undergraduate

and graduate degree. After satisfying all the program requirements, students are awarded a Master's in Education and are eligible to apply for an Elementary Education, Special Education or Secondary Education teacher certification.

Clinical Practice Experience: Practicum and Student Teaching Requirements

Initial experiences in schools and community agencies direct candidates in the arts of observation, interviewing, and ongoing reflection. There are two intermediate field experiences (practicum) which require candidates to be participant observers in an elementary classroom one morning each week for two semesters. These practicum courses are taken concurrently with either language arts or math and science pedagogy courses. Students work closely with a cooperating teacher, a Temple practicum supervisor, and pedagogy course faculty in observing, planning, teaching and assessing student learning. This must be completed prior to application for teacher candidacy. It is important to note that neither undergraduate secondary education candidates nor post-baccalaureate graduate certification candidates pursue a field experience practicum.

However, in the final semester of Temple's teacher certification program, all the candidates for teacher certification (undergraduate and graduate) must pursue a 14-week student teaching placement, in accordance with Title 22, Part XVI, Chapter 354.25(f) of the Pennsylvania Code (see Appendix I). This may be at a school

in the School District of Philadelphia, in another nearby urban school district or at a school in the surrounding suburbs. Ninety-eight percent of the placements are in public schools.

Student Teaching Design Innovations

Based on the program's mission stated earlier, between 2006 and 2007 when the data for this study were collected, the administration of the College of Education at Temple University drew from the existing literature on clinical practice to implement four changes in the design of the field components of its teacher preparation program. These included the establishment of collaborative partnerships through the Urban Education Collaborative with schools mainly in the School District of Philadelphia; completion of student teaching at the same sites where at least one previous practicum experience had been completed (elementary candidates only); intentionally assigning preservice teachers to specific sites for student teaching; and placing preservice teachers in peer cohorts at certain sites.

Cohort versus individual student placements

The research literature (Bullough et al, 2003; Dinsmore & Wenger, 2006; Tinto, 1997,1998) points to the benefits of having more than one student teacher *(cohort placement)* placed at a particular field site as opposed *to individual student placements (single placements)*. The College is therefore increasingly trying to place preservice teachers with a cohort of colleagues with whom they can reflect on and learn from their experiences, positive and negative.

Previous practicum

The research literature also points to the benefits of familiarity with the community and the specific context of the school. One way of achieving this is through ongoing field experiences at the same site (Raudenbush, Rowe & Cheong, 1992; Weiner, 1993; Zeichner & Hoeft, 1996). To allow preservice teachers more continuous and in-depth clinical practice, where appropriate, teacher candidates in elementary education are assigned to one of the schools in which they completed their required practica. In this model, preservice teachers become increasingly familiar with the school community and the many demands in the life of an effective educator that exist outside of the individual classroom. For the purposes of this study those preservice teachers who are having a second experience at the same school site are categorized as "*familiar*" and others who are at a completely new site are categorized as "*unfamiliar*".

"Chosen" versus "Assigned" student placements

The program seeks to place preservice teachers at one of their preferred placement schools, hopefully with the end result being a successful student teacher. As a part of the focus of the Urban Education Collaborative, the program has also been deliberating selecting field placement settings and then assigning students to these sites. While a variety of issues influence the field site and cooperating teacher assignment process, the specific interests and personal professional needs of individual students are

used to assist in matching students, field sites, and cooperating teachers. Based on the candidate's input and the College's priorities, the Director of Clinical Education makes a formal request to the individual school district of the recommended school. The principal works with the teaching staff at the school to determine which teacher candidates, if any, will be selected to student teach at the school and with which teachers. The cooperating teacher must meet the requirements of the Pennsylvania Department of Education (see Appendix I). Preservice teachers who are placed at the field site that they selected, for the purposes of this study, are categorized as "*chosen*" and others who are placed by the program are categorized as "*assigned*".

These changes have been implemented gradually over time, not fully at scale, and in a program of Temple's size to create an intentional opportunity for the college to examine its underlying theory of action and compare the impacts of various changes in program design to both support continued program improvement and contribute to the larger knowledge base on effective teacher preparation.

The End-of-Student-Teaching Survey was modified beginning in May 2006 to gather descriptive information from preservice teachers about which design changes were applicable to individual placements. For those in peer cohort placements, a question was asked about the importance of having other preservice teachers on-site. The survey was also amended to explore the self-reported teacher efficacy,

preparedness for teaching, and self-reported intent to pursue a teaching career. Respondents were also asked about considering teaching in the School District of Philadelphia.

Since this study considered the "specific factors and strategies", "innovative field experiences," "carefully thought out practices," referred to previously as sources of teacher efficacy beliefs, within the contexts of field placement sites, an instrument based on Bandura's self efficacy construct was incorporated into the End-of-Student-Teaching Survey as a measure of personal and general teaching efficacy. Based on its widespread use in the field, *Woolfolk and Hoy's 1990 modification of Gibson and Dembo's 1984 Teacher Efficacy Scale [TES]* was selected. Further details concerning the construct validity and scoring for the *TES* are provided in the section on Instrumentation.

Research Design

The design of this study was based on a dominant quantitative survey which included some qualitative open-ended questions designed to elicit more in-depth responses and explanations to some of the responses which asked for "Yes" or "No" responses, or measured levels of agreement to certain statements. These included questions on preparedness to teach in the community in which the schools were located, reasons for wanting or not wanting to teach in the School District of Philadelphia, and thinking about a permanent position at the student teaching school site.

According to Creswell (2005) survey design is useful for examining attitudes, beliefs, and gathering opinions, and for group comparisons. This design was therefore appropriate for fulfilling the goals of this study in gathering information about perceptions of quality in the field experiences of Temple University preservice teachers in urban and suburban field placements. Additionally, it was appropriate for assessing the influence of the structural and contextual components of the student teaching experience on these student teachers' attitudes and beliefs about their own post-student teaching competencies.

Participants

The participants in the present study were candidates for teaching certification who had completed 14 weeks of student teaching in the Spring or Fall Semesters of 2006 and 2007. Temple University's College of Education offers four paths to teacher certification. These student teachers were (i) undergraduates pursuing a teaching degree, (ii) post-baccalaureate candidates who were pursuing a graduate degree and teaching certification, (iii) post-baccalaureate candidates who were pursuing teaching certification only, or (iv) candidates in the Five-Year Program that offers the opportunity for non-education major undergraduates to complete their undergraduate degree in their own college while simultaneously pursuing a Masters in Education degree and Pennsylvania Teacher Certification. However, because one of the outcomes measured in this study is on the relationship between

specific field experiences and specific career choices, those teacher candidates who were already in teaching positions and had made specific career decisions prior to enrolling in the teacher preparation program (e.g., those who are full-time teachers with intern or emergency certifications while completing a postbaccalaureate certification program) have been omitted from the data set for this analysis.

Data Collection

At the end of student teaching, candidates for certification were invited to complete the End-of-Student-Teaching survey which took about fifty minutes for full completion. Participation in this End-of-Student-Teaching survey was voluntary, but student teachers were encouraged to complete the survey to assist the College of Education in diagnostic assessment of the student teaching experience. These self-report, web-based surveys were posted on the student teaching website of the College of Education about a week before the end of student teaching in each semester and remained accessible for a period of two weeks. The complete survey instrument was administered online via the online survey host at www.Zoomerang.com which provides each student teacher with a code number. The survey was completed anonymously once student teachers had verified their eligibility to sign into the site. The host keeps all data secure and data are uploaded into SPSS 16.0 at the completion of data collection.

Additional data on the description of individual field sites were gathered from the Pennsylvania Department of Education and School District of Philadelphia websites. These data included a description of the size of the school, poverty indicators (measured by eligibility for free or reduced lunch), and the ethnic makeup of the student body (for the School District of Philadelphia only).

Instrumentation

End-of-Student-Teaching Survey

The College of Education at Temple University at the completion of the 14-week student teaching experience conducts a web-based End-of-Student-Teaching survey on a semester basis to evaluate the teacher preparation program, inclusive of field experiences. In addition, the survey is designed to gain feedback for improving the field experience component of the program, including opinions on design changes recently implemented in the program. This survey is administered in accordance with Pennsylvania Code Part XVI, Chapter 354, Sections 22, 25, and 33. (See Appendix I).

The End-of-Student Teaching survey included 126 items across several key topic areas—student teacher demographic and experiential information, program design and faculty quality, clinical practice design variables, school site context, and mentor and supervisor supports. The questions on this survey are based on questions from the *2003-2004 Schools and Staffing Survey (SASS)*, from the *2004-2005 Teacher Follow-up Survey (TFS)*, from the *Teacher Policy Research*

Teacher Pathway Project: Teacher Preparation Program Graduates Spring 2004 Survey and from a pre-existing Temple University end-of-student-teaching survey. Self-reported outcome data were also collected, including degree of preparedness for fulltime teaching, teaching efficacy based on *Woolfolk and Hoy's 1990 (long form) adaptation of Gibson and Dembo's 1984 Teaching Efficacy Scale (TES)*; and intent to teach. The survey included multiple choice options, Likert-like scale ratings, and open-ended response items. All items on the survey were coded or recoded so that the higher the score, i.e. the closer to the theoretical maximum of the scale, the greater the degree of agreement with the statement made in the item. For dichotomous high/low variables, high = 2 and low = 1 and for dichotomous yes/no variables, yes = 2, no/don't know = 1, unless otherwise stated.

Teaching Efficacy Scale (TES)

In this study, the teaching efficacy variables were measured using Woolfolk and Hoy's 1990 revision of Gibson and Dembo's 1984 Teacher Efficacy Scale (*TES*). The *TES* is the most well-known, and often used of all the teacher efficacy scales with both convergent and divergent validity of the scale having been established by Gibson and Dembo through multitrait-multimethod analysis. Responses to this 22-item scale are based on a 6-point Likert scale ranging from 1 "strongly disagree" to 6 "strongly agree". This scale was included as the final item on the End-of-Student-Teaching Survey.

Nine of the items are reverse scored. These items are 2, 3, 4, 9, 10, 13, 17, 20, and 22.

For the *Personal Teaching Efficacy* dimension of teacher efficacy, the higher the score, the greater the teacher's agreement that he or she possesses and can implement the skill set necessary to overcome the obstacles that students present in terms of academic and behavioral deficiencies. For the *General Teaching Efficacy* dimension of teacher efficacy, the higher the score, the greater the teacher's agreement that the environment surrounding the student (e.g. home and family background) presents such a powerful influence that the skills of teachers will have no impact upon student attainment. In their original sample, Hoy and Woolfolk (1990) obtained alpha coefficients of reliability of 0.84 for personal teaching efficacy and 0.72 for general teaching efficacy. Subsequent studies have shown reliability indices of between .75 and .81 for the personal efficacy dimension and between .64 and .77 for the general teaching efficacy dimension (Soodak & Podell, 1996; Tschannen-Moran & Woolfolk-Hoy,2001; Woolfolk & Hoy, 1990). The scores on the dimensions of teaching efficacy were computed using unweighted means of the items that load .35 or higher on the respective factor. Detailed information about reliability coefficients for this study are given in Chapter 4.

Measurement of Sources of Efficacy Beliefs and Contextual Variables

The field site experiences were examined through current interpretations of the interactions between context and the four

sources of teaching efficacy beliefs (Bandura, 1997; Labone, 2004; Tschannen Moran, Woolfolk Hoy & Hoy, 1998; Tschannen Moran & Woolfolk Hoy, 2007). These four sources are mastery experiences, vicarious experiences, verbal persuasion, and emotional arousal.

Mastery Experience[ME] (i.e. actual mastery of the teaching tasks) was measured by Likert-type items which measured the degree of agreement or disagreement about self-reported preparedness to teach in the community surrounding the school; perceived adequacy of practica and other early field experiences; preparedness to complete specific teaching tasks; and the degree of challenge experienced in completing these tasks. This is founded on the premise that assessment of future teaching mastery is based on beliefs about past successes (measured by preparedness) and failures (measured by challenge).

Verbal Persuasion[VP] was measured by the feedback and encouragement provided during the student teaching process by the program faculty; the university-appointed supervisor; the cooperating teacher; and other student teachers at the same field site. Respondents were asked to respond to questions measuring adequacy and frequency on a 5 point Likert scale (1 "strongly disagree" to 5 "strongly agree").

Vicarious Experience[VE] was measured by was measured by Likert-type items which measured the degree of agreement or disagreement about the adequacy of opportunities provided by the program, before student teaching, to observe and learn about

teaching tasks from models of effective and efficient teaching, usually during teaching methods classes. These tasks related to management and motivation of students; and handling culturally and academically diverse student populations. The student teacher's assessment of the cooperating teacher as a master teacher and reliable model was also included.

The *Emotional Arousal[EA]* arising from the student teaching experience was measured by the degree of agreement or disagreement about satisfaction with the student teaching experience; degree of anxiety about safety at the school site; and expectations of teaching as a stress-filled occupation. Also included was the level of certainty, subsequent to student teaching, that the choice to pursue a teaching career was the right one.

The *contextual* variables at the field sites were measured through variables associated with availability of resources; support provided by various personnel while the student teacher was at the school; school location; and school climate. Also examined was the effects of the *clinical practice design* variables of single versus cohort placements; assigned or self-selected field placements; and unfamiliar or familiar (i.e. previous practicum at the same site) field sites.

Measurement of Teaching Intentions Variables

To measure teaching intentions the student teachers were asked to respond to four items related to their teaching intentions following graduation from the preparation program. The first two

items asked "Are you considering the possibility of teaching at the school at which you completed your student teaching experience?" and "Are you considering the possibility of teaching at a school in the School district of Philadelphia?" Responses were coded as No=1, Undecided=2, and Yes=3. The first variable was named *Teach at Student Teaching school* [TST] and the second named *Teach in School District of Philadelphia* [SDP]. The third item asked "How much do you agree with the statement, I am sure teaching will be my lifelong career?" and responses were based on a 5-point Likert scale ranging from 1 "strongly disagree" to 5 "strongly agree". This variable was named *Lifelong Teaching Career* [TLC]. The final item was a dichotomous item measuring intentions to teach for less or more than 5 years (5 years or less= 1, More than 5 years=2). This variable was named *Teaching Plans in Years* [TPY].

CHAPTER 4

RESULTS

The mission of the teacher preparation program in this study is to provide highly qualified teachers for the Commonwealth of Pennsylvania, including the School District of Philadelphia. These teachers need to be effective and efficient in all school locations. The study identified possible relationships between student teaching experiences in the context of field placements at urban and suburban school sites, and each student teacher's self-reported preparedness for pursuit of a fulltime teaching position, teaching efficacy, and future teaching intentions.

Descriptive Analyses

Description of the Sample

The End-of-Student-Teaching web-based surveys used in this study were administered over a 2-year period (four semesters) to a total of 786 student teachers in public and private school field placements. One hundred and eighty (180) student teachers (77%) fully completed the 2006 Spring survey, 155 (85%) the 2006 Fall survey, 147 (77%) the 2007 Spring survey, and 160 student teachers (89%) completed the 2007 Fall survey. This represents an overall average response rate of 82% across the four semesters.

To minimize some of the variation due to school structure only public school placements were used in this study. Therefore the total survey sample used was 600. This represented 413 (69%) student

teachers at urban and 187 (31%) at suburban public schools who had
fully completed the survey at the end of the four successive
semesters. Of the 413 urban-based respondents, 405 (98%) were at
schools in the School District of Philadelphia. Individual analyses
of variance conducted on items used in this study revealed no
statistically significant differences (p>.05) between the mean
scores of student teachers at public schools across the four
semesters in question. Consequently, the results for the four
semesters were pooled into one large dataset.

Descriptive Data for Student Teachers and Field Sites
Demographic Data for Student Teachers

Table 4.1 displays the frequency distributions for the self-
reported student teacher demographic data based on field site
location. Chi-squared tests of independence were performed comparing
the demographic data for student teachers at the two types of field
locations. These analyses revealed that on the variables of *sex*
(χ^2(1)=.133, p=.715), *age* (χ^2(40)=41.986, p=.385) and *certification*
pathway (χ^2(1)=.015,p=.902) there was not a significant location
effect. There was a location effect with a smaller percentage of
white respondents (67% v. 77%) and larger percentage of minority
(33% vs. 23%) respondents in urban placements. The chi-square test
of independence was significant (χ^2(1)=4.951,p=.026). The ethnic
breakdown of minorities in urban placements was 13% black, 6% Asian
and 2% Hispanic and 12% other ethnicities or not reported. Breakdown

for minorities in suburban placements was 5% black, 4% Asian and 2%

Hispanic and 12% other ethnicities or not reported.

Table 4.1. Demographic Data for Student Teachers

	Urban		Suburban	
	N	*%*	*N*	*%*
Sex				
Female	309	75.9	143	77.3
Male	98	24.1	42	22.7
Ethnicity				
White, non-Hispanic	274	67.2	141	76.6
Other Ethnicities	134	32.8	43	23.4
Black, non-Hispanic	*53*	*13.0*	*10*	*5.4*
Asian	*25*	*6.1*	*8*	*4.3*
Multiracial	*9*	*2.2*	*2*	*1.1*
Hispanic/Latino(a)	*8*	*2.0*	*3*	*1.6*
American Indian	*3*	*0.7*	*0*	*0.0*
Prefer no answer	*36*	*8.8*	*20*	*10.9*
Age Group				
25 yrs and under	276	67.5	124	67.1
Over 25 yrs	133	32.5	61	32.9
Certification Level Sought				
Elementary	286	69.2	105	56.1
Secondary	127	30.8	82	43.9
Certification Pathway				
Undergraduate	344	83.3	155	82.9
Graduate	69	16.7	32	17.1
[1]*Degree/Certification*	*52*	*12.6*	*24*	*12.8*
[2]*5 yr B.Ed./M.S.*	*12*	*2.9*	*5*	*2.7*
[3]*Certification only*	*5*	*1.2*	*3*	*1.6*

Notes.
#1   ***Degree/Certification:*** Post-baccalaureate candidates who are pursuing a graduate degree and teaching certification.
#2   ***5 yr Bed/MS:*** candidates in the Five-Year/Dual Certification Program
#3   ***Certification only:*** Post-baccalaureate candidates who are pursuing teaching certification only

For the variable *certification level sought* there was also a significant location effect ($\chi^2(1)=9.731, p=.002$). As shown in Table 4.1 a greater percentage of student teachers in urban field placements were seeking elementary certification. This could be due to the fact that the majority of preservice teachers in the elementary program would have completed their filed experience (practicum) requirements in the School District of Philadelphia. As such they were probably more familiar with these schools, either self-selecting or being assigned to these urban schools.

