Copyright

by

Rebecca Larkin

May, 2012

TEACHER RETENTION THROUGH FUND FOR TEACHERS FELLOWSHIPS

A Dissertation Presented to the Faculty of the College of Education University of Houston

In Partial Fulfillment of the Requirements for the Degree

Doctor of Education

by

Rebecca Larkin

May, 2012

ACKNOWLEDGEMENT

I would like to express my deepest gratitude for the multitude that made it possible for me to complete this project. First, I must thank Fund for Teachers for generously allowing me access to research its program. The FFT staff could not have been more welcoming or helpful, particularly Perrin Worrell who first introduced me to FFT and Stephanie Ascherl, who was instrumental in the implementation of the survey.

I sincerely appreciate the encouragement and assistance of all my friends and colleagues at University of Houston and Second Baptist School, especially, Blanca Snyder, Brenda Rhoden, and Jeff Williams. The Educational Leadership and Cultural Studies faculty were exceptionally helpful throughout the program, and my dissertation committee Dr. Patricia Holland, Dr. Catherine Horn, Dr. Mimi Lee, and Dr. Steven Busch were highly supportive. My profoundest thanks go to Dr. Patricia Holland and Dr. Catherine Horn who both went well beyond the call-of-duty to see me through to the end of this project.

Finally, I would like to thank my family for their love and patience which urge me forward in every venture I attempt. I especially owe my husband, Lee, the deepest gratitude for his reassuring patience and unbounded love which sustain me daily.

DEDICATION

This work is dedicated to all K-12 classroom teachers and to the staff and donors of Fund for Teachers who support teachers in their chosen profession.

TEACHER RETENTION THROUGH FUND FOR TEACHERS FELLOWSHIPS

An Abstract of A Dissertation Presented to the Faculty of the College of Education University of Houston

In Partial Fulfillment of the Requirements for the Degree

Doctor of Education

by

Rebecca Larkin

May, 2012

Larkin, Rebecca. "Teacher Retention through Fund for Teachers Fellowships." Unpublished Doctor of Education Dissertation, University of Houston, May, 2012.

Abstract

Researchers have identified that experienced teachers are essential to raising student achievement and that effective professional development is a key element in both retaining classroom teachers and raising student achievement. However, researchers have focused primarily on the traditional sources of professional development offered through schools, districts, and university programs. Little attention has been given to the effects of teacher-oriented, non-profit foundations that offer professional development outside of the traditional educational community.

Fund for Teachers, a nonprofit organization, awards teachers grants of up to 5000 dollars for summer fellowships to engage in personally designed professional development. This study surveyed a random sample of the over 3500 participants who had received FFT grants between 2001 and 2008 to discover the effect of the FFT grant experience on relational status, and teacher retention in the classroom.

After factor and multiple regression analyses, the findings indicate the effects of the FFT grant experience and teacher identity had significant positive effects on teachers' relational status within the educational community. And, more importantly, the fellowship's effect on teachers' classroom practice was significantly predictive of the participants' job satisfaction.

This study contributes to professional development and teacher retention research in two ways. Its findings support the current understanding of the powerful role effective, professional development can play in increasing teachers' job satisfaction. The study also expands that understanding and identifies the potential contribution to teacher retention by non-profit foundations that provide teacher-designed, effective professional development.

TABLE OF CONTENTS

| Chapter | | Page |
|---------|---|------|
| Ι | INTRODUCTION | 13 |
| | Purpose of Study and Research Questions | 19 |
| | Background of Study | 20 |
| II | LITERATURE REVIEW | 22 |
| | FFT Professional Development Model | 24 |
| | Teacher Attrition | 28 |
| | Teacher Retention | 29 |
| | Effective Professional Development | 31 |
| | Relational Status | 34 |
| | Summary | 36 |
| III | METHODOLOGY | 38 |
| | Participants | 39 |
| | Instrument | 40 |
| | Data Collection | 42 |
| | Analysis | 43 |
| | Validity and Reliability | 44 |
| IV | RESULTS | 46 |
| | Sample Description | 46 |
| | Study Analysis | 50 |
| | Limitations | 63 |

| V D | DISCUSSION AND CONCLUSION | 67 |
|--------|-------------------------------|-----|
| | Findings | 67 |
| | Implications | 79 |
| | Further Research | 80 |
| | Conclusion | 81 |
| REFERE | NCES | 83 |
| APPEND | IX A FUND FOR TEACHERS SURVEY | 93 |
| APPEND | IX B SURVEY COVER LETTER | 110 |
| APPEND | IX C SURVEY REMINDER POSTCARD | 112 |