Experiential Data for Student Teachers

Table 4.2. Background Experiential Data for Student Teachers

	Urban		Suburban	
	N	%	*N*	%
#1:PK-12 Classroom				
10 or less hrs	37	9.0	17	9.1
11 – 60 hrs	176	42.6	91	48.7
61 – 100 hrs	87	21.1	37	19.8
101 – 200 hours	73	17.7	22	11.8
200^+ hrs	40	9.7	20	10.7
#2:Taught Own Class				
Never	361	87.4	169	90.4
Less than 1 yr	43	10.4	13	7.0
1 – 2 yrs.	5	1.2	3	1.6
3 - 5 yrs	4	1.0	2	1.0

Notes

#1   Length of time spent in PK-12 classrooms (observation, practicum, service learning) as part of early field experiences before student teaching.

#2   Length of time teaching own class in a public elementary or secondary school fulltime before student teaching.

Table 4.2 presents the frequency distributions for self-reported background experiential data for the student teachers based on field site location. With regard to background experiential factors, as shown in Table 4.2 on the factor *Hours of pre-student teaching experience in PK-12 classrooms* ($\chi^2(4)=4.134,p=.388$) there was not a significant location effect, with the percentage distribution of student teachers in urban and suburban placements being fairly evenly matched. This was also true for the experiential factor *Length of time teaching in their own public school classrooms before starting this program*, ($\chi^2(4)=1.942,p=.746$).

Descriptive Contextual Data for School Sites

Poverty Levels at School Sites

To assist in exploring the impact of individual school site poverty levels, frequency distributions of low poverty sites and high poverty sites within each field type location were calculated based on data from the Pennsylvania Department of Education and School District of Philadelphia websites. The results are presented in Table 4.3.

Table 4.3. Frequency distribution of School Poverty Variable for Urban and Suburban Field Locations

	Urban		Suburban	
	N	%	N	%
School Poverty ratings (% low-income students)				
Low-Poverty	87	21.2	162	95.9
High Poverty (>50%)	323	78.8	7	4.1

Low poverty level was defined as 50% or less of the school population being eligible for free or subsidized lunch. *High poverty level* was defined as more than 50% of the school population being eligible for free or subsidized lunch.

Clinical Practice Design Variable Data

Frequency distributions were then calculated for the four clinical practice design variables that the college had focused on over the past two years. The purpose was to see how the designs were distributed between urban and suburban placements. This information is displayed in Table 4.4.

Table 4.4. Frequency Distribution of Clinical Practice Design Variables by Urban versus Suburban sites

	Urban		Suburban	
	N	%	N	%
Student Teacher Selected Field Placement Site				
Assigned/No	112	27.1	20	10.7
Chosen/Yes	301	72.9	167	89.3
Other Student Teachers Teaching at Site				
Single Placement	112	27.1	127	67.9
Cohort Placement	301	72.9	60	32.1
Student Teacher Completed Practicum at Same Site (Elementary placements)				
Unfamiliar/No	170	59.4	101	96.2
Familiar/Yes	116	40.6	4	3.8

Clinical practice design variables examined were:-

- student teaching at a *field site selected* by the student teacher (no or assigned=1, yes or chosen=2),

- *presence of other student teachers* from the same program at the same field site (no or single=1, yes or cohort=2), and

- *student teacher had previously completed a practicum* at the same field site (no or unfamiliar=1, yes or familiar=2).

Chi-squared analyses of the clinical practice design factors revealed significant deviation between urban and suburban field placements on all three factors. There significant location effect between the greater percentage of elementary level student teachers in urban placements who had *completed a previous practicum at the field site* $(\chi^2(1)=48.763,p=.000)$ versus those in suburban placements. As stated previously, this is probably related to collaborations initiated through the Urban Education Collaborative mainly with schools in the School District of Philadelphia which include practicum placements for elementary students.

There were also significant location effects in the smaller percentage of urban versus suburban placed student teachers who had *selected the field site* $(\chi^2(1)=20.333,p=.000)$, and larger percentage of urban versus suburban placed student teachers who were in *cohort versus single placements* $(\chi^2(1)=89.386,p=.000)$.

Factor Analyses

Before answering the research questions several factor analyses were conducted. For all factor analyses, the Kaiser Rule in

collaboration with Cattell's Scree Plot was used to determine the number of factors. Those items with factor loadings of .35 or higher were retained and where items loaded on two factors, the item was deleted from the scale. This was followed by reliability testing for each scale and subscale. Apart from the factor analysis of the *TES* which was a confirmatory analysis, all other factor analyses were exploratory. These were performed to check the reliability and construct validity of several scales constructed to group similar themed items making the dataset more manageable.

Factor Analysis of the TES

A Principal Component Factor analysis was conducted to confirm the two factor structure of the 22-item *TES* scale for this sample. Since the two-factor structure accounted for only 38% of teacher efficacy variance, an exploratory factor analysis using principal components extraction and varimax rotation was performed as a follow-up procedure. This resulted in a four-factor structure. Factor loadings based on orthogonal varimax rotation are presented in Table 4.5. Factors 1 and 2 were similar to Woolfolk and Hoy's Factor 1 or Personal Teaching Efficacy [PTE], while factors 3 and 4 were similar to Woolfolk and Hoy's Factor 2 or General Teaching Efficacy [GTE]. Together the four factors accounted for 54.2% of teacher efficacy variance.

Table 4.5. Factor Loadings and Eigenvalues for the *TES*

No.	Item	Factor 1	Factor 2	Factor 3	Factor 4

Items loading on R-M's Factor 1 (Professional Knowledge)

No.	Item	1	2	3	4
16.	If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly.	.72			
18.	If one of my students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.	.70			
6.	When a student is having difficulty with an assignment, I am usually able to adjust it to his/her level.	.68			
22.	My teacher training program and/or experience has given me the necessary skills to be an effective teacher.	.67			
5.	I have enough training to deal with almost any learning problem.	.66			
19.	If I really try hard, I can get through to even the most difficult or unmotivated students.	.65			
8.	When I really try, I can get through to most difficult students.	.64			
14.	If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.	.57			
15.	The influences of a student's home experiences can be overcome by good teaching.	.51			

Items loading on R-M's Factor 2 (Outcome Expectations)

No.	Item	1	2	3	4
11.	When the grades of my students improve, it is usually because I found more effective approaches.		.76		
12.	If a student masters a new concept quickly, this might be because I knew the necessary steps in teaching that concept.		.71		
7.	When a student gets a better grade than he/she usually gets, it is because I found better ways of teaching that student.		.67		
1.	When a student does better than usually, many times it is because I exert a little extra effort.		.64		

Items loading on R-M's Factor 3 (Home Environment)

No.	Item	1	2	3	4
10.	Teachers are not a very powerful influence on student achievement when all factors are considered.			.78	
2O.	When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment.			.76	
3.	The amount a student can learn is primarily related to family background.			.69	

Table 4.5. contd.

No.	Item	Factor			
		1	2	3	4

Items loading on R-M's Factor 3 (Home Environment)

| 9. | A teacher is very limited in what he/she can achieve because a student's home environment is a large influence on his/her achievement. | | | .67 | |
| 2. | The hours in my class have little influence on students compared to the influence of their home environment. | | | .64 | |

Items loading on R-M's Factor 4 (External Causality)

13.	If parents would do more for their children, I could do more.				.70
21.	Some students need to be placed in slower groups so they are not subjected to unrealistic expectations.				.63
4.	If students aren't disciplined at home, they aren't likely to accept any discipline.				.51
17.	Even a teacher with good teaching abilities may not reach many students.				.47
	Eigenvalue	4.30	2.67	3.15	1.82

Factors 1 and 2 reflected each teacher's analysis of his or her personal teaching competence. Factor 1, *Professional Knowledge [PK],* was defined as efficacy expectations of the student teacher; the teacher's belief that he or she possessed the necessary skill set to address students' deficiencies. *PK* accounted for 19.5% of overall teaching efficacy variance. Factor 2, *Outcome Expectations [OE],* was defined as outcome expectations of the student teacher; the teacher's belief that students do better because he or she does better in effectively implementing the skills needed to advance students' learning and achievement. *OE* accounted for 12.1% of overall teaching efficacy variance.

Factors 3 and 4 reflected analysis of the teaching task and its context. Factor 3, *Home Environment [HE},* was defined as the

student teacher's belief that a student's home environment and family background has a more powerful influence on student achievement than teachers. *HE* accounted for 14.3% of overall teaching efficacy variance. Factor 4, *External Causality {EC}*, was defined as the student teacher's general belief that a lack of parental support and discipline together with low academic ability creates a student whose academic achievement will remain outside of the influence of even an efficient, effective teacher. *EC* accounted for only 8.3% of overall teaching efficacy variance. *(For correlational analyses between factors see Appendix B).*

Using these items, Cronbach's Alpha reliability of the four factors was computed and found to be .85 for Factor 1 (*Professional Knowledge - PK*), .79 for Factor 2 (*Outcome Expectations - OE*), .81 for Factor 3 (*Home Environment - HE*), and .60 for Factor 4 (*External Causality - EC*). Using Guttman's Split-Half Coefficient reliability of the four factors was computed and found to be .80 for the *PK* factor, .78 for the *OE* factor, .77 for the *HE* factor and .60 for the *EC* factor.

Table 4.6 presents comparative *Teacher Efficacy Scale* [*TES*] factor item loadings for this sample of student teachers and the sample of prospective teachers used by Woolfolk and Hoy in the 1990 study.

Table 4.6. Comparative Factor Item Loadings for the TES

No	Item	R-M	W&H*
		Factor Loading	

Items loading on W&H's Factor 1 (PTE) and R-M's Factor 1 (PK)

16.	If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly.	.72	.57
18.	If one of my students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.	.70	.54
6.	When a student is having difficulty with an assignment, I am usually able to adjust it to his/her level.	.68	.54
22.	My teacher training program and/or experience has given me the necessary skills to an effective teacher.	.67	.51
5.	I have enough training to deal with almost any learning problem.	.66	.47

Items loading on W&H's Factor 1 (PTE) and R-M's Factor 1 (PK)

19.	If I really try hard, I can get through to even the most difficult or unmotivated students.	.65	.56
8.	When I really try, I can get through to most difficult students.	.64	.59
14.	If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.	.57	.59
15.	The influences of a student's home experiences can be overcome by good teaching.	.51	

Items loading on W&H's Factor 1 (PTE) and R-M's Factor 2 (OE)

11.	When the grades of my students improve, it is usually because I found more effective approaches.	.76	.53
7.	When a student gets a better grade than he/she usually gets, it is because I found better ways of teaching that student.	.71	.59
12.	If a student masters a new concept quickly, this might be because I knew the necessary steps in teaching that concept.	.67	.46
1.	When a student does better than usually, many times it is because I exert a little extra effort.	.64	.39

Items loading on W&H's Factor 2 (GTE) and R-M's Factor 3 (HE)

10.	Teachers are not a very powerful influence on student achievement when all factors are considered.	.78	.37
20.	When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment.	.76	.63
3.	The amount a student can learn is primarily related to family background.	.69	.55
9.	A teacher is very limited in what he/she can achieve because a student's home environment is a large influence on his/her achievement.	.67	.70
2.	The hours in my class have little influence on students compared to the influence of their home environment.	.64	.47

No	Item	Factor Loading	
		R-M	W&H*

Items loading on W&H's Factor 2 (GTE) and R-M's Factor 4 (EC)

13.	If parents would do more for their children, I could do more.	.70	.47
21.	Some students need to be placed in slower groups so they are not subjected to unrealistic expectations.	.63	
4.	If students aren't disciplined at home, they aren't likely to accept any discipline.	.51	.58
17.	Even a teacher with good teaching abilities may not reach many students.	.47	.35

Note
* From Woolfolk, A., & Hoy, W. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology, 82*, 81-91. Originally based on the Teacher Efficacy Scale developed by S. Gibson & M. Dembo (1984). Teacher Efficacy: a construct validation. Journal of Educational Psychology, 76, 569-582.

Factor Analysis and Scale Creation based on Sources of Efficacy Beliefs

Several exploratory factor analyses were conducted to group similar items on the End-of-Student-Teaching Survey. These items were grouped according to conceptual definitions of sources of efficacy beliefs based on previous research as outlined in the introduction to this chapter. Problem items were deleted based on inter-item correlations where items either did not correlate with many items or were too highly correlated with other items in that scale. In all cases the Kaiser-Meyer-Olkin [KMO] Measure of Sampling Adequacy was greater than 0.5 indicating that factor analysis was appropriate for these data.

Factors were extracted using Principal Axis Factoring and where more than one factor resulted this was followed by Varimax rotation. The result was the creation of several scales designed to

measure mastery experiences, verbal persuasion and vicarious experiences. These were:-

SCALES RELATING TO MASTERY EXPERIENCES

- Preparedness to Perform Classroom Management and Instructional Tasks Scale [MPCM]:- *The student teacher's perception that he or she has mastered classroom management and instructional tasks*

- Preparedness to Teach Diverse Student Populations Scale [MPDS]:- *The student teacher's perception that he or she has mastered the tasks of teaching diverse student populations*

- Preparedness to Perform Technology-related Teaching Tasks Scale [MPTT]:- *The student teacher's perception that he or she has mastered the technology-related teaching tasks*

- Challenges in Performing Classroom Management and Instructional Tasks Scale [MCCM]:- *The student teacher's perceived degree of difficulty in mastering classroom management and instructional tasks*

- Challenges in Teaching Diverse Student Populations Scale [MCDS]:- *The student teacher's perceived degree of difficulty in teaching diverse student populations*

SCALES RELATING TO VICARIOUS EXPERIENCES

- Opportunities to Learn about Student/Community Diversity Scale:- [VISD]- *The student teacher's belief that the teacher preparation program provided adequate*

opportunities to learn about student diversity and environmental context.

- Cooperating Teacher as Role Model Scale [VICR]:– *The student teacher's belief that the cooperating teacher was a good role model.*

- Opportunities to Learn about Management of Students Scale [VIMS]:– *The student teacher's belief that the teacher preparation program provided adequate opportunities to learn classroom management and instructional strategies for student motivation.*

SCALES RELATING TO VERBAL PERSUASION

- Cooperating Teacher Verbal Persuasion Scale[VPCT]:– *The student teacher's belief that the cooperating teacher provided adequate, useful and encouraging feedback.*

- University-appointed Supervisor Verbal Persuasion Scale[VPSU]:– *The student teacher's belief that the university-appointed supervisor provided adequate, useful and encouraging feedback.*

- Teacher Prep Program Faculty Verbal Persuasion Scale[VPPF]:– *The student teacher's belief that the teacher prep program faculty provided adequate, useful and encouraging feedback.*

Emotional arousal was measured by responses to individual items concerning satisfaction, stress, safety, and happiness. Questions

representative of the scales designed to measure sources of efficacy beliefs and Cronbach reliability estimates derived from the data in this study are presented in Table C1.

Factor Analysis and Scale Creation based on Field Site Contextual Variables

Factor analysis was then conducted on items related to the structural context of the student teaching experience and relationships at the field site. The result was the creation of several scales designed to measure various contextual aspects at the student teaching field site. These were:-

- Coop as Mentor Scale[CTMS]:- *The student teacher's belief that the cooperating teacher was supportive.*

- Principal as Leader Scale[CPLS]:- *The student teacher's confidence in the principal's ability to lead effectively.*

- Principal as Communicator Scale[CPCS]:- *The student teacher's confidence in the principal's ability to communicate with staff and students.*

- Teacher-Teacher Interaction Scale[CTTI]:- *The student teacher's perceptions of a cooperative, friendly, efficient, satisfied teaching staff at the field site.*

- Teacher-Student Interaction Scale[CTSI]:- *The student teacher's perceptions of a disciplined student body whose teachers had high expectations for them.*

- University Supervisor Efficiency Scale[CUSE]:- *The student teacher's belief that the university-appointed supervisor*

was helpful, supportive and knowledgeable about the program's expectations and available.

- Availability of Resources Scale[CAVR]:– *The student teacher's perceived degree of challenge in accessing resources at the field site.*

Questions representative of each of these contextual scales and Cronbach reliability estimates derived from the data in this study are presented in Table C2.

Research Questions

Research Question 1: Is there a significant difference in student teachers' scores on the self-reported predictor variables measuring sources of teaching efficacy belief and related contextual factors based on field site location?

A series of one-way analyses of variance (ANOVA) were used to investigate the effect of field site location on student teachers' sources of self-efficacy scores as measured by individual items and scales. The differences between the occurrence of specific contextual factors which might have an influence on the student teachers' experiences in urban and suburban field assignments were also investigated. The means, F test, significance level, and effect size (reported as partial eta squared) for these analyses are contained in Table 4.7.

Table 4.7. Means, Standard Deviations, F-values, significance and
            effect sizes for predictor sources of efficacy belief and
            contextual variables

	Urban(*n*=413)		Suburban(*n*=187)				
	Mean	*SD*	*Mean*	*SD*	*F value*	η^2	*SC*
Variables							
Mastery Experience Variables							
Time spent in PreK Classrooms Prior to Student Teaching *(5)*	**2.77**	*1.14*	2.66	*1.14*	1.04	.00	.062
Adequacy Early Field Experiences*(5)*	2.16	*0.92*	**2.18**	*0.91*	0.04	.00	-.044
# Days with Complete Responsibility*(8)*	6.50**	*1.57*	**7.05****	*1.35*	11.71	.02	-.175
# Full-period Lessons Taught*(5)*	4.23**	*0.90*	**4.52****	*0.84*	9.58	.03	-.158
Preparedness for:-							
Classroom Management*(4)*	2.90	*0.63*	**2.92**	*0.68*	0.13	.00	.001
Diverse Student Populations*(20)*	**12.93**	*3.31*	12.79	*3.35*	0.27	.00	.065
Challenges With:-							
Classroom Management*(5)*	**3.34****	*0.65*	3.14**	*0.62*	8.39	.01	.148
Diverse Student Populations*(20)*	**12.65***	*2.66*	12.04*	*2.64*	4.52	.01	.109
Preparedness for Technology Related Teaching Tasks*(4)*	2.52	*0.77*	**2. 67**	*0.76*	3.34	.01	-.093
Preparedness to Teach in that Community *(5)*	3.76**	*0.94*	**4.20****	*0.90*	19.39	.04	-.225

Table 4.7. contd.

Variables	Urban(*n*=413)		Suburban(*n*=187)				
	Mean	*SD*	*Mean*	*SD*	*F value*	η^2	*SC*

Vicarious Experience Variables

Opportunities Provided by the Program to learn:-							
About Student and Community Diversity*(5)*	**3.14***	*0.80*	2.95*	*0.85*	4.59	.00	.110
Classroom Mgt. and Instructional Strategies*(5)*	**3.61**	*0.85*	3.50	*0.84*	1.36	.00	.060
Perceiving the Cooperating Teacher as a good role model*(5)*	4.32	*0.94*	**4.47**	*0.83*	3.49	.01	-.041

Verbal Persuasion Variables

Adequacy of Feedback and Encouragement from:-							
Cooperating teacher*(5)*	3.93**	*0.81*	**4.12****	*0.75*	5.94	.02	-.116
University Supervisor*(5)*	**3.75**	*0.86*	3.72	*0.87*	0.24	.00	.093
Program Faculty*(5)*	3.10	*1.06*	**3.20**	*1.08*	1.24	.00	-.063
Other Student Teachers(2)	**1.59****	*0.49*	1.25**	*0.43*	38.48	.02	.317

Emotional Arousal Variables

Satisfaction with Student Teaching*(5)*	4.38**	*0.77*	**4.65****	*0.69*	10.98	.03	-.169
Wouldn't Reconsider Decision to Teach *(5)*	4.31	*1.01*	**4.45**	*0.75*	2.94	.01	-.073
Perceiving Teaching as Stressful*(5)*	**3.31**	*1.04*	3.29	*1.03*	0.06	.01	-.002
Feeling Safe at the School(2)	1.93**	*0.25*	**1.99****	*0.07*	47.81	.06	.220

Table 4.7. contd.

	Urban(*n*=413)		Suburban(*n*=187)				
Variables	*Mean*	*SD*	*Mean*	*SD*	*F value*	η^2	*SC*

Contextual Variables

	Urban Mean	SD	Suburban Mean	SD	F value	η^2	SC
Cooperating Teacher as Mentor*(10)*	7.46	*1.18*	**7.60**	*0.92*	2.11	.00	−.019
Efficiency of University Supervisor*(20)*	**13.57**	*3.39*	13.23	*3.28*	1.35	.00	.098
Confidence in Principal as:- a Leader*(15)*	11.20**	*2.54*	**12.49****	*2.14*	24.08	.07	−.251
an Effective Communicator *(10)*	8.21*	*1.57*	**8.58***	*1.43*	5.10	.02	−.116
Perceptions of:- Positive Teacher Student Interactions*(40)*	27.82**	*7.09*	**34.34****	*4.05*	90.01	.20	−.485
Cooperative, Satisfied Teaching Staff*(35)*	26.19**	*4.58*	**28.72****	*3.69*	29.18	.08	−.276
Challenge in Accessing Resources *(35)*	**19.55****	*4.57*	16.97**	*4.25*	28.63	.07	.274
School Poverty Level *(2)*	**1.79****	*0.41*	1.14**	*0.35*	222.19	.47	.762

Notes.

    (#) after variable name indicates theoretical maximum of scale.

    Means in bold indicate higher value.

    SC structural coefficient

    * *p*<.05;   ***P*<.01

***Relationship between Field Location and Sources of Efficacy Beliefs
and Field Site Contextual variables***

Urban-based teachers reported significantly greater challenge
in:-

- *classroom management and instructional tasks* [MCCM] ,
  specifically,

  - *classroom management and discipline* (3.79 v. 3.36,
    p<.01),

  - *establishing self as an authority* (3.46 v. 3.11,
    p<.01),

  - *motivating students* (3.36 v. 3.16, *p*<.05); *and*

- *dealing with culturally and academically diverse student
  populations* [MCDS], specifically,

  - *dealing with culturally diverse learners* (2.86 v.
    2.50, *p*<.01).

This despite the fact that both groups felt fairly equally prepared
to "*perform classroom management and instructional tasks*" [MPCM] and
"*deal with diverse student populations*" [MPDS].

Urban-based teachers also reported significantly higher scores
on:-

- *opportunities provided by the program to learn about
  student and community diversity [VISD],*

- *verbal persuasion from other student teachers* [VPST],

- *Challenge in accessing resources at the site* [CAVR], and

- *High poverty level at school site [POV].*

Suburban-based teachers reported significantly higher scores on:-

- *Preparedness to teach in that specific community* [COMM],

- *Number of days with complete responsibility for all instructional tasks* [CRCI]),

- *Number of full-period lessons taught during the student teaching experience* [FPLT],

- *Verbal persuasion from the cooperating teacher* [VPCT],

- *Confidence in principal's leadership ability* [CPLS],

- *Confidence in principal's ability to communicate effectively* [CPCS],

- *Cooperative, satisfied teaching staff at the school,* [CTTI],

- *Positive teacher-student interactions* [CTSI],

- *Feeling safe and less anxious at the site [SAFE].* and

- *Overall satisfaction with the student teaching experience [SaST],*

Despite suburban-based teachers feeling more satisfied with the student teaching experience and a greater sense of personal safety, there were however no statistically significant differences between the two groups on variables measuring "*Happy with/ would not reconsider decision to teach, even if I could"[RTC]* and "*Perceiving teaching as a stressful career*" [STR].

Identifying Discriminating Variables between Urban and Suburban Field Placements

To examine which source of efficacy variables and contextual factors are the best discriminants of location effect, all study variables were simultaneously entered into a discriminant function analyses (DFA). Rather than comparing scores on the dependent variable for significant differences as occurs with ANOVA's, the DFA provides an estimate of the relative importance of each of the source of efficacy variables and contextual factors based on urban compared with suburban field locations. The Wilks' Lambda function analysis conducted for *Location* which discriminated between the experiences of preservice teachers in urban locations compared to those in suburban locations was significant, λ =.526, χ^2 (29) = 262.66, *p*< .001. This indicated that, overall, the 29 variables in the study differentiated between preservice teachers in urban locations and those in suburban locations. The discriminant function explained 68.9% of the separation between urban-based and suburban-based preservice teachers, and 86.1% of the teachers were correctly classified by the resulting function.

As shown in Table 4.7, of the 29 factors which comprise the discriminant function, the factors having the highest correlation with the discriminant function (i.e. structure coefficients of .250 or greater) for the preservice teachers in the study included in descending order of importance:-

- School poverty level (urban scored higher);

- Positive teacher-student interactions exemplified by appropriate, non-disruptive student behavior, and teachers having high expectations for their students (suburban scored higher);

- Feedback and encouragement from other members of the peer cohort (urban scored higher);

- Positive teacher culture exemplified by a cooperative, friendly, efficient and satisfied teaching staff (suburban scored higher);

- Greater challenge in gaining access to needed resources (urban scored higher); and

- Confidence in the principal's leadership ability (suburban scored higher).

This confirms the hypothesis that contextual factors form an important part of the difference in the experiences of preservice teachers in urban compared with suburban field placements. These groups are in fact encountering very different contextual factors based on location of the student teaching sites.

Summary of Relationship between Field Location and Student Teachers' Sources of Efficacy and Field Site Contextual variables

Question 1 explored the influence of field site location, urban or suburban, on the experiences that contribute to the development of teacher efficacy, that is, the sources of efficacy development. It also explored relative differences in context, climate and relationships between urban and suburban field

experience placements for student teachers. These analyses revealed some significant differences between the experiences of student teachers in each location.

Although the effect sizes were small, field site location had the greatest effect on five contextual variables, and one verbal persuasion variable. The greatest difference between the two locations is poverty level of the schools, with urban-based student teachers dealing with much higher school poverty levels at their field sites. This could have influenced the lower perceptions of a cooperative, motivated, satisfied teaching staff, and lower confidence in the leadership ability of the school principal. Additionally, student teachers reported greater challenge in getting access to needed instructional resources and support at urban sites, which may also be related to poverty levels.

Next in importance in differentiating between urban-based and suburban-based student teachers was the fact that urban-based student teachers felt less prepared to teach in the communities in which they found themselves. This may be related to the urban-based student teachers higher scores on challenge experienced in dealing with diverse, especially culturally diverse student populations.

Possibly linked to their own dissatisfaction with their urban teaching job, or to the fact that teachers are now being held accountable for student achievement (translated into exam results) like never before, mentor teachers at urban sites relinquished their positions on fewer occasions resulting in less hands-on experiences

for those student teachers. The urban cooperating teachers also reportedly provided less useful feedback on teaching, and encouragement to reflect on the impact of the lessons on student achievement, to their assigned mentees.

Those urban-based student teachers in cohort placement were also more likely, than their suburban counterparts, to seek out peers for verbal and emotional support and to feel the presence of other student teachers at the same site was important to them.

On the level of emotional arousal, the location did significantly differentiate between overall satisfaction levels with the student teaching experience. Possibly related to this is the higher reported incidences of negative student-teacher interactions and inappropriate student behaviors, and greater anxiety about personal safety. So it is probable that the contextual, support and relationship challenges experienced by urban-based versus suburban-based student teachers translated into their much lower reported satisfaction scores. However, despite greater challenges and not feeling as satisfied as the student teacher might have liked to feel, this did not translate into higher levels of regret for urban-based teachers about the initial decision to pursue a teaching career. It also did not translate into greater perceptions of teaching as a stressful career for urban-based student teachers, with student teachers in both locations having similar feelings.

Having explored the effect of field site location on the

predictor variables, the next question explores the effect of location on the outcome variables.

Research Question 2: Is there a significant difference in student teachers' scores on self-reported outcome variables measuring preparedness for fulltime teaching, teaching efficacy, and teaching intentions based on field site location?

To answer research question 2, a series of one-way analyses of variance (ANOVA) were performed to investigate the effect of field site location on student teachers' preparedness to student teach, overall preparedness for fulltime teaching, teaching efficacy, and teaching intentions. The means, F test, significance level, and effect size (reported as partial eta squared) for these analyses are contained in Table 4.8.

Relationship between Field Location and Preparedness, Teaching Efficacy and Teaching Intentions outcomes

As shown in Table 4.8, there were no significant difference between the scores of urban-based and suburban-based student teachers on *Preparedness to Student Teach [PST]* and *Overall Preparedness for a Fulltime Teaching Position [PFT]* subsequent to the student teaching experience. So student teachers began their student teaching experience with similar levels of *Preparedness to Student Teach*, in both locations, as expected since all the student teachers had passed through similar preparation. Interestingly, they also completed the student teaching experience with similar levels of *Preparedness for a Fulltime Teaching Position*, despite the

challenges faced by those student teachers who were in urban locations, as discussed in the previous section.

Although the differences in student teachers' mean scores on all four teaching efficacy factors based on field site location were not significant, based on *F* values and effect size, field site location had a stronger effect on *Personal Teaching Efficacy [PTE]* scores than *General Teaching Efficacy [GTE]* scores. In order of decreasing 'school location' effect, scores for the PTE factor *Outcome Expectations [OE]* were most influenced by school location, followed by the PTE factor *Professional Knowledge [PK].* This was followed by the GTE factor *External Causality [EC]. The* GTE factor *Home Environment [HE]* was least influenced by differences between an urban and a suburban school placement.

PTE is firstly each student teacher's personal assessment of his or her own knowledge, and having deemed oneself competent, and secondly his or her ability to effectively and efficiently impart and use that knowledge to improve students' academic achievement. Since these are both influenced by contextual constraints at individual school sites, especially for urban-based teachers, then it would seem to make logical sense that if a teacher feels that effective implementation will be hampered by constraints such as lack of resources or disruptive, destructive student behaviors, then that teacher's PTE would be strongly affected. However, regardless of the surrounding location, the preservice teachers hold similar individual views concerning the positive influence of the school

system on students' academic achievement over and above the

influence of the students' home environments.

Table 4.8. Means, Standard Deviations and F-values for outcome preparedness, efficacy and teaching intentions scores

	Urban(*n*=413)		Suburban(*n*=187)				
	Mean	*SD*	*Mean*	*SD*	*F value*	*p*	*η²*
Preparedness for Teaching							
Prep. for Student Teaching(*4)*	2.96	*0.81*	**2.98**	*0.94*	.09	.763	.00
Overall Prep. for F/T Teaching(*5)*	4.19	*0.85*	**4.33**	*0.80*	2.25	.134	.01
Teaching Efficacy							
Professional Knowledge*(6)*	**4.49**	*0.68*	4.40	*0.68*	1.30	.256	.00
Outcome Expectations(6)	**4.51**	*0.74*	4.40	*0.74*	2.05	.153	.01
Home Environment(6)	**2.81**	*1.01*	2.79	*0.85*	.04	.839	.00
External Causality*(6)*	**3.72**	*0.94*	3.66	*0.95*	.36	.551	.00
Future Teaching Plans							
Teach at same school*(3)*	**1.63****	*0.82*	1.20**	*0.55*	39.86	.000	.07
Teach in SDP*(3)*	**2.40****	*0.81*	1.48**	*0.74*	176.23	.000	.23
Teach at least 5 yrs*(2)*	1.78*	*0.42*	**1.87***	*0.34*	6.20	.013	.01
Lifelong teaching career*(5)*	3.85*	*1.09*	**4.08***	*0.97*	5.99	.015	.01

Notes
Italic number in brackets after variable name indicates theoretical maximum of scale for that variable.

Means in bold indicate higher value.

* *P*<.01;   *P<.05

When teaching intentions were considered, as is displayed in Table 4.8:-

Urban-based student teachers had significantly higher scores on:-

- *Considering a job at the same school where they pursued student teaching [TST],* and

- *Teaching in the School District of Philadelphia [SDP].*

Suburban-based respondents, however, had significantly higher scores on:-

- *Plans to remain teaching for at least 5 years [TPY],* and

- *Pursuing teaching as a lifelong career [TLC] .*

Although field site location had a significant bearing on all four teaching intention outcome variables, as expected the intention to *Teach in the School District of Philadelphia* was greater for those student teachers who had pursued urban placements, since 98% of these urban placements were in the School District of Philadelphia. These student teachers might have established relationships in the School District and also gained knowledge of the positives and negatives, giving them a viable base from which to make such a decision. Urban teachers were also more likely to want to return to the same school to teach probably for similar reasons. Additionally, knowing the negatives and the challenges could possibly explain why, although initially wanting to teach, those student teachers in urban placements were also less likely to be considering teaching for more than 5 years or as a lifelong career.

Summary of Relationship between Field Location and Student Teachers'
Preparedness, Efficacy and Teaching Intentions variables

Question 2 explored the effect of field site location, urban
or suburban, on teacher preparedness for fulltime teaching,
resultant personal and general teaching efficacy, and future
teaching intentions. It also explored relative differences in
initial preparedness for the student teaching experience between
student teachers in urban and suburban school site placements.

When differences between the two locations are examined the
greatest and only statistically significant differences are between
the *Teaching Intentions* of urban-based and suburban-based student
teachers. The student teachers in each location began the experience
with similar levels of *Preparedness to Student Teach*, both feeling
well-prepared for the experience. Subsequent to the student teaching
experience, they again reported similar levels, this time, of
Preparedness for Fulltime Teaching still both feeling well-prepared.

Student teachers in both types of field locations reported
similar levels of *Personal Teaching Efficacy* agreeing more than
disagreeing that they possessed the necessary knowledge and skills
(Professional Knowledge) and that they could implement and use this
knowledge effectively to bring about academic gain in their students
(Outcome Expectations). In addition, they reported similar levels of
General Teaching Efficacy both disagreeing more than agreeing that a
student's home environment and family background had a more powerful
influence on student achievement than teachers *(Home Environment)*,
and agreeing more than disagreeing that lack of parental support and

appropriate home discipline combined with low academic ability had a more powerful influence on student achievement than teachers *(External Causality)*.

Although the student teachers felt similarly well-prepared and had similar levels of efficacy, teaching intentions of the two groups, as stated above, did differ significantly. Those student teachers in urban placements were more likely to be considering a position at the same school where they completed their student teaching experience, or a position in the School District of Philadelphia. Those student teachers in suburban placements were more likely to be thinking about a lifelong career in teaching.

So why is there this difference in teaching intentions despite similar self-reported perceptions of preparedness and efficacy? Questions 3 and 4 seek to explore the relationship between the predictor variables of school context and sources of efficacy development and resultant preparedness, teacher efficacy, and teaching intentions. These questions also explore the possible influence on these outcome factors of student teacher's individual factors such as sex, ethnicity, and certification level being sought, as well as the influence of the clinical practice design factors.

Research Question 3: Which sources of teaching efficacy beliefs, singly or in combination with demographic and contextual variables, are the best predictors of teaching efficacy?

Given the importance of teacher efficacy and its reported relationship not only to student achievement, but also to the teacher's preparedness for a teaching role and commitment to teaching as a career, question 3 explored those factors that contribute most to efficacy development. To answer research question 3, hierarchical regression analyses were performed to explore the predictability of *Personal Teaching Efficacy* and *General Teaching Efficacy* that contextual and demographic variables add to predictions based on efficacy sources alone. A series of multiple regression analyses were conducted to examine the independent effects of the variables related to the sources of efficacy belief, school site demographic and contextual variables, clinical practice design variables, and student teacher demographic (personal) variables on the four sub-scales which were created based on Woolfolk and Hoy's 1990 revision of Gibson and Dembo's *Teacher Efficacy Scale[TES] (see Table 4.5).* These four subscales are *Professional Knowledge[PK], Outcome Expectations[OE], Home Environment[HE],* and *External Causality[EC].* The combined effect of all the predictor 'source of efficacy belief' variables on the criterion efficacy variables was also determined. Given the very small effect size of difference in field location on the majority of both predictor and outcome variables, the data from all student teachers were analyzed as a whole (*n*=600).

It was theorized, based on the literature, that student teacher's efficacy levels measured on the four subscales PK, OE, HE

and EC would be directly related first to the four groups of 'source of efficacy belief' variables, that is, mastery experience[ME], vicarious experience[VE}, verbal persuasion[VP], and emotional arousal[EA]. Based on Bandura's (1997) tenet that efficacy belief development is context specific, the additional predictability provided by field site contextual and clinical practice design variables was then calculated. Finally the four individual teachers' characteristics were entered into the regression equation to explore whether additional variance could be explained.