LIST OF TABLES

| Table | | Page |
|-------|--|------|
| 1 | Fellows' Ages | 47 |
| 2 | Fellows Ethnicity | 47 |
| 3 | Educational Certification | 48 |
| 4 | Degree at Time of Application | 48 |
| 5 | School Enrollment | 49 |
| 6 | School Type | 49 |
| 7 | School Setting | 49 |
| 8 | Factor Analysis Results | 51 |
| 9 | Factor Loadings and Cronbach's Alpha of survey items | 52 |
| 10 | Regression Variables Mean and SD | 56 |
| 11 | Research Question 1: Results of Regression Analysis | 57 |
| 12 | Research Question 2: Results of Regression Analysis | 59 |
| 13 | Teacher Design of FFT Fellowship | 60 |
| 14 | Fellows' years of classroom experience at time of application and | 61 |
| | survey | |
| 15 | 2001-07 Annual FFT cohort years of classroom experience at time of | 62 |
| | application and survey | |

LIST OF FIGURES

| Figure | | Page |
|--------|-----------------------------------|------|
| 1 | Elements of FFT Grant Application | 25 |

Teacher Retention through Fund for Teachers Fellowships

Introduction

An exhilarating evening, it was the most fun I had ever experienced in four hours. From six to ten, we awarded teachers a total of over 400,000 dollars the Houston area Fund for Teachers had raised over the previous year to fund summer projects. Fifteen to twenty small committees of teachers, school administrators, and corporate executives who had read a variety of proposals, selected the best and most promising of the studies, and awarded each teacher selected as much as 5000 dollars to pursue his or her personally designed program of professional development over the summer.

The selected programs encompassed a variety of designs that focused on studentteacher relations, discipline content, and/or pedagogy. These proposals included language immersion and research; exploration of cultural and social traditions around the world; workshops on teaching methods for special-needs students; teaching techniques in music, performance art, and the visual arts; correlation of math skills and ancient building techniques; techniques for motivating reluctant and immigrant students; and a multitude of science experiments in biology, chemistry, physics, and geology. The depth and breath of the programs were staggering; the quality of the proposals impressive. It was clear to me these are the kind of teachers who would excite students with their enthusiasm for their discipline and model life-long learning. These were the kind of teachers our students need and with whom our students would excel.

Believing that education is a teacher-driven process, Raymond Plank, now retired as CEO of Apache Corporation, founded Fund for Teachers (FFT), a nonprofit organization, in 2001. FFT seeks to reward K-12 teachers for the work they do everyday, supplement their professional growth and improve student achievement through the awarding of grants for teacher-designed professional development. These grants provide teachers with enriching summer experiences that schools and/or districts do not normally provide and teachers personally cannot afford (FFT Web site, 2012). Along with the goals of rewarding teachers and improving classroom instruction, FFT seeks to improve teacher retention in the classroom (Boston Consulting Group, 2007).

There is no substitute for the enthusiastic, experienced teacher who connects with students and who can inspire in them the same enthusiasm for learning (Long & Hoy, 2006; Long & Moore, 2008). Along with the effect of teachers' enthusiasm, classroom experience is also important. Research demonstrates experienced teachers raise student achievement more than do novice teachers (Clotfelter, Ladd & Vigdor, 2006; Rockoff, 2004). However, many dissatisfied teachers change jobs either out of the classroom into administration or out of education all together, and increasing teacher attrition bequeaths students with novice teachers year after year.

The dwindling supply of experienced teachers has been the subject of many studies and according to these findings, 40-50% of teachers leave education within the first five years, and those figures have been increasing (Boe, Cook & Sunderland, 2008; Ingersoll, 2003). Researchers have also confirmed that the traditional and alternative certification programs produce more than sufficient numbers of teachers to fill classroom needs; however, the problem lies in the high turnover rate of teachers migrating from school to school, going into administration, retiring early, and leaving education altogether (Ingersoll, 2002). Adding to these causes of attrition, current sociological research reveals that younger adults entering the workforce over the last decade, including those going into education.