Hierarchical multiple regression analyses were performed with the following seven blocks of variables entered in order: mastery experience variables (AdFE, CRCI, FPLT, MPCM, MCCM, MPDS, MCDS, MPTT, COMM); emotional arousal variables (SaST, RTC, STR, SAFE); vicarious experience variables (VICR, VISD, VIMS); verbal persuasion variables (VPCT, VPSU, VPPF, VPST); contextual variables (CTMS, CUSE, CPLS, CPCS, CTSI, CTTI, CAVR, POV, LOC); student teacher personal variables (SEX, ETHN, PATH, CRTL); and clinical practice design variables (CHRT, FMLR, CHSN). Table D1 lists meanings of the codes assigned to each source of efficacy variable, while Table D2 lists the meanings of the codes assigned to each school site contextual, clinical practice design and student teacher's individual (personal) variables.

Results of the regression analyses for *Professional Knowledge* [PK] are displayed in Table 4.9, for *Outcome Expectations* [OE] in Table 4.10, for *Home Environment* [HE] in Table 4.11, and for

External Causality [EC] in Table 4.12. Shown in each table, in addition to variance explained by each block of variables, are those unique variables within each block which made significant independent contributions to explanation of variance in the criterion variable.

Predicting PTE: Professional Knowledge

The block of mastery experience[ME] made the largest contribution explaining 36% of the variance in the *Professional Knowledge(PK)* dimension of student teachers' Personal Teaching Efficacy. The second block, emotional arousal[EA} variables, helped explain an additional 2% of PK variance, followed by the blocks of vicarious experience[VE] and verbal persuasion[VP] variables which helped explain an additional 3% and 1% respectively. The addition of the final three blocks of contextual variables, personal variables, and design variables only helped explain an additional 4% of the variance in student teachers' PK over the 42% explained by the blocks of 'sources of efficacy belief' variables alone. The seven blocks of variables combined to explain 46% of the variance in student teachers' *Professional Knowledge*. The F statistic was highly significant (*p*<.01) for all seven steps, so each block when added to the previous blocks made significant contributions to PTE *Professional Knowledge* predictability for this group of student teachers. There were, however, within these combined blocks of variables, five variables which were independently significantly related to PK.

Table 4.9. Hierarchical Regression Analysis of PK and Efficacy
Source, Contextual, Personal & Design Variables

<u>Professional Knowledge for Student Teachers</u>

	R^2	SE	F	p
Step 1 Mastery Experiences	.36	*.55*	15.54	.00
Step 2 Emotional Arousal	.38	*.55*	11.65	.00
Step 3 Vicarious Experiences	.41	*.54*	10.49	.00
Step 4 Verbal Persuasion	.42	*.54*	8.57	.00
Step 5 Contextual	.44	*.54*	6.30	.00
Step 6 Personal	.45	*.54*	5.60	.00
Step 7 Design	.46	*.54*	5.04	.00

	Beta	*t*	Sig
AdFE(Step 1)	-0.11	-2.03	.04
MPCM(Step 1)	0.23	3.25	.00
MPDS(Step 1)	0.24	3.92	.00
COMM(Step 1)	0.14	2.52	.01
LOC(Step 5)	-0.17	-2.37	.02

High scores on the *Professional Knowledge* dimension of PTE were significantly predicted by independent contributions from (in order of significance):-

- higher scores on ME variable: *Preparedness to Teach Academically and Culturally Diverse Students [MPDS],*

- higher scores on ME variable: *Preparedness to Perform Classroom Management Tasks and Use Instructional Strategies [MPCM],*

- being in an *urban placement* (contextual)*,*

- higher scores on ME variable: *Preparedness to Teach in the Community in which the School is Situated [COMM],* and

- lower scores on ME variable: *Adequacy of Early Field Experiences in familiarizing me with Professional Expectations [AdFE].*

Predicting PTE: Outcome Expectations

For the student teachers in the study, the variance in *Outcome Expectations[OE]* explained by 'source of efficacy belief' variables increased from 11% with only the block of mastery experience[ME] variables to 14% with the addition of the remaining three blocks of efficacy source variables. The addition of the final three blocks, contextual, personal and design variables, helped explain an additional 6% of student teachers' OE variance.

The *F* statistic was highly significant (*p*<.01) for each addition of the 'source of efficacy belief' blocks of variables and significant (*p*<.05) when each additional block of contextual, personal and design variables entered the equation. The combination of efficacy belief variables, together with the contextual, personal, and clinical practice design variables helped explain 20% of the variance in student teachers' *Outcome Expectations [OE].*

Table 4.10. Hierarchical Regression Analysis of OE and Efficacy
Source, Contextual, Personal & Design Variables

Outcome Expectations for Student Teachers

	R^2	SE	F	p
Step 1 Mastery Experiences	.11	.71	3.41	.00
Step 2 Emotional Arousal	.12	.72	2.55	.00
Step 3 Vicarious Experiences	.14	.71	2.45	.00
Step 4 Verbal Persuasion	.14	.72	1.99	.00
Step 5 Contextual	.18	.72	1.69	.02
Step 6 Personal	.19	.72	1.60	.03
Step 7 Design	.20	.72	1.52	.04

	Beta	t	Sig
MPCM (Step 1)	0.16	1.98	.05
MCCM (Step 3)	0.15	1.96	.05
LOC (Step 5)	-0.19	-2.11	.04

Although all seven combinations of blocks of variables made significant contributions to OE predictability, there were within these blocks three variables which were independently significantly related to OE.

High scores on the *Outcome Expectations* dimension of PTE were significantly predicted by independent contributions from (in order of significance):-

- being in an *urban placement* (contextual),

- higher scores on ME variable: *Preparedness to Perform Classroom Management Tasks and Use Instructional Strategies [MPCM],* and

- higher scores on ME variable: *Degree of Challenge faced with Classroom Management and Use of Instructional Strategies [MCCM].*

Summary of Predictability of Personal Teaching Efficacy

When the results of regression analyses of the seven combined blocks of predictor variables on the two dimensions of Personal Teaching Efficacy, are examined, as predicted by the literature, the block of Mastery Experience [ME] variables makes the largest contribution to predictability of both *Professional Knowledge* and *Outcome Expectations.*

The student teachers' belief that they possessed the necessary skills to address student academic deficiencies, (i.e. their *Professional Knowledge[PK]* score), was related to high levels of preparedness to teach academically and culturally diverse populations as well as to perform classroom management and instructional tasks. Feeling knowledgeable about the surrounding community also contributed to each student teacher's belief that he or she possessed the necessary skill set. There was a surprising inverse relationship between adequacy of early field experiences and PK, where student teachers who reported more inadequate early experiences had higher PK scores. Maybe this is case of "ignorance is bliss", where if one convinces oneself that one has less initial

knowledge and experience, then possibly one feels a greater gain at the end of the experience.

Each student teacher's belief that he or she could effectively implement the knowledge and skills they possessed to help students do better, (i.e. their *Outcome Expectations [OE]* score), was also related to high levels of preparedness to perform classroom management and instructional tasks, and additionally to feeling more challenged by these tasks. Feeling prepared for diverse populations and knowing the community did not make significant independent contributions to OE predictability.

Interestingly, being in an urban placement was also a significant predictor of high levels of both *Professional Knowledge* and *Outcome Expectations*. This could possibly be related to the fact that greater challenges in classroom management and instruction also translated into higher OE scores. So urban-based student teachers are possibly responding to the challenges of high poverty levels, related lack of resources, and inappropriate student behavior. It would seem that these preservice teachers while being more challenged are also more likely to rise to the challenge resulting in individual feelings of competence as teachers, in accordance with Bandura's (1997) who theorized that challenge enhances PTE development.

Predicting GTE: Home Environment

The block of Mastery Experience[ME] variables also made the largest contribution (9%) to explanation of variance in the *Home*

Environment[HE] dimension of student teachers' *General Teaching Efficacy [GTE]*. Adding the *Emotional Arousal[EA]* variables helped explain an additional 6% of HE variance. The block of *Vicarious Experience[VE]* variables did not explain any additional variance in HE, while the *Verbal Persuasion [VP]* variables explained an additional 1% of HE variance over the 15% explained by the previous three combined blocks of efficacy belief sources variables.

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Table 4.11. Hierarchical Regression Analysis of HE and Efficacy
            Source, Contextual, Personal, & Design Variables

Home Environment for Student Teachers

	R^2	SE	F	p
Step 1 Mastery Experiences	.09	*.96*	2.81	.00
Step 2 Emotional Arousal	.15	*.94*	3.30	.00
Step 3 Vicarious Experiences	.15	*.94*	2.75	.00
Step 4 Verbal Persuasion	.16	*.94*	2.32	.00
Step 5 Contextual	.21	*.93*	2.14	.00
Step 6 Personal	.22	*.93*	1.96	.00
Step 7 Design	.24	*.93*	1.88	.00

	Beta	t	Sig
COMM (Step 1)	-0.19	-2.73	.01
RTC (Step 2)	-0.22	-3.33	.00
CTSI (Step 5)	-0.31	-3.03	.00
POV (Step 7)	-0.22	-2.22	.03

The combined blocks of contextual, personal, and design variables together helped explain an additional 8% of HE variance making a total of 24% of the variance in student teachers' HE being explained by the combining all seven blocks of variables. The *F* statistic, was highly significant (*p*<.01) for all seven combinations of variable blocks. This indicated that each successive combination significantly contributed to the predictability of HE.

Although all seven combinations of blocks of variables made significant contributions to HE predictability, there were within these blocks four variables which were independently significantly related to HE. High scores on the *Home Environment[HE]* dimension of GTE were significantly predicted by independent contributions from (in order of significance):-

- lower scores on contextual variable: *Positive teacher – student interactions at the school site[CTSI],*

- lower scores on EA variable: *Happy with/would not reconsider decision to pursue a teaching career, even if I could[RTC]*

- being in a *low poverty school placement [POV] (*contextual), and

- lower scores on ME variable: *Preparedness to Teach in the Community in which the School is Located[COMM]*

Predicting GTE: External Causality

The regression equation became significant with the addition of the first block, mastery experience[ME] variables, which

explained 8% of the variance in student teachers' *External Causality[EC]*. After addition of the block of emotional arousal[EA] variables which together with the ME variables explained 11% of EC variance, adding the blocks of vicarious experience[VE] and verbal persuasion[VP] variables failed to explain any further variance in teachers' EC.

Table 4.12. Hierarchical Regression Analysis of EC and Efficacy Source, Contextual, Personal & Design Variables

External Causality for Student Teachers

	R^2	SE	F	p
Step 1 Mastery Experiences	.08	*.89*	2.55	.01
Step 2 Emotional Arousal	.11	*.88*	2.24	.01
Step 3 Vicarious Experiences	.11	*.89*	1.84	.03
Step 4 Verbal Persuasion	.11	*.89*	1.51	.08
Step 5 Contextual	.15	*.89*	1.38	.10
Step 6 Personal	.17	*.89*	1.43	.07
Step 7 Design	.19	*.88*	1.43	.06

	Beta	t	Sig
MCCM (Step 1)	0.20	2.70	.01
CTSI (Step 5)	-0.29	-2.73	.01
SEX (Step 6)	0.15	2.26	.03
POV (Step 7)	-0.20	-2.00	.05
CRTL (Step 7)	-0.16	-1.96	.05

Addition of the blocks of contextual, personal and clinical design variables helped explain an additional 8% of EC variance. The seven blocks together helped explain 19% of variance in student teachers' EC. Although the final four blocks of variables, i.e. Verbal Persuasion[VP], contextual, personal and design variables were not significantly related to student teachers' EC there were individual variables within these blocks that made significant independent contributions to explaining EC variance. High scores on the *External Causality[EC]* dimension of GTE were significantly predicted by independent contributions from (in order of significance):-

- lower scores on contextual variable: *Positive teacher – student interactions at the school site[CTSI],*
- higher scores on ME variable: *Degree of Challenge faced with Classroom Management and Use of Instructional Strategies"[MCCM],*
- being in a *Low Poverty school placement[POV]* (contextual),
- seeking *Secondary Level Certification[CRTL]*(personal)*,* and
- being *Male[SEX]* (personal).

Summary of Predictability of General Teaching Efficacy

When the results of regression analyses of the seven combined blocks of predictor variables on the two dimensions of General Teaching Efficacy, are examined, the block of Mastery Experience [ME] variables makes the largest contribution to predictability of

both *Home Environment[HE]* and *External Causality[EC].* Possibly tied to this is an interesting inverse relationship between both *HE* and *EC* dimensions of GTE and school poverty level, with student teachers in low poverty schools feeling that home environment and lack of parental support and discipline were more powerful influences on student academic achievement. A possible explanation might be that in dealing with students of "privilege" in low poverty placements, some of these students are lacking in parental support and discipline, and feel that the student teachers have little or no authority over their education.

The student teachers' HE and EC scores were also inversely related to positive teacher-student experiences and interactions, and related lower teacher expectations for student performance. So the less positive the experiences the greater the student teacher's belief that home and family were more powerful than school. Feeling less knowledgeable about the surrounding community and having second thoughts about teaching as the right career choice also increased belief in the power of home environment and family background on student achievement over that of effective schools and teachers. Additionally being male *(72% agreement)* opposed to female *(57% agreement)* student teacher, being in a secondary level placement, and feeling challenged by classroom management/discipline and instructional tasks increased the belief that a lack of home discipline and parental involvement had a greater influence on student achievement than the teacher did.

Research Question 4: What, if any, is the differential influence of contextual variables on preparedness for fulltime teaching, the decision to pursue a teaching career, and the decision to seek a teaching position in the School District of Philadelphia over and above source of efficacy beliefs alone?

To answer research question 4 and explore the predictability of the criterion variables of *"preparedness for fulltime teaching"[PFT], and "intention to pursue a lifelong teaching career"[TLC],* a series of hierarchical regression analyses were performed. The objective of these analyses was to examine the independent effects of the variables related to the four sources of efficacy belief, school site contextual variables, clinical practice design variables, and student teacher demographic (personal) variables on these criterion variables. The combined effect of all the predictor variables on the criterion variables was also determined.

Prediction of Preparedness for Fulltime Teaching Career

Hierarchical regression analyses were conducted for all student teachers in the study ($N=600$). It was theorized based on the literature that respondents' preparedness for fulltime teaching would be related most strongly to mastery and vicarious experiences. A hierarchical multiple regression analysis was performed with the following seven blocks of variables entered in order: *student teacher personal* variables; *clinical practice design* variables; *vicarious experience* variables; *mastery experience* variables; *verbal*

persuasion variables; *emotional arousal* variables; and *contextual* variables. Personal and design variables were entered first since information contributed to PFT variance by these variables could be accounted before prior to addition of the efficacy source variables. Results of the regression analysis for *Preparedness for Fulltime Teaching*[PFT] are displayed in Table 4.13.

Table 4.13 Hierarchical Regression Analysis of Preparedness for Full-time Teaching and Predictor Variables

Preparedness for Fulltime Teaching for All Student Teachers

	R^2	SE	F	p
Step 1 Personal	.02	*.81*	0.99	.42
Step 2 Design	.06	*.81*	1.54	.15
Step 3 Vicarious Experience	.14	*.78*	2.54	.01
Step 4 Mastery Experience	.27	*.74*	3.17	.00
Step 5 Verbal Persuasion	.28	*.74*	2.66	.00
Step 6 Emotional Arousal	.30	*.74*	2.41	.00
Step 7 Contextual	.33	*.745*	2.01	.00

	Beta	t	Sig
CHSN(Step 2)	.18	2.36	.02
FMLR(Step 4)	-.18	-2.17	.03
AdFE(Step 4)	-.18	-2.40	.02
FPLT(Step 4)	-.16	-2.13	.04
MCCM (Step 4)	-.21	-2.44	.02

The personal and design blocks of variables did not contribute significantly either singly or in combination to explaining

Preparedness for Fulltime Teaching [PFT] variance of this group of student teachers. The F statistic became significant (*p*<.01) with the addition of the block of vicarious experience [VE] variables and remained so with addition of the blocks of efficacy source ME. VP and EA variables and the block of contextual variables. All the blocks of variables combined explained 33% of the variance in *Preparedness for Fulltime Teaching [PFT]* for this group of student teachers. The blocks of personal and design variables which were entered first into the equation together explained 6% of the variance in *PFT*. Addition of the blocks of vicarious and mastery experience variables helped explain an additional 21% of PFT variance (contributing 8% and 13% respectively), making the largest contribution to explanation of PFT as hypothesized. The block of contextual variables only helped explain an additional 3% of the variance in student teachers' *PFT* over that explained by the combined blocks of personal, design and efficacy source variables.

Higher scores on *Preparedness for Fulltime Teaching [PFT]* were significantly predicted by independent contributions from (in order of significance):-

- Lower scores on ME variable: *Degree of Challenge faced with Classroom Management Tasks and Use of Instructional Strategies[MCCM],*

- Positive responses on Design variable: *Student Teaching at a School Selected by Student Teacher[CHSN],*

- Lower scores on ME variable: *Adequacy of early field experiences in familiarizing me with professional expectations[AdFE],*

- Negative responses on Design variable: *Completion of practicum experiences at the same school site [FMLR],* and

- Lower scores on ME variable: *Number of full period lessons taught over the semester[FPLT].*

Correlation between Preparedness and Teacher Efficacy

When *PFT* was correlated with personal teaching efficacy dimensions, there was a significant positive linear relationship between *PFT* and both *Professional Knowledge* ($r=.27$, $p<.01$) and *Outcome Expectations* ($r=.20$, $p<.01$). When *PFT* was correlated with general teaching efficacy factors, there was a significant negative linear relationship between *PFT* and both *Home Environment* ($r=-.19$, $p<.01$) and *External Causality* ($r=-.12$, $p<.05$). So the greater the student teacher's belief in his or her personal teaching competence the more prepared the student teacher felt and vice versa. In addition, the greater the belief that environmental influences surrounding the student could not be conquered by effective schools and teachers the less prepared the student teacher felt.

Prediction of Lifelong Teaching Career

Hierarchical regression analyses were conducted for all student teachers in the study ($N=600$). It was theorized, based on the literature, that respondents' teaching intentions would be directly related first to emotional arousal[EA] variables, then to

field site contextual and clinical practice design variables, the other three blocks of sources of efficacy belief variables, and finally to individual teachers' characteristics.

A hierarchical multiple regression analysis was performed with the following seven blocks of variables entered in order: *emotional arousal* variables; *contextual* variables; *clinical practice design* variables; *mastery experience* variables; *vicarious experience* variables; *verbal persuasion* variables; and *student teacher personal* variables. Results of the regression analysis for *Lifelong Teaching Career*[TLC] are displayed in Table 4.14.

The first block of variables entered into the regression, emotional arousal[EA] variables, accounted for approximately half, (i.e. 20%) of the total variance in the "*intention to pursue a lifelong teaching career*"[TLC]. The blocks of contextual variables and design variables only helped explain an additional 5% of the variance in student teachers' TLC over the 20% explained by the block of EA variables. Addition of the fourth and fifth blocks, mastery experience[ME] and vicarious experience[VE] variables helped explain an additional 9% of TLC variance. The seven blocks combined together explained 39% of the variance in TLC for all student teachers in this study. The F statistic was highly significant (*p*<.01) for all seven combinations of blocks of variables, so they all made a significant contribution to the predictability of TLC for this group of student teachers.

Table 4.14. Hierarchical Regression Analysis of Teaching as Lifelong Career and Predictor Variables

Lifelong Teaching Career for All Student Teachers

	R^2	SE	F	p
Step 1 Emotional Arousal	.20	*.98*	11.66	.00
Step 2 Contextual	.24	*.98*	4.21	.00
Step 3 Design	.25	*.99*	3.35	.00
Step 4 Mastery Experience	.31	*.97*	2.84	.00
Step 5 Vicarious Experience	.34	*.96*	2.80	.00
Step 6 Verbal Persuasion	.37	*.94*	2.78	.00
Step 7 Personal	.39	*.95*	2.56	.00

	Beta	t	Sig
RTC(Step 1)	.43	6.40	.00
CUSE(Step 4)	.16	2.13	.03
MCDS(Step 4)	-.20	-2.50	.01
VISD(Step 5)	-.31	-2.02	.04
VPSU(Step 6)	.28	2.45	.02

Higher scores on "*intention to pursue a lifelong teaching career*"*[TLC]* were significantly predicted by independent contributions from (in order of significance):-

- Higher scores on EA variable: *Would not reconsider decision to pursue a teaching career, even if I could [RTC],*

- Lower scores on VE variable: *Opportunities provided by the program to learn about student and community diversity [VISD],*

- Higher scores on VP variable: *Feedback and encouragement provided by the university supervisor [VPSU],*

- Lower scores on ME variable: *Degree of Challenge in Teaching Academically and Culturally Diverse Students[MCDS],* and

- Higher scores on contextual variable: *Belief that the supervisor was efficient[CUSE]* .

Correlation between Preparedness, Teacher Efficacy and Teaching Commitment

When "*intention of pursuing a lifelong teaching career*" was correlated with "*overall preparedness to teach*" there was a significant positive linear relationship between these two variables (r=.14, p<.01). The more prepared a student teacher felt the greater the likelihood of the candidate pursuing a lifelong teaching career. There was also a significant positive correlation with Professional Knowledge (r=.25, p<.01) and Outcome Expectations (r=.20, p<.01) and a significant negative correlation with Home Environment (r=-.18, p<.01) and External Causality (r=-.17, p<.01). So greater belief that one possessed the required skills and could implement them effectively to bring about positive change in student academic performance, and less belief in the powerful influence of home environment and family background versus effective teachers and

schools on student academic performance, translated into greater likelihood of a lifelong teaching career.

Prediction of Considering a Position in School District of Philadelphia

Since one of the goals of this program is to enhance the supply of teachers for the large urban School District of Philadelphia, some additional analyses were done. An additional hierarchical multiple regression analysis was performed to determine the factors which best predicted "*Considering Teaching in the School District of Philadelphia"[SDP]* for all the student teachers in the study. Results are displayed in Table 4.15.

The F statistic was not significant for the first three combinations of blocks of variables entered, that is, mastery experience [ME], vicarious experience [VE] and verbal persuasion [VP]. With the addition of the block of emotional arousal [EA] variables, the F statistic became significant indicating that the combination of all the efficacy source variables made a significant contribution to the predictability of "*Considering seeking teaching position in the School District of Philadelphia"[SDP]* for this group of student teachers. However, the combined blocks of ME, VE, VP, and EA variables only helped explain 8% of the variance in SDP. The F statistic remained significant with the addition of the final two blocks of variables, that is, contextual plus design, and personal. The combined blocks explained 36% of the variance in *SDP*.

Addition of the contextual variables contributed an additional significant increase (R^2 =.23) in the explanation of SDP variance. As expected, the variable *location* made the largest independent contribution to predictability of SDP variance. Adding the final block of personal variables helped explain an additional 5% of SDP variance.

Table 4.15.   Hierarchical Regression Analysis of Teaching in the School District of Philadelphia

Teaching in SDP for All Student Teachers

	R^2	SE	F	p
Step 1 Mastery Experience	.04	*.89*	1.53	.13
Step 2 Vicarious Experience	.04	*.89*	1.18	.29
Step 3 Verbal Persuasion	.06	*.88*	1.57	.07
Step 4 Emotional Arousal	.08	*.78*	1.57	.05
Step 5 Context/Design	.31	*.78*	5.13	.00
Step 6 Personal	.36	*.75*	5.29	.00

	Beta	t	Sig
CRCI (Step 1)	-.12	-2.22	.03
LOC(Step 5)	-.41	-6.76	.00
CPCS(Step 5)	-.18	-2.41	.02
SaST(Step 6)	.13	2.16	.03
RTC(Step 6)	.10	2.10	.04
SEX(Step 6)	.10	2.24	.03

Higher scores on "*considering seeking a teaching position in the School District of Philadelphia"[SDP]* were significantly predicted by independent contributions from (in order of decreasing strength):-

- Being in an *urban field placement* (contextual),

- Lower scores on contextual variable: *Believing the principal to be an effective communicator[CPCS],*

- *Being male (personal),*

- Lower scores on ME variable: *Days with complete responsibility for classroom instruction [CRCI],*

- Higher scores on EA variable: *Satisfaction with student teaching experience [SaST], and*

- Higher scores on EA variable: *Would not reconsider decision to pursue a teaching career, even if I could [RTC].*

Summary of Predictability of Overall Preparedness to Teach, Lifelong Teaching Career, and Teaching in the School District of Philadelphia

Based on the findings from the regression analyses, "*overall preparedness for teaching*" was most strongly predicted by a combination of mastery and vicarious experiences. Interestingly it was those student teachers who felt that their early practicum experiences were inadequate and those who taught fewer lessons, who felt most prepared. This was almost certainly related to the fact that those student teachers who felt least challenged by classroom management and instructional tasks also felt most prepared. Preparedness was also predicted by self-selection of the field site.

It might be useful in another study, to investigate the criteria upon which student teachers base their self-selection decisions.

The contribution of emotional arousal variables were key for commitment to a teaching career and teaching intentions with "*confidence that the decision to pursue a teaching career was the right one*" being a strong predictor of both "*lifelong teaching career*". For prediction of a "*lifelong teaching career*" other efficacy source variables played a major role with the effectiveness and efficiency of the student teacher's university-appointed supervisor being really important. This included positive feedback and frequent encouragement from the supervisor, being observed by the supervisor on a regular basis, and supervisor accessibility and availability to respond to questions and concerns.

For prediction of "*teaching in the School District of Philadelphia*" the emotional arousal variables, satisfaction with the student teaching experience and feeling happy about the initial decision to pursue a teaching career were important. Student teachers who completed an urban field placement, and male preservice teachers were also more likely to be considering a SDP position.

Follow-up Analysis

Teaching Intentions of those student teachers who were in Urban High Poverty field placements

The question of what preservice programs can do to better prepare and encourage new teachers into the profession and specific districts and schools is especially important for large, urban

districts which traditionally have had difficulty recruiting qualified teachers to their most needy schools. The challenge is especially significant in the School District of Philadelphia. The purpose of this final analysis is therefore to identify the predicting factors that distinguish those student teachers in urban high-poverty field placements who intend to teach in the School District of Philadelphia from those who do not; and those who are thinking of permanently teaching at the field site and those who are not. Ninety-nine percent of student teachers in urban high poverty placements were at field sites in the School District of Philadelphia. The final set of analyses explored the responses of these student teachers to the following questions:-

- "Are you considering the possibility of teaching in the School District of Philadelphia, in the next school year?"

- "Are you considering the possibility of teaching at the school at which you did your student teaching?"

Results of the responses received from the student teachers concerning their teaching intentions are presented in Table 4.16.

There were 325 preservice teachers who were placed at urban high-poverty field sites. While 66% of the 303 student teachers (i.e. those who answered these questions) fulfilling their student teaching assignment at urban high poverty schools are definitely considering a position in the School District of Philadelphia, 56%*(168)* are definitely <u>not</u> considering a permanent position at the

same school site. Only 7%*(20)* are definitely considering a position

at the same site in the School District of Philadelphia.

Table 4.16. Cross-tabulation of Responses of Student Teachers at
Urban High Poverty school sites (n=303)

Considering teaching at student teaching field site:	Considering teaching in the School District of Philadelphia			
	YES	UNDECIDED	NO	TOTAL
YES	20	10	44	74 *(24%)*
UNDECIDED	28	28	5	61 *(20%)*
NO	150	8	10	168 *(56%)*
TOTAL	198*(66%)*	46*(15%)*	59 *(19%)*	303 *(100%)*

Teaching in School District of Philadelphia

The student teachers were asked to give explanations for the

responses which they gave concerning *teaching in the School District*

of Philadelphia. The *top five positive influences* on seeking

teaching positions in the School District of Philadelphia were:-

- love of the children in the city (58%);

- commitment to urban education (58%);

- motivated by the student teaching experience (48%);

- proximity to home (31%); and

- growing up in Philadelphia (27%).

The *top five deterrents* to seeking a teaching position in the School District of Philadelphia were:-

- hoping for a teaching position outside of Philadelphia (28%);

- not believing I'd get the early mentoring and guidance support I would need (18%);

- anticipated classroom management problems (12%);

- condition of the school facilities (8%); and

- lack of support for special needs students (7%).

Discriminant Function Analysis of Teaching in School District of Philadelphia [SDP] for respondents in urban high poverty placements

The Wilks' Lambda function analysis conducted for *Teaching in the School District of Philadelphia* produced two functions. Function I discriminated between preservice teachers who gave a positive response to SDP compared to those who either gave a negative response or were undecided, while Function II discriminated between negative and undecided responses. 44 variables measuring school climate, student teaching context, sources of efficacy, individual student teacher characteristics and efficacy scores were entered in to the analysis as shown in Table 1 of Appendix F. Pooled-within group correlations between these discriminating variables and the standardized canonical discriminant function revealed that of the 25 factors which comprise Function I, there were 5 factors having the highest correlation with the discriminant function (i.e. structure coefficients of .200 or greater) for the urban high-poverty

preservice teachers in this study. In descending order of importance, *positive responses to teaching in the School District of Philadelphia* were likely if student teachers:-

- were in schools with more students [context: climate - physical];

- were over 25 years old [personal]; and

- felt prepared to teach in the urban community surrounding the school [ME: prepared /context: location].

Interestingly, *negative or undecided responses to teaching in the School District of Philadelphia* were more likely if student teachers:-

- were seeking elementary level certification [personal];

- received a lot of feedback from members of the peer cohort [VP: peer]; and

- believed they could effectively implement the knowledge they had gained to bring about high student achievement [PTE: Outcome Expectations].

Of the 19 factors which comprise Function II, there were 4 factors having the highest correlation with the discriminant function (i.e. structure coefficients of .200 or greater) for the urban high-poverty preservice teachers in this study. In descending order of importance, *undecided responses to teaching in the School District of Philadelphia* were likely if student teachers:-

- experienced positive teacher-student interactions exemplified by appropriate, non-disruptive student

behavior, and teachers' belief in their students' academic capabilities [context: climate - social and academic].

Negative responses to teaching in the School District of Philadelphia were more likely if the student teacher:-

- had strong general belief that a lack of parental support and discipline together with low academic ability creates a student whose academic achievement will remain outside of the influence of even an efficient, effective teacher (GTE: External Causality);

- felt challenged by classroom management tasks [ME;: challenge]; and

- experienced difficulty in gaining access to needed instructional supplies and resources [context: climate - physical].

None of the verbal persuasion, vicarious experience, emotional arousal, design variables, preparedness or challenge variables were strong predictors of a positive response to SDP.

Seeking a Permanent Position at the Student Teaching School

Respondents were then asked to give explanations for the responses which they gave concerning <u>teaching at the student teaching school</u>. Reasons given for saying YES included:-

- (a) feeling comfortable at the school,

- (b) receiving support from administration and faculty,

- (c) building good relationships with the students,

- (d) believing I can make a difference,

(e)   my alma mater, and

(f)   close to home.

The following quotes from student teachers help to give a more
in-depth understanding of the underlying reasons why student
teachers responded positively:-

> The principal was a great motivator for her staff as well
> as the children. The environment was conducive to a great
> learning environment. The staff made me feel welcome and
> were very supportive during my time there.

> If I ended up teaching in the School District of
> Philadelphia I would love to teach at A! It is an
> incredible school with a fabulous staff and amazing
> principal who has created one of the nicest most caring
> school communities/cultures I have ever seen!

> I like the school that I did my student teaching at;
> although there was a minor conflict with my cooperating
> teacher my overall experience was wonderful. I enjoyed
> bonding with the students and have made deep attachments
> to other faculty members.

> The administrative staff is supportive and committed. The
> teaching staff is friendly and committed. The students
> are diverse. It is highly structured. It is close to
> home.

> I had a wonderful teaching experience at AF and I would
> be delighted if I had a chance to teach in that school. I
> was blown away by how much of a support team the teachers
> have with one another no matter what grade they are in.
> The staff is so helpful. I would be thrilled if I could
> get a chance to teach at AF.

> Reasons given for saying NO/UNDECIDED included:

(a)   moving away from Philadelphia after graduation,

(b)   problems with the administration, staff or cooperating

       teacher,

(c)   negative attitude of teachers at the school,

(d)   the location of the school,

(e)   not being the age level that I want to teach,

(f)   not willing or prepared to deal with the type of students

      who go to the school, and

(g)   no positions being available.

The following quotes from student teachers help to give a more in-depth understanding of the underlying reasons why student teachers responded negatively :-

> I would love to teach at school X, but I am moving back home to be by my family.

> I do not want to teach in this school because I am looking for a different kind of school with teachers who are positive and happy where they are.

> Low salary, low funding for necessary materials, no technology in the classrooms, safety in and outside of classroom on school grounds.

> Other than my cooperating teacher, the staff don't seem receptive of me.

Discriminant Function Analysis of Teaching at Student Teaching school [TST] for respondents in urban high poverty placements

The Wilks' Lambda function analysis conducted for *Teaching at the Student Teaching School* produced two functions. Function I discriminated between preservice teachers who gave a positive or undecided response to TST compared to those who gave a negative response, while Function II discriminated between positive and undecided responses. The same 44 variables measuring school climate, student teaching context, sources of efficacy, individual student teacher characteristics and efficacy scores were entered in to the analysis. (See Table F1). Pooled-within group correlations between these discriminating variables and the standardized canonical

discriminant function revealed that of the 28 factors which comprise Function I, there were 9 factors having the highest correlation with the discriminant function (i.e. structure coefficients of .200 or greater) for the urban high-poverty preservice teachers in this study. In descending order of importance, *positive or undecided responses to thinking about seeking a permanent position at the student teaching school* were likely if student teachers:-

- viewed the mentor (cooperating) teacher as a good role model [VE: mentor];

- were satisfied with student teaching experience [EA];

- felt supported and mentored by the cooperating teacher [context: mentor support];

- received adequate feedback and encouragement from the cooperating teacher [VP: mentor];

- experienced positive teacher culture exemplified by a cooperative, friendly, efficient and satisfied teaching staff [context: climate - social and academic];

- experienced positive teacher-student interactions exemplified by appropriate, non-disruptive student behavior, and teachers' belief in their students' academic capabilities [context: climate – social and academic]; and

- had faith in the leadership capability of the principal [context: climate].

Negative responses to thinking about seeking a permanent position at the student teaching school, in descending order of importance were likely if student teachers:-

- experienced difficulty in gaining access to needed instructional supplies and resources [context: climate - physical]; and

- felt challenged by classroom management and disciplinary issues [ME: challenge].

Of the 16 factors which comprise Function II, there were 5 factors having the highest correlation with the discriminant function (i.e. structure coefficients of .200 or greater) for the urban high-poverty preservice teachers in this study. In descending order of importance, *positive responses* were more likely if student teachers:-

- received adequate encouragement and feedback from field supervisor [VP: supervisor];

- received adequate encouragement and feedback from program faculty [VP: faculty];

- felt more prepared to use technology [ME: preparedness]; and

- felt more prepared to teach academically and culturally diverse student populations [ME: preparedness].

Undecided responses were more likely if the student teacher felt that early clinical experiences such as the practicum were adequate preparation for student teaching [ME: preparedness].

Table 4.17 presents descriptive data for the student teachers and school sites in the urban-high poverty subsample.

Table 4.17. Demographic Data for Student Teachers in Urban High
             Poverty Placements

	N	%
Sex		
Female	248	77
Male	73	23
Ethnicity		
White, non-Hispanic	205	63
Other Ethnicities	120	37
Graduated from Philadelphia high school		
Yes	39	16
No	204	84
Certification Pathway		
Undergraduate	278	85
Graduate	47	15
Certification Level Sought		
Secondary	78	24
Elementary	247	76
Collaborating Site		
No	196	60
Yes	129	40
Minority Population		
Low	22	7
High (50% or more)	303	93
Sch. District of Philadelphia Placement		
Not SDP	5	1
SDP	320	99

NOTE:

Percentages are based on number of actual number of responses received to each question

Chapter Summary

Student teachers in urban locations reported significantly different experiences from those in suburban locations on several aspects of the clinical practice assignment. The greatest differences, which were contextual in nature, were probably related to the higher levels of school poverty in urban schools, as well as urban-based teachers feeling less prepared to work in those communities. For the urban-based student teachers, this translated into greater challenge in accessing resources, in being subject to an higher incidence of inappropriate and disruptive student behavior, feeling more anxious about personal safety, and greater challenge in dealing with student academic and cultural diversity, classroom management, and adaptation of instruction. In addition, they reported less feedback and encouragement from their cooperating teachers, and a more disgruntled teaching staff in general. This in turn related to greater dissatisfaction with the student teaching experience.

While the field site location did not significantly influence the student teachers' overall preparedness for fulltime teaching or teaching efficacy levels, there was a significant effect on teaching intentions (location and commitment). Student teachers in urban placements were more likely to be "*considering a permanent position at the student teaching school*" or "*teaching in the urban School District of Philadelphia*". In regard to commitment, student teachers

in suburban placements were more likely to be considering "te*aching for at least 5 years"* and a "*lifelong teaching career"*.

In regard to prediction of teaching efficacy, as hypothesized, the mastery experiences of the student teaching assignment were the strongest contributors to development of teaching efficacy. The contextual variable "location" was a significant predictor of both dimensions of *Personal Teaching Efficacy* with urban-based student teachers interestingly having higher scores on *Professional Knowledge* and *Outcome Expectations.* Contextual variables especially "school poverty" and "positive student-teacher interactions" played a large role in prediction of *General Teaching Efficacy*. There was a surprising inverse relationship between "school poverty" and both dimensions of *General Teaching Efficacy* with student teachers at low poverty schools having a stronger belief in the power of home/family environmental influences over that of schools and teachers on student academic achievement. Males and those student teachers seeking secondary certification were also more likely to feel powerless against a lack of parental discipline and "difficult" students.

"*Overall preparedness for fulltime teaching"* was predicted mainly by mastery and vicarious experiences. Interestingly it was those student teachers who felt that their previous practicum experiences had been inadequate, and who had taught fewer lessons during student teaching, who felt most prepared. This might be related to the fact that it was also those who felt less challenged

in classroom management and adaptation of instruction who also felt most prepared to assume the responsibilities of a fulltime teaching assignment. Self-selection of the field site was also an important predictor of overall teaching preparedness.

Emotional arousal variables were the strongest predictors of *teaching commitment* with being confident about the initial decision to pursue a teaching career playing a really big role. Effectiveness and efficiency of the supervisor, including receiving adequate feedback and encouragement to reflect on the teaching process, and its impact on student achievement, were important contributors to predictability of *lifelong teaching career intentions.*

For *teaching intentions* location the contextual factors at the field site also played a major role. Being in an urban placement was the strongest predictor of future intent to teach in the School District of Philadelphia. Teaching in SDP was also predicted by feeling confident about the decision to pursue a teaching career and having a satisfying student teaching experience. Being male was also a strong predictor of SDP.

When asked, student teachers in urban high poverty schools cited their love of children*(58%)* and commitment to urban education*(58%)* as the most common reasons for wanting to teach in Philadelphia. Motivation as a result of the student teaching experience*(48%)* came in a close third. The greatest deterrent was the option of a teaching job outside of Philadelphia*(28%)* followed by not believing they would receive necessary mentoring and guidance

in the first years of teaching*(18%)*. Preservice teachers who were over 25, and who felt prepared for the urban environment were most likely to want to teach in the School District of Philadelphia. Interestingly those preservice teachers seeking elementary certification were less likely to want to teach in SDP possibly because they have many more options open to them. Feeling powerless to overcome influences of students' home environments, and challenged by classroom management tasks and gaining access to needed resources were the strongest deterrents to teaching in SDP.

Student teachers in urban high poverty schools who felt that that the cooperating teacher had been supportive, and a good mentor and role model, that the staff and administration were supportive, that the principal was a good leader and motivator, who had formed a bond with the students, who felt encouraged and received adequate feedback from faculty and supervisor, and who felt prepared to deal with the academic and cultural diversity encountered in contemporary urban classrooms, and to use technology in teaching were more likely to be thinking about securing a permanent position at the student teaching site. Similar to the decision to teach in the School District of Philadelphia, it was those who felt challenged by classroom management tasks and experienced difficulty gaining access to needed resources, who were least likely to be thinking about securing a permanent position at the student teaching site.

CHAPTER 5

DISCUSSION

This chapter presents a summary of the study and its findings. Conclusions drawn from the data presented in Chapter 4, discussion of implications of these findings for action, as well as recommendations for further research, are also included in this chapter.

Summary of the Study

The No Child Left Behind (NCLB) Act calls for a highly qualified teacher in every classroom. The cadre of professional educators and researchers have made it clear that "highly qualified" means more than just a high GPA and college-based classroom experiences during teacher preparation. Although the training of highly qualified teachers traditionally begins in the college classroom, current research on quality teacher preparation consistently argues for the value of clinical practice or student teaching field experiences in the development of highly qualified teachers. These experiences, which take place over the course of one or two semesters, allow student teachers to work with children from diverse backgrounds in real classroom locations. This occurs under the guidance of university and school personnel, with the hope of being able to transfer knowledge and skills learned during the preservice program from theory to practice. The mission of the teacher preparation program in this study was to produce individuals

who are effective, efficacious teachers prepared for the task of teaching, and committed to a lifelong teaching career.

The desire to understand how high quality field experiences in actual classroom locations influence the development of teaching efficacy, preparedness to teach and commitment to the teaching profession was therefore a major objective of this study. This study had the potential, as well, to help fill in some of the gaps in the research on experiences of student teachers in both urban and suburban locations.

Additionally the study sought, by providing greater descriptions of the contexts within which the student teaching is occurring, to address one of the criticisms of the clinical practice research that "most of the studies were not contextualized within a teacher education program and lacked description of field placement sites" (Hollins & Gutzman, 2005, p.502).

In this study, student teaching field experiences were examined through the lens of Bandura's (1997) sources of teacher efficacy belief development and their interactions with student teaching contextual influences such as field site location and poverty levels, and school climate influences such as relationships at the site, and availability of resources. Self-reported teacher efficacy was measured using the *TES*. Self-reported preparedness for teaching and teaching intentions were measured using items on the End-of-Student-Teaching survey administered by the program.

Factorization of the *TES*

Based on the issues reported in the literature regarding the conceptualization and measurement of teacher efficacy, prior to answering the research questions a factor analysis was conducted on the *TES*. This factor analysis resulted in four subscales. Two of these, Professional Knowledge (PK) and Outcome Expectations (OE) resembled Woolfolk and Hoy's (1990) Personal Teaching Efficacy (PTE) and reflected each teacher's analysis of his or her personal teaching competence. Factor 1, *Professional Knowledge [PK],* was defined as efficacy expectations of the student teacher; the teacher's belief that he or she possessed the necessary skill set to address students' deficiencies. Factor 2, *Outcome Expectations [OE],* was defined as outcome expectations of the student teacher; the teacher's belief that students do better because he or she does better in effectively implementing the skills needed to advance students' learning and achievement.

The other two, Home Environment (HE) and External Causality (EC) resembled Woolfolk and Hoy's (1990) general teaching efficacy (GTE), and reflected analysis of the teaching task and its context. Factor 3, *Home Environment [HE},* was defined as the student teacher's belief that a student's home environment and family background has a more powerful influence on student achievement than teachers. Factor 4, *External Causality {EC},* was defined as the student teacher's general belief that a lack of parental support and discipline together with low academic ability creates a student

whose academic achievement will remain outside of the influence of even an efficient, effective teacher.

Review of Data Collection

The data used in this study were collected over a two-year period. Self-report web-based End-of-Student-Teaching surveys were administered to the approximately 786 teacher candidates who completed their student teaching requirements between Spring 2006 and Fall 2007 at a large, urban public university in the northeastern USA. To minimize some of the site contextual variation only data collected from the 600 candidates who were in public school placements in urban *(n=413)* and suburban *(n=187)* locations were used in these analyses.

Descriptive data collected for *urban field site placements* revealed that 98% of these were in the School District of Philadelphia. Seventy-nine percent were in high-poverty schools, 72% were in schools with enrolments greater than 400 students, and 67% had a 50% or greater minority student population. Data collected for sub*urban field site placements* revealed that 4% were in high-poverty schools, and 84% were in schools with enrolments greater than 400 students. No data were collected on the minority student population of these schools although the percentage was probably much lower given the ethnic makeup of the communities in which they were located.

Limitations of the Study

The research used a self-reported web-based survey instrument, the End-of-Student-Teaching Survey, in order to collect demographic and background educational and experiential data. All other variables, preparedness scores, teacher efficacy scores and teaching intentions (commitment and location) scores were also measured by this self-report survey instrument. These surveys were conducted at the completion of the student teaching experience. The honesty, accuracy and sincerity of the student teachers as they responded to the survey could influence the internal validity of the study and might introduce possible bias. For example, the analyses by race/ethnicity would be skewed if candidates from one racial/ethnic group were more likely than others not to identify their racial/ethnic background on the survey.

Another limitation of this study is the fact that only post-field experience measures were collected. For a valid statement to be made about the impact of teacher preparation and field experiences on the development of efficacy, preparedness and commitment it is necessary to collect baseline data when preservice teachers are admitted to candidacy, again at the start of the 14-week student teaching experience, and a third administration at the end of the experience when this study was performed. As such this study is correlational rather than prescriptive of cause and effect.

Although this survey concerns, for the most part, the student teaching experience only one member of the student teaching triad

contributed to this analysis of the experience. No data were gathered from the other two triad members i.e. the cooperating (mentor) teacher and university-appointed field supervisor nor were data gathered from the Director of Clinical Education or the administration at the school partner sites. The perceptions of quality were therefore only from the perspective of one stakeholder, the student teacher. The addition of focus groups and individual interviews would also have added to the interpretation of the data collected by the survey.

In analyzing the findings of the study, one has to be careful about interpretation of findings n the light of existing research since much of the research literature on efficacy and commitment is derived from studies of in-service as opposed to the pre-service teachers which are considered in this study.

Generalizability of the study may be limited to student teachers enrolled in urban teacher preparation programs situated in large cities and completing clinical practice in public schools.

Conclusions

Background comparison of student teachers' individual characteristics and contextual and design factors at school sites in urban and suburban locations

Based on non-parametric analyses, the groups of student teachers in each location had similar demographic profiles based on sex, age and certification pathway. There were significantly more

non-White student teachers in urban placements, and also significantly more respondents seeking elementary certification. Both groups reported similar pre-program professional experiences in terms of previous work in PK-12 classrooms.

School site contextual variables were significantly different with student teachers in urban placement facing much higher school poverty, and greater percentages of minority students in their classrooms.

Field placement design factors also varied significantly with more urban-based student teachers being in peer cohort placements, more having completed at least one previous practicum at the same field site, and less having selected their own field placement school site.

Is there a significant difference in student teachers' scores on the self-reported predictor variables measuring sources of teaching efficacy belief and related contextual factors based on field site location?

<u>Vicarious Experiences</u>

Both groups of student teachers reported similar levels of opportunity to observe and learn from career models, that is, learn vicariously. There were no significant differences on self-reported adequacy of opportunities provided prior to student teaching to observe and learn from models about classroom management and instructional strategies. This usually took place in teaching methods classes which all student teachers participated in equally.

Urban student teachers did, however, report more opportunity prior to student teaching to observe student diversity, probably explained by the fact that a greater percentage of them had completed previous practica in urban environments.

Mastery Experiences: Preparedness/Challenges (Actual Teaching)

During the hands-on experiences of student teaching in real classrooms, each preservice teacher begins to make a judgment call based on feelings of preparedness or challenge about his or her personal competence in mastering various teaching tasks (Bandura, 1997; Tschannen-Moran & Woolfolk-Hoy, 2001, 2007). Field site location did have a significant bearing on this with urban-based teachers reporting fewer instances where they were given full responsibility for classroom instruction. This might have been due to the cooperating teachers in these schools not having enough confidence in the student teachers. No data were collected from the cooperating teachers so this cannot be verified, but the following quote from a student teacher would seem to support this:

> The student teaching experience was still a bit artificial. Much of the teaching experience is left untouched. Cooperating teachers are often reluctant to hand over classes.

Although feelings similarly prepared to perform specific teaching tasks such manage a classroom or deal with academically and culturally diverse students, urban-based student teachers felt significantly less prepared to teach in the urban communities in which they found themselves. A possible explanation for this might be due to cultural incompetency between the student teachers (who

were 76% female and 67% Caucasian), and the environment of the school, as was found by previous researchers (Foote & Cook-Cottone, 2004; Rushton, 2001, 2002, 2003) investigating student teachers' experiences in urban placements. Ninety-eight percent of student teachers in urban placements were in the School District of Philadelphia, while only 43% of urban-based student teachers reported home zip codes in the city of Philadelphia. Additionally 79% of the urban field sites were high poverty schools. Since only 18% of student teachers in urban field placements had graduated from a Philadelphia high school it was unlikely that very many had previous experiences with high poverty communities. Comments from three student teachers in urban placements illustrate the differences in preparedness between those who knew and were comfortable in an urban environment and those who were not:

> I am from the inner city and I went to Philadelphia public school. I know what the problems are because I have witnessed them firsthand. I worked in the school before practicum therefore I was familiar with the community, the students and the climate of the school. I knew what to expect going into my student teaching experience. *(ST#1 - prepared)*

> I was informed of the positive aspects of teaching in a low-income school. I was aware of the negative aspects, but not to the extent that I should have been. Fights occur daily, even in younger grades where non-violence is pushed heavily. Children come in wearing the same clothes for a week at a time. Some parents resented the fact that white teachers were teaching their children. I was not expecting this.
> *(ST#2 - not prepared)*

> I was teaching in a neighborhood much different than I am used to. I was prepared because of all the different theories discussed in a Temple classroom but that does

not always prepare you for the facts of being in a school in a low-income neighborhood.

(ST#3 - not prepared)

Not surprisingly, student teachers in urban placements reported feeling significantly more challenged by classroom management and disciplinary tasks, and in dealing with culturally diverse students. They also felt less prepared to perform technology related tasks in these urban classrooms. This was probably related to the greater cultural diversity that exists within urban classrooms, as well as higher incidence of negative and inappropriate student behavior. The following two comments from student teachers in urban placements illustrate this point:

Well being that I was from a rural place I was not used to all black school with students who smell of weed, who come and sleep all the time, who think cursing and talking to a teacher or students is okay, they defaced a lot of material, and walked out of class at their own will. It was challenging to set them straight to make them see that it was not alright.

(ST#4 – challenged by cultural/ethnic diversity)

The diversity of intelligences found in one classroom. I found myself having to be able to craft a lesson for classes that had ESL students, mentally gifted students, and students with learning disabilities, all sitting side by side.. I was surprised by this at first and challenged all semester.

(ST#5 – challenged by academic diversity)

Verbal/Social Persuasion from mentor, supervisor and peers

Although there was no location effect on perceptions of mentor teachers as good career role models, student teachers in urban placements felt that they received less positive constructive

feedback on their teaching from the cooperating teacher, as illustrated by this comment:

> While student teaching I had issues with my cooperating teacher. Feedback was only given in a negative manner, which made me feel very uncomfortable in the classroom. I only got positive feedback once from this teacher.

They also reported receiving less encouragement to reflect on the impact that their teaching had on student achievement. These differences in perception might be related to the finding that urban cooperating teachers were less willing to relinquish full control of the classroom to the student teacher, and therefore may have been more judgmental of the student teacher's efforts. In contrast, there were no significant differences reported, based on location, in feedback on teaching from the university-appointed field supervisors and encouragement to reflect on the impact of the lessons taught on student achievement.

Urban-based student teachers in cohort placements also seemed to value the presence and verbal support of their peers more than their suburban counterparts:

> I lucked out because in the room next to mine was another student teacher from Temple. She served as my best support throughout the semester.

They were also more likely to seek out this support.

School Climate & Context

As stated previously, urban-based student teachers faced greater poverty at their sites. More than likely this accounted for the greater challenge which they reported in gaining access to necessary instructional materials and supplies. Although they

reported similar levels of support from mentors and supervisors in settling into the placement and in learning about school culture, urban student teachers had a much less positive perception of relationships between students and teachers, reported more inappropriate and disruptive behavior, and felt that the faculty had lower expectations for the student academic achievement. They also reported less positive teacher culture feeling that the teaching staff was less cohesive, and less satisfied with their jobs. The fact that they also viewed the principals as more ineffective leaders and poorer communicators to staff and students added to the more negative views of overall school climate.

Emotional Arousal

Although equally acknowledging that teaching is a stressful career and feeling equally confident that the decision to pursue a career in teaching was the right one, student teachers in urban placements felt less satisfied with their overall student teaching experience. This might be a result of some of the school site contextual issues such as high poverty levels and physical school climate challenges in accessing needed resources. Relationship issues with the cooperating teachers, and lower levels of confidence in the leadership and communication ability of the school principal could also have influenced the reported levels of satisfaction. The greater levels of challenge experienced in effectively performing teaching tasks and dealing with diverse student populations, which

are probably also related to the contextual and relationship issues, may also have contributed to these levels of satisfaction.

Additionally because of the nature of the communities as well as the relative incidence of inappropriate student behavior, student teachers at urban sites were more anxious about their safety at those schools. Twenty-three percent of urban-based student teachers were on guard or felt that their safety was threatened compared with 3% of suburban-based respondents while 57% in urban placements reported that physical abuse of teachers never happened compared with 88% in suburban placements.

<u>Summary</u>

Student teachers in urban placements therefore face many more challenges than their counterparts in suburban placements, probably related to the much greater levels of poverty in these schools as well as more challenges from student indiscipline, and greater dissatisfaction amongst the permanent teaching staff. If the levels of satisfaction with the student teaching experience are to become comparable for student teachers in both locations, the teacher preparation program must make a concerted effort to ensure that all student teachers, but especially those in urban placements, are aware of associated challenges. Special emphasis needs to be placed on allowing preservice teachers to become more integrated and comfortable in to the community prior to student teaching. The program must also continue to build on its efforts to place student teachers in cohorts based on the reported positive effect of peer

support on the experience especially at urban sites, and also to work with mentor teachers in making them more cognizant of the important role which they play in the preparation of the next generation of teachers.

Is there a significant difference in student teachers' scores on self-reported outcome variables measuring preparedness for fulltime teaching, teaching efficacy, and teaching intentions based on field site location?

Preparedness for Responsibilities of a Fulltime Teaching Position

There were no statistically significant differences, based on field site location, on preparedness for student teaching or preparedness for fulltime teaching. Given that student teachers in both locations started the field experience with similar levels of preparedness, This would imply that they felt they had similar levels of classroom preparation, and similar opportunities to observe and learn teaching tasks vicariously. Despite urban based student teachers facing greater challenges with classroom management and student diversity, and the more difficult contextual realities, this did not translate into significant differences based on location in overall teaching preparedness.

Teaching Efficacy: Personal and General

There were also no statistically significant differences, based on field site location, on the *Professional Knowledge*, *Outcome Expectations*, *Home Environment* or *External Causes* dimensions of teaching efficacy. This is in keeping with some of the previous

research which found that efficacy levels were not adversely influenced by location (Tschannen-Moran & Woolfolk-Hoy, 2007). However, the means on the *Personal Teaching Efficacy* dimensions were higher than the means on the *General Teaching Efficacy* dimensions in both locations. This indicated that each student teacher's assessment that he or she possessed the needed skill set and could effectively translate theory learned in the university classroom into action in the actual classroom was greater than the general belief that environmental influences on the students' academic achievement were a more powerful influence than effective teachers. According to previous research, personal teaching efficacy - the belief that I can - tends to increase as reality and theory begin to merge during the student teaching experience, while general teaching efficacy – the belief that teachers can - decreases (Hoy & Woolfolk-Hoy, 1990).

Teaching Intentions (Location and Commitment)

When teaching intentions are examined, student teachers in urban placements were more likely to be considering teaching at the school site. This may be explained by the fact that more of the urban-based student teachers (41% v. 4%) had also completed practicum experiences at the same school site, and so they felt comfortable there:

> I would love to teach at any of the schools at which I have had practica or student teaching. I have had a great amount of support at each. Also I know the schools well and it would be a nice comfort level to go to a place I know well.

They were, as expected, also more likely to be considering a teaching position in the School District of Philadelphia.

Urban-based teachers were, however, less likely to be thinking of teaching for more than 5 years, or pursuing teaching as a lifelong career. This was probably due to the higher level of challenge at urban sites, as well as concerns about dealing with difficult students, alongside often demotivated peers over an extended number of years.

So despite feeling similarly prepared and efficacious, location does play a significant role in student teachers' long-term commitment to a teaching career and the decision about where to secure a permanent teaching position.

Which sources of teaching efficacy beliefs, singly or in combination with demographic and contextual variables, are the best predictors of teaching efficacy?

Personal Teaching Efficacy

The judgment call that each student teacher makes on his or her personal teaching competence based on the perceptions of success or failure in the student teaching classroom are instrumental in creating a sense of personal teaching efficacy. As predicted by Bandura(1997), mastery experiences made the strongest contribution to these personal efficacy judgments.

Professional Knowledge (PK), the first dimension of personal teaching efficacy measured the student teacher's belief that, *I possess the necessary skills for my students to achieve success in*

my classroom. Completion of a field assignment where the student teacher (a) was prepared to teach in the community, and (b) had mastered the skills necessary to teach academically and culturally diverse students, and to effectively manage the classroom and use appropriate instructional strategies, enhanced PK development. These mastery experiences helped explain 36% of the overall variance in student teachers' PK.

The contextual variable of "location" also had an influence on the development of PK with student teaching in an urban location (versus a suburban one) having a positive influence. One likely explanation for this is the differences in prior experiences. Having a significantly larger percentage of elementary level candidates in urban placements translated into more student teachers who had been exposed to classroom teaching realities earlier in their preparation through classroom observations, practica, and service learning. Possibly these respondents were then able to make an earlier assessment of what a necessary teaching skill set looked like and work toward achieving this. This is implied in the following comment from a secondary education major:

> For secondary education students, student teaching is the only practical experience we obtain within the curriculum. It would be beneficial if we were given the opportunity to go into an authentic classroom BEFORE the start of student teaching. In this way we would gain experience of being in front of the class.

Outcome Expectations (OE), the second dimension of personal teaching efficacy, measured the student teacher's belief that, *I can effectively use the skills that I possess to ensure that my students*

achieve success in my classroom. Feeling that one had mastered the skills necessary to effectively manage the classroom and use appropriate instructional strategies but also feeling challenged in the implementation of these tasks contributed to development of OE. As the student teachers reported, this experience "really pushed my limits and showed me what I am capable of doing" and "made me become more confident in my teaching. Also, teaching made me utilize different teaching methods to see what students adapted to quicker." Mastery experiences predicted 11% of the variance in student teachers' OE while context helped explain an additional 4%.

Being in an urban location added to prediction of OE, as well. Conventional wisdom would seem to suggest that field site location would play a greater role in predicting OE. This is based on the premise that school climate issues such as availability of resources and behavior of the students would influence one's self-analysis of the ability to effectively implement one's skills.

General Teaching Efficacy

The student teacher's analysis of the teaching task at hand within the specific contextual and structural confines of the school site helps to create a sense of general teaching efficacy. As predicted by Bandura(1997), mastery experiences make the strongest contribution to these general efficacy analyses but they are strongly influenced by context. Home Environment (HE), the first dimension of general teaching efficacy, measured the student teacher's general belief that, *Teachers and the school system can*

overcome the powerful influence of the student's home environment.
When a student teacher was in an assignment where he or she: (a)
felt more prepared to teach in the community, (b) more confident
that the decision to pursue a teaching career was the right one, and
(c) was exposed to lower levels of inappropriate student behavior
with adequate teacher response to these behaviors then HE was
enhanced. The student teacher was more likely to believe that
teachers and schools are a stronger influence on student achievement
than the home environment. The contextual variable of *school poverty*
also influenced the prediction of HE with student teachers at high
poverty schools having a stronger belief in the greater effect of
teachers than the home environment on potential student success, and
those at low poverty schools feeling that home and parents were a
stronger influence.

> I was teaching in a low income environment where the
> parents did not have time to spend with their children.
> This made me want to try to help their children more and
> spend additional time with them in having them learn.
> *(Urban elementary high-poverty placement)*

External Causality (EC), the second dimension of general
teaching efficacy, measured the student teacher's belief that, *even
though students' achievement is influenced by lack of parental
supports and inadequate discipline, effective teachers can still be
a more powerful influence.* Student teachers in field assignments
where they (a) felt challenged by classroom management issues and
finding appropriate instructional strategies, (b) were exposed to
higher levels of inappropriate student behavior with inadequate

teacher response to these behaviors, and (c) were at low poverty schools began to lose faith in the ability of even effective teachers to adequately cope with the diversity of problems that students bring to the classroom.

> I came from an urban environment and was shocked by some of the behaviors of suburban school teachers and students.
>
> *(Suburban elementary low-poverty placement)*

Those in high-poverty placements also faced issues dealing with environmental influences but these were not so much due to a lack of support as to parental/student attitude.

> In my previous classes and practice. I have learned about teaching in urban areas. However it becomes different and some things were unexpected when dealing more with parents and daily attitude (and change of attitude) in the students.
>
> *(Urban elementary high-poverty placement)*

Additionally, being male was also a significant predictor of student teachers' development of the individual's belief that the personal and environmental constraints that potentially influence student achievement could not be overcome by even the most effective teachers. Previous research by Chen and Addi(1992) and Huang(2001) which found that male teachers report more instructional difficulties, and that female teachers scored higher on interpersonal relationships with their students and a greater belief in their students' capabilities. So it is possible that the male preservice teachers in this study also feel less empowered and capable. Seekers of secondary certification were also more likely to

believe in that students who lacked discipline and "difficult" students could not be reached by the school system.

> I was not prepared for the amount of "babysitting" required to teach high school.
> *(Suburban secondary placement)*

Summary

So the findings of this study in regard to the major role played by mastery experiences align with Usher and Pajares (2008) analysis of several previous studies examining the development of self-efficacy in academic settings. For *Personal Teaching Efficacy*, mastery experiences which occur during clinical practice are the largest contributors to the development of the two dimensions, *Professional Knowledge (PK)* and *Outcome Expectations (OE)*. Each student teacher's belief that he or she possessed the necessary knowledge and skills to effectively handle classroom management and use appropriate instructional strategies (MPCM) was an important and significant contributor in predicting both dimensions of personal teaching efficacy. Being in an urban placements also led to predictably higher levels of student teachers' belief that they possessed the right skills and knowledge, and could effectively use these to bring about academic success in their students. This is in keeping with previous findings by Bandura (1997) who found that successfully overcoming challenges, such as those faced by student teachers in urban environments, was a particularly powerful predictor of efficacy development.

When development of *General Teaching Efficacy* was considered, perceptions of inappropriate student behavior with inadequate teacher response to these behaviors (CTSI), and poverty levels at the schools were the only significant common predictors of its two dimensions, *Home Environment (HE)* and *External Causality (EC)*. This indicates that the school site contextual realities played a strong role in developing the student teachers' general belief about the relative power of home and environment versus teachers and school in successful student achievement. Despite fewer challenges in dealing with student behavior, student teachers in low poverty schools were more likely to attribute the success or failure of their students to external causes like home and family background, and less likely to attribute student academic achievement to school and teacher effectiveness. This was also true of secondary level candidates and male student teachers.

It is therefore vital that the teacher preparation program play a role, not only in providing the necessary knowledge base for their teacher candidates, but also in helping to build up positive emotions and thoughts about teaching. This is vital since it is those student teachers who report a more positive emotional response to the challenges especially of urban locations, who feel most efficacious. *(For reference, correlational analysis of the efficacy variables with the emotional arousal and challenge variables are shown in Table E1.)*

What, if any, is the differential influence of contextual variables on preparedness for fulltime teaching, the decision to pursue a teaching career, and decision to seek a teaching position in the School District of Philadelphia over and above sources of efficacy beliefs alone?

Preparedness for Fulltime Teaching

Contextual and design factors helped predict an additional 7% of *Preparedness for Fulltime Teaching* over and above the 24% predicted by the sources of efficacy beliefs alone, though location did not make a significant independent contribution. *Preparedness for Fulltime Teaching* was promoted by assignments where student teachers felt that they could adequately cope with challenges presented in classroom management and adaptation of instruction. Interestingly they felt more prepared if they felt that their early field experiences had been inadequate. Additionally, student teachers felt more prepared if they had taught fewer lessons. Self-selection of the school site for student teaching but not having had a practicum experience at the same site also predicted preparedness. More research needs to be done to ascertain whether these were secondary education or graduate students who do not have a practicum experience. A possible explanation for these findings is the idea that for some people 'less is more'. Less hands-on experiences meant less opportunity for feeling challenged; less opportunity for preservice optimism to be challenged by in-service reality.

Teaching Intentions

Emotional arousal experienced as a result of the student teaching experience made a greater contribution to prediction of teaching intention than any of the other groups of variables. This makes sense if one accepts Bandura's (1994) hypothesis that self-efficacy beliefs influence the degree of stress and depression felt in difficult and challenging situations, which in turn influence motivation. Positive teaching intentions were promoted when the student teacher felt satisfied that the field experience had been a successful one, felt safe at the school, and believed that the decision to pursue a teaching career was the right one.

Intention to Pursue a Lifelong Teaching Career

In addition, the intention to pursue a lifelong teaching career was promoted by student teaching assignments where the candidates believed that (a) they had been successful in addressing challenges with academically and culturally diverse classrooms, (b) that the supervisor had been helpful in assisting them to settle into the teaching assignment, and (c) that they had received adequate feedback and encouragement from the supervisor. Interestingly having fewer vicarious experiences related to diversity also promoted lifelong teaching intentions. Here again maybe ignorance is bliss. Not being exposed to the extremes of diversity which are possible within a classroom and therefore feeling that one had successfully negotiated diversity during the field experience contributed to confidence that teaching was the

right career. This in turn contributed to the intention to pursue a lifelong teaching career. Field site contextual, clinical practice design, and student teacher individual characteristics helped predict an additional 7% of intention to pursue a lifelong teaching career over and above the 32% predicted by the sources of efficacy beliefs alone.

Consideration a Permanent Position in School District of Philadelphia

When student teachers considered applying for a permanent position in the School District of Philadelphia field site contextual, clinical practice design, and student teacher individual characteristics were significant predicting an additional 28% of SDP variance over that explained by the combination of the four blocks of efficacy source variables. Student teaching assignments in urban locations promoted consideration of a teaching position in the School District of Philadelphia. This was a likely finding since 98% of those candidates who had completed student teaching in urban locations had done so in Philadelphia.

Being a part of a positive collective teacher culture, even if the principal was not an effective communicator, also added to predictability of SDP. Those student teachers who had a more positive emotional response to the student teaching experience, and who felt they were part of a positive and productive team, were the most likely to think about pursuing careers in the high-poverty and high-minority schools of urban school districts, like the School

District of Philadelphia. These findings were supported by the student teachers' own words.

Unexpected Results

There were several unexpected results arising from the study. Most of these have been discussed previously. These included:-

- The inverse relationship between perceptions of *Adequacy of early practicum and other Field Experiences [AdFE]* and scores on the *Professional Knowledge [PK]* dimension of Personal Teaching Efficacy [PTE],

- The linear relationship between completing student teaching in *Urban School Locations [LOC]* and scores on both the *Professional Knowledge [PK]* and *Outcome Expectations [OE]* dimensions of Personal Teaching Efficacy [PTE],

- The inverse relationship between school poverty level [POV] and scores on both the *Home Environment [HE]* and *External Causality [EC]* dimensions of General Teaching Efficacy [GTE],

- The inverse relationship between perceptions of A*dequacy of early practicum and other Field Experiences [AdFE]* and scores on *Preparedness for Fulltime Teaching [PFT]*,

- The inverse relationship between *Full Period Lessons Taught during student teaching [FPLT]* and scores on *Preparedness for Fulltime Teaching [PFT]*, and

- The inverse relationship between *Opportunities for learning about Academic and Cultural Diversity prior to student teaching [VISD]* and *Intention to Pursue a Lifelong Teaching Career [TLC]*,

Implications for Action

Based on the findings of this study, there are several implications for action given the stated goal of providing suggestions for improving the clinical experiences of student teachers.

The first implication for action given the major role played by mastery experiences, in efficacy development and preparedness, is to ensure that the mastery experiences provided during student teaching assignments are equivalent in terms hands-on experiences in real-world classrooms. Perhaps mentor teachers and principals could be brought in for pre-student teaching orientation to ensure that everyone is clear about the program's expectations. This includes expectations in terms of timing and scope of responsibility regarding the student teachers' transition from observer to being in full control of the classroom. At the same time, the experience needs to be challenging since it was those student teachers who faced greatest challenge who reported comparatively higher personal teacher efficacy. Related to this, is the need for cooperating teachers to be aware of the important part they play, as career role models, especially in demonstrating coping versus mastery skills (Usher & Pajares, 2008) and providing support and guidance for their

mentees, especially in more challenging school and classroom contexts.

The second implication for teacher preparation programs should be the establishment of peer cohorts at school sites. This is based on the premise that those students who were in cohort placements reported benefitting from emotional support and verbal persuasion of their peers, and that they placed great value on this. This is in keeping with the findings of Tinto (1997, 1998) and Dinsmore and Wenger (2006) who found that students in learning communities such as that created by peer cohort placements create a sense of community and support, contributing to positive clinical experiences for the preservice teachers.

As previously elucidated by several researchers (Foote & Cook-Cottone,2004; Proctor, Rentz, & Jackson (2001); Rushton (2003) preservice teachers who are not well-prepared for the realities of urban classroom placements are likely to have increased self-doubt and reduced efficacy. So the third implication arises from issues of cultural dissonance which were experienced by student teachers especially during field placements in urban contexts. Based on this finding, the student teachers who will be completing their assignment in urban contexts need more exposure to the realities of urban classrooms and communities earlier in the program. Maybe going into the schools and interacting with students, parents, and teachers one-on-one during tutoring sessions or extracurricular activities might help the student teachers to become more familiar

and comfortable with this unknown environment. This in turn could possibly address some of the challenges which these student teachers faced in dealing with issues of cultural and academic diversity within the classroom, since they would become cognizant much earlier in the program about possible challenges. University classroom instruction and methods courses would seem less in a vacuum, since the student would be able to relate reality to theory. In other words, Professional Knowledge and Outcome Expectations would be enhanced earlier and for a longer period of time. Interacting more closely with parents and community prior to student teaching should help to dispel some of the student teachers' negative beliefs about the powerful influences of Home Environment and External Causality. These supports could include weekly sessions both within the community as well as at the university where student teachers talk about their experiences and professionals share ways in which some of these challenges might be tackled.

Following on from the previous implication, it is also important that teacher preparation programs whose mission is provision of teachers for urban school districts, expose student teachers to schools in those districts. This is based on the premise that those student teachers who completed their student teaching assignment in the School District of Philadelphia were more likely to be considering a teaching position there, even if not at the same school. Teacher preparation programs should also recruit local candidates who live and have gone to school in these urban

communities, and are familiar with the complexities of urban life, since it is these teacher candidates who also are more likely to want to teach in the urban high-poverty schools in their own communities, and which are in desperate need of teachers. In addition, recruitment of more male teachers may prove beneficial since male teachers despite not feeling as effective as their female counterparts, were more likely to be considering a permanent position in the urban School District of Philadelphia.

It is also vitally important that the administration of teacher preparation programs work with the schools to ensure that the student teaching environment is a nurturing and supportive one. This is essential since it was those student teachers who felt more satisfied with the student teaching experience, and not regretting their decision to pursue a teaching career, who were more likely to want to teach in the more demanding environments. Adding to this, is that fact that confidence that the initial decision to pursue a teaching career was the right one, also enhances commitment to a long-term teaching career.

Since having supervisors who make regular observations and are available to address student teachers' questions and concerns strongly predict commitment to a lifelong teaching career, as well teaching intent location, administration of teacher preparation programs need to ensure that supervisors are properly trained and monitored by the program. These supervisors should also provide

regular, useful positive feedback and encourage the student teacher to reflect on his or her teaching.

Finally, the greatest challenges for student teachers are those challenges related to classroom management and discipline, student motivation, and dealing with culturally diverse student populations. Teacher preparation programs must revisit their pre-program curricula to ensure that student teachers are given copious opportunities to observe, learn about and practice classroom management strategies and interact with diverse student populations in real world situations before student teaching.

Recommendations for Further Research

Although this analysis did serve to answer some questions concerning the student teaching experience in different locations there are some recommendations for further research. This includes an analysis of student teaching experiences from the perspective of the two other members of the student teaching triad. This would give a more accurate picture of this experience. More details about the actual classroom to which student teachers were assigned in terms of cooperating (mentor) teacher experience and other demographic details about the students in the class, should be included in future analyses. It is also recommended that more qualitative inquiry methodologies, such as focus groups and interviews, be incorporated into future studies of this nature.

Other areas for further research include investigation of differences in overall and task-specific preparedness, in teaching

efficacy, and in teaching commitment between student teachers completing clinical practice at different grade levels, and also how gender differences contribute to the reality of the student teaching experience. These recommendation are based on findings that showed males and females, and elementary and secondary certification candidates demonstrated differential development especially of general teaching efficacy and intentions to teach in an urban environment.

The influence of opportunities provided prior to student teaching to observe teachers and students in various contexts, and to talk about the impact of these observations on personal feelings of competence, as well as the impact of peer observation and feedback might be an important and useful addition to the knowledge base, since vicarious experiences were important contributors to preparedness development.

Finally, this study has demonstrated the importance of the student teachers' positive emotional state to commitment to a long-term teaching career and to the individual teacher's belief in the more powerful influence of schools and teachers on student academic achievement over and above that of home and family. Since so much of the professional knowledge as well as development of positive emotions concerning a teaching career is acquired prior to student teaching, the impact of an effective, caring program faculty on the development of teaching efficacy and commitment might also be an additional area for further research.

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APPENDICES

APPENDIX A

EXCERPTS FROM:- RULES AND REGULATIONS

TITLE 22. EDUCATION

PART XVI. STANDARDS

CHAPTER 354. PREPARATION OF PROFESSIONAL EDUCATORS

GENERAL PROVISIONS

§ 354.25. Preparation program curriculum.

(d) The professional educator program shall have sequential field experiences that may begin as early as the initial semester of college enrollment, prior to student teaching, internships, and clinical experiences, which provide candidates with opportunity to:

   (1) Apply principles and theories from the program design to actual practice in classrooms and schools.

   (2) Study and practice in a variety of communities, with students of different ages, and with culturally diverse and exceptional populations.

(e) Field experiences shall:

   (1) Include frequent observation and consultation with cooperating teachers and school administrators fluent in the institution's education philosophy.

   (2) Be fully supported by the preparing institution's faculty.

   (3) Be an integrated part of the professional education curriculum and shall be consistent with the overall program design.

   (4) Encourage reflection by candidates.

   (5) Include evaluation and feedback from higher education faculty, public or nonpublic school faculty, and peers.

(f) The preparation program shall be designed to provide a minimum 12 week fulltime student teaching experience under the supervision of:

   (1) Program faculty with knowledge and experience in the area of certification.

   (2) Cooperating teachers trained by the preparation program faculty and who have the following:

      (i) The appropriate professional educator certification.

(ii) At least 3 years of satisfactory certificated teaching experience.

(iii) At least 1 year of certificated teaching experience in the school entity where the student teacher is placed.

§ 354.26. Collaborative programs.

(a) The preparing institution shall collaborate with higher education faculty, public school personnel, and other members of the professional education community to design, deliver, and facilitate effective programs for the preparation of professional educators and to improve the quality of education in schools. The evidence that this standard is met includes the following:

(2) The preparing institution develops agreements with public and nonpublic schools and cooperating professional educators to ensure:

(i) Student teaching, internships and other field experiences are collaboratively designed and implemented.

(iii) Cooperating professional educators involved in student teaching, internships, and clinical experiences are trained by the preparing institution to assist, guide, and evaluate the performance of student teachers and individuals who are serving in a clinical experience or internship.

(b) The preparing institution shall develop collaborative relationships, programs, and projects with public and nonpublic schools, to develop and refine knowledge bases, to consult, and to conduct research to improve the quality of education.

Please note: The official text of Chapter 354 can be found in the *Pennsylvania Bulletin*, Volume 30, No. 41, October 7, 2000. Retrieved from http://www.pabulletin.com/secure/data/vol30/30-41/1719.html

APPENDIX B

Inter- Correlational Analysis of the Teaching Efficacy dimensions

Correlational analyses were performed to investigate the nature of the relationship between the four teacher efficacy variables which had resulted from factor analysis of the Teacher Efficacy Scale *[TES]* to determine if significant relationships existed. These results are presented in Table B1.

Table B1. Inter-Correlational Analyses of PTE and GTE for the *TES*

	Personal TE		General TE	
	PK	OE	HE	EC
Professional Knowledge(PK)		.532**	−.204**	−.052
Outcome Expectations(OE)			−.048	−.025
Home Environment(HE)				.487**
External Causality(EC)				

Note.
**   Correlations significant at 0.01 level

The two personal efficacy factors which assessed personal competence through *Professional Knowledge[PK]* and *Outcome Expectations[OE]*, were significantly positively correlated with each other. Student teachers with higher PK scores also tend to have higher OE scores.

The two general efficacy factors which assessed the teaching task at hand through *Home Environment{HE]* and *External Causality[EC]* were also

significantly positively correlated. Student teachers with higher HE scores also tend to have higher EC scores.

PK was highly significantly negatively related to *HE* indicating that the student teachers who believed that they possessed the necessary skills for their students to achieve success in their classrooms, where less likely to believe that students' home environment and family background were more powerful influences on student academic success than effective teachers. The correlation between *PK* and *EC* neared zero indicating that *PK* and *EC* were not related.

OE also neared zero correlation to both general efficacy factors, *HE and EC,* indicating that they are probably measuring different constructs.

APPENDIX C

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**Table C1.   Items supporting each Scale Relating to Sources of Efficacy
               Beliefs**
_____

SCALES RELATING TO MASTERY EXPERIENCES

***Preparedness to Perform Classroom Management and Instructional Tasks Scale
[MPCM]:-*** *The student teacher's perception that he or she has mastered
classroom management and instructional tasks (ά = 0.870)*
- Handle a range of classroom management or discipline situations
- Select and adapt curriculum and instructional materials

Preparedness to Teach Diverse Student Populations Scale [MPDS]:- *The
student teacher's perception that he or she has mastered the tasks of
teaching diverse student populations (ά = 0.791)*
- Special Needs Learners
- Culturally diverse learners

Preparedness to Perform Technology-related Teaching Tasks Scale [MPTT]:-
*The student teacher's perception that he or she has mastered the
technology-related teaching tasks (ά = 0.919)*
- Using technology to analyze student data (e.g. spreadsheets)
- Using camcorders, digital cameras, or scanners to prepare for class

***Challenges in Performing Classroom Management and Instructional Tasks
Scale [MCCM]:–*** *The student teacher's perceived degree of difficulty in
mastering classroom management and instructional tasks (ά = 0.801)*
- Classroom management/discipline
- Motivating students

Challenges in Teaching Diverse Student Populations Scale [MCDS]:– *The
student teacher's perceived degree of difficulty in teaching diverse
student populations (ά = 0.630)*
- Dealing with learning disabled students
- Dealing with culturally diverse learners

SCALES RELATING TO VICARIOUS EXPERIENCES

Opportunities to Learn about Student/Community Diversity Scale:- [VISD]–
*The student teacher's belief that the teacher preparation program provided
adequate opportunities to learn about student diversity and environmental
context. (ά = 0.866)*
- Identify and address learning needs and/or difficulties of students
- Gain knowledge about the communities of the students I am likely to
  teach

Cooperating Teacher as Role Model Scale [VICR]:- *The student teacher's belief that the cooperating teacher was a good role model. (ά = 0.860)*
- My cooperating teacher is an excellent teacher and a worthy role model.
- My cooperating teacher was a good model of innovative and effective instruction.

Opportunities to Learn about Management of Students Scale [VIMS]:- *The student teacher's belief that the teacher preparation program provided adequate opportunities to learn classroom management and instructional strategies for student motivation. (ά = 0.911)*
- Develop strategies for handling student misbehavior
- Develop curriculum that builds on students' experiences, interests, and abilities

SCALES RELATING TO VERBAL PERSUASION

Cooperating Teacher Verbal Persuasion Scale[VPCT]:- *The student teacher's belief that the cooperating teacher provided adequate, useful and encouraging feedback. (ά = 0.818)*
- My cooperating teacher provided adequate opportunities for discussing problems and concerns.

University-appointed Supervisor Verbal Persuasion Scale[VPSU]:- *The student teacher's belief that the university-appointed supervisor provided adequate, useful and encouraging feedback. (ά = 0.803)*
- My university-appointed supervisor often provided feedback on my teaching that helped me to develop an ability to write about and improve on my teaching performance.

Teacher Prep Program Faculty Verbal Persuasion Scale[VPPF]:- *The student teacher's belief that the teacher prep program faculty provided adequate, useful and encouraging feedback. (ά = 0.784)*
- My teacher prep program faculty often encouraged me to reflect on my teaching and subsequent student learning.

_____

_____

Table C2. Items supporting each Scale Relating to Contextual Variables at the Field Sites
_____

Coop as Mentor Scale[CTMS]:– *The student teacher's belief that the cooperating teacher was supportive.(ά = 0.799)*
  - My cooperating teacher was helpful in helping me understand the school location and school culture (e.g., discipline code, professional norms).

Principal as Leader Scale[CPLS]:– *The student teacher's confidence in the principal's ability to lead effectively.(ά = 0.817)*
  - The school administration's behavior toward the staff is supportive and encouraging.
  - I like the way things are run at this school.

Principal as Communicator Scale[CPCS]:– *The student teacher's confidence in the principal's ability to communicate with staff and students. (ά = 0.810)*
  - The principal lets staff members is expected of them.
  - The principal knows what kind of school he/she wants and has communicated it to the staff.

Teacher–Teacher Interaction Scale[CTTI]:– *The student teacher's perceptions of a cooperative, friendly, efficient, satisfied teaching staff at the field site. (ά = 0.826)*
  - The teaching staff like it here and are generally satisfied.
  - Teachers here actively support and mentor new teachers.

Teacher–Student Interaction Scale[CTSI]:– *The student teacher's perceptions of a disciplined student body whose teachers had high expectations for them. (ά = 0.893)*
  - Teachers in this school have high expectations for their students.
  - The level of student misbehavior in this school does not interfere with my teaching.

University Supervisor Efficiency Scale[CUSE]:– *The student teacher's belief that the university-appointed supervisor was helpful, supportive and knowledgeable about the program's expectations and available. (ά = 0.736)*
  - My supervisor was available to talk with me when I had questions or concerns about teaching.
  - My supervisor was helpful in assisting me in securing the instructional resources and materials I needed for classroom instruction.

Availability of Resources Scale[CAVR]:– *The student teacher's perceived degree of challenge in accessing resources at the field site. (ά = 0.832)*
  - Instructional materials to use during lessons (e.g. text books, worksheets)
  - Consumable materials and necessary classroom supplies
_____

APPENDIX D

Table D1.   List of assigned codes for Predictor Variables

Mastery Experiences Variables

Feeling Prepared

- Adequacy of early field experiences in familiarizing student teacher with professional expectations (AdFE)
- Preparedness to teach academically and culturally diverse student populations (MPDS)
- Preparedness to perform classroom management tasks and use instructional strategies(MPCM)
- Preparedness to perform technology-related teaching tasks (MPTT)
- Preparedness to teach in community in which the school is located (COMM)

Feelings of Challenge

- Degree of challenge with classroom management and use of instructional strategies (MCCM)
- Degree of challenge with teaching diverse student populations (MCDS)

Actual hands-on experience

- Number of full-period lessons taught during student teaching (FPLT)
- Number of days spent with complete responsibility for classroom instruction (CRCI)

Emotional Arousal Variables

Positive

- Satisfaction with the Student Teaching Experience (SaST)
- Happy with the decision to pursue teaching as a profession (RTC)
- Feeling safe at the student teaching site (SAFE)

Negative

- Feeling or anticipating teaching to be stressful occupation (STR)

Table D1.   contd.

Vicarious Experiences Variables

Mentor Role Model

- Belief that the cooperating teacher was a good role model (VICR)

Observation of classrooms

- Opportunities provided before student teaching to learn about student and community diversity (VISD)
- Opportunities provided before student teaching to learn about classroom management and instructional strategies (VIMS)

Verbal Persuasion Variables

- Feedback/encouragement provided by the cooperating teacher (VPCT)
- Feedback/encouragement provided by the university-appointed field supervisor (VPSU)
- Feedback/encouragement provided by the teacher preparation program faculty (VPPF)
- Feedback/encouragement provided by other student teachers at the site (VPST)

School Site Variables

School Climate

- Support/mentoring provided by cooperating teacher (CTMS)
- Belief that the supervisor was efficient (CUSE)
- Confidence in principal's ability to lead (CPLS)
- Confidence in principal's ability to communicate (CPCS)
- Positive teacher-student interactions (CTSI)
- Perceptions of cooperative, satisfied teaching staff(CTTI)
- Challenge in accessing resources CAVR)

School Context

- Poverty Level of School (POV)   *Low = 1   High =2*
- Location (LOC)   *Urban = 1   Suburban =2*

<u>Table D1.   contd.</u>

Design of Field Placement

- Single versus cohort placement(CHRT)

    Single = 1   *Peer Cohort =2*

- Teaching at a school selected by student teacher (CHSN)

    No = 1   *Yes = 2*

- Completion of practicum experiences at the same school (FMLR)

    No = 1   *Yes = 2*

Student Teacher Personal variables

- Sex (SEX)

    Female = 1   *Male = 2*

- Ethnicity(ETHN)

    Caucasian = 1   *Other ethnicities = 2*

- Certification Pathway (PATH)

    Undergraduate = 1   *Graduate = 2*

- Certification Level Sought(CRTL)

    Secondary = 1   *Elementary = 2*

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APPENDIX E

Table E1. Correlational analysis between predictor efficacy sources variables and outcome efficacy scores

URBAN FIELD SITES
Criterion Teacher Efficacy Variables

Predictor Variables	PK	OE	HE	EC
Emotional Arousal				
SaST	.298**	.137*	-.180**	
RTC	.183**		-.315**	-.168**
STR	-.211**		.231**	.212**
SAFE			.168**	
Teaching Challenges				
MCCM	-.230**		.262**	.227**
MCDS			.225**	.155**
Contextual Challenges				
CAVR			.261**	.184**
CTSI	.218**	.143*	-.335**	-.204**
CTTI	.287**	.117*	-.119*	
POV(L/H)				
Personal				
SEX (F/M)			.204**	.172**

<u>Note</u>
** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Table E1.   contd.

SUBURBAN FIELD SITES
Criterion Teacher Efficacy Variables

Predictor Variables	PK	OE	HE	EC
Emotional Arousal				
SaST	.285**	.199*		
RTC	.458**	.213*		
STR				
SAFE				
Teaching Challenges				
MCCM	-.185*			
MCDS				
Contextual Challenges				
CAVR				
CTSI	.423**			
CTTI	.419**	.322**		
POV(L/H)			-.239**	
Personal				
SEX (F/M)				

Note
** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

APPENDIX F

Discriminant Function Analyses for Teaching Intentions: Teaching in the School District of Philadelphia (SDP) and Teaching at Student Teaching School (TST)

Table F1. Structure Matrix for Teaching in School District of Philadelphia (SDP)

Structure Matrix for SDP		
	Function 1	**Function 2**
VICR	**.578***	.120
SatisSTExper	**.528***	.060
CCSS	**.390***	−.128
VPCT	**.388***	−.139
CTTI	**.374***	−.118
CTSI	**.360***	−.036
CPLS	**.320***	−.225
CAVR	**−.233***	.089
MCCM	**−.214***	.154
Find tch stressful	**−.199***	.070
EthnWNW	**−.191***	.002
SchSiz	**.162***	.035
MPCM	**.138***	−.076
PreptchComm	**.135***	−.045
ExCrec	**.119***	−.047
CPCS	**.114***	−.051
PractSame	**−.110***	−.046
VPcohST	**−.108***	.044
RTC	**.089***	.047
PrepFT	**.083***	−.021
UGGrad	**.080***	−.041
MinPopln	**−.079***	−.034
VIMS	**.078***	−.028
Actual# ST	**−.076***	.010
recfeelsafe	**.071***	−.058
YOB	**−.066***	.028
HErec	**.045***	−.031
Q43preKrec	**.012***	−.002

Table F1.contd.

Structure Matrix for SDP contd.		
	Function 1	Function 2
AdeqFE	-.125	.278*
VPSU	.016	-.227*
VPPF	.175	-.226*
MPTT	.102	-.212*
MEprepTchgDivStud	.120	-.211*
MEChallTchgDivStud	-.053	.195*
Q45Lesons tught	.063	-.195*
PKrec	.092	.189*
Q21SpkOthLang	-.058	.168*
CUSE	.138	-.154*
VISD	.062	-.148*
Q44ComplResp	-.001	-.143*
Q17Sex	.046	-.142*
ETrec	.045	.101*
SchSel REC	.049	-.096*
FieldPlaceREC	-.006	.072*
Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions Variables ordered by absolute size of correlation within function.		
*. Largest absolute correlation between each variable and any discriminant function		

Table F2.   Structure Matrix for Teaching at Same School (TST)

Structure Matrix for TST		
	Function 1	Function 2
VICR	.578[*]	.120
SatisSTExper	.528[*]	.060
CCSS	.390[*]	-.128
VPCT	.388[*]	-.139
CTTI	.374[*]	-.118
CTSI	.360[*]	-.036
CPLS	.320[*]	-.225
CAVR	-.233[*]	.089
MCCM	-.214[*]	.154
Find tch stressful	-.199[*]	.070
EthnWNW	-.191[*]	.002
SchSiz	.162[*]	.035
MPCM	.138[*]	-.076
PreptchComm	.135[*]	-.045
ExCrec	.119[*]	-.047
CPCS	.114[*]	-.051
PractSame	-.110[*]	-.046
VPcohST	-.108[*]	.044
RTC	.089[*]	.047
PrepFT	.083[*]	-.021
UGGrad	.080[*]	-.041
MinPopln	-.079[*]	-.034
VIMS	.078[*]	-.028
Actual# ST	-.076[*]	.010
recfeelsafe	.071[*]	-.058
YOB	-.066[*]	.028
HErec	.045[*]	-.031

Table F2.contd.

Structure Matrix for TST contd.		
	Function 1	Function 2
AdeqFE	−.125	.278*
VPSU	.016	−.227*
VPPF	.175	−.226*
MPTT	.102	−.212*
MEprepTchgDivStud	.120	−.211*
MEChallTchgDivStud	−.053	.195*
Lesons tught	.063	−.195*
PKrec	.092	.189*
SpkOthLang	−.058	.168*
CUSE	.138	−.154*
VISD	.062	−.148*
ComplResp	−.001	−.143*
Q17Sex	.046	−.142*
ETrec	.045	.101*
SchSel	.049	−.096*
FieldPlace	−.006	.072*
Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions Variables ordered by absolute size of correlation within function.		
*. Largest absolute correlation between each variable and any discriminant function		