High faculty turnover engenders several negative outcomes, but three distinct categories of those consequences are (a) student achievement, (b) school stability, and (c) financial costs. The most significant of these losses associated with high faculty turnover is its impact on student achievement. Current research establishes the importance of teachers' personal influence on student achievement and reveals that teachers' classroom experience has a direct and increasing effect on achievement (Clotfelter, et al., 2006; Rockoff, 2004). Along with teacher experience, the level of teachers' job satisfaction directly influences students' academic achievement; greater job satisfaction results in more instructional support and a better learning climate for students (Opdenakkera & Dammea, 2006).

The negative consequences of high faculty turnover do not end with loss of potential student achievement but can also be seen in the lack of school stability – disruption and poor overall school performance (Ingersoll, 2001). School instability as a result of high faculty turnover harbors a two-fold detriment: more novice teachers and the forfeiture of potential teacher mentors. Novice teachers are not as effective as are more experienced teachers, and they have a higher rate of attrition especially when schools lack strong induction programs (Ingersoll, 2002, 2003). A strong mentoring program is one of the most important elements in a new teacher's induction, and positive early career experiences, in turn, increase teacher retention (Darling-Hammond, 2003; Ingersoll, 2001, 2002). Retaining experienced teachers in the classroom is vitally important not only to adequately staff schools but also to provide teacher educators and mentors for

novices (Boe, Cook, & Sunderland, 2007; Darling-Hammond, Macdonald, Maritza, Snyder, Whitford, Rusco, et al., 2000).

Finally, the total monetary cost of teacher attrition for schools, districts, and the nation as a whole soars into the billions of dollars (Barnes, Crowe, & Schaefer, 2007; Darling-Hammond & Sykes, 2003; Ingersoll, 2003; Shockley, Guglielmino, & Watlington, 2006). Cost analyses of teacher turnover in individual districts across the country reveal that replacing a departing teacher – recruiting, hiring, and training – can range from a few thousand dollars into the tens-of-thousands of dollars per teacher. (Barnes, et al., 2007; Shockley, et al., 2006; Texas Center for Educational Research, 2000). The researchers' estimations of exact costs for teacher attrition and replacement varies, but even at the lowest estimated figures, the financial loss to education is staggering. Combating attrition and keeping experienced teachers in the classroom longer are important issues that must be confronted for the sake of school reform: the potential for student achievement, the stability and strength of schools, and the huge monetary losses call policy-makers and school/district administrators to account (Barnes, et al., 2007; Darling-Hammond, 2000, 2003; Ingersoll, 2001).

Clearly the question of how to keep energized, intellectually driven, and qualified teachers in the classroom concerns school administrators at every level. The elements that lead to classroom teacher retention have been investigated for virtually every grade level, school type, and discipline taught. In research controlling for teacher and school characteristics, teachers' job dissatisfaction encompasses a variety of issues, but key among the reasons mentioned most often are (a) inadequate administrative support, (b) lack of faculty input into decision-making, (c) teacher autonomy, (d) poor social respect,

and (e) adequate professional development (Borman & Dowling, 2008; Guarino, Santibañez, & Daley, 2006; Ingersoll, 2001; Ingersoll, 2003; Ingersoll & May 2010; Johnson, Baldacci & Project of the Next Generation of Teachers, 2006; McGrath & Princiotta, 2005; Nieto, 2003; Petty, 2007). The general lack of prestige of the teaching profession as well as lack of respect for its complexity and for their personal professional expertise frustrates teachers, erodes their professional identity, and leads them to seek careers that offer more respect or prestige in administration or outside of education (Ingersoll 1997; Ingersoll and Perda, 2008).

The strength and depth of teachers' professional identities contribute to their positive attitudes towards teaching, and these identities are highly influenced by teachers' work environment (Flores & Day, 2006). More importantly, this sense of professional identity is a key element in sustaining teacher's enthusiasm for and commitment to the classroom (Day, Elliott, & Kington, 2005; Day, Kington, Stobart, & Sammons, 2006). Closely linked with this identity is the teachers' commitment to professional learning, its content, and its effect on student achievement (Day, et al., 2005; Day, Kington, et al., 2006).

Well-designed, effective professional development can equip teachers with the tools to improve their practice, provide intellectual stimulation, improve student achievement, re-energize their passion for teaching, and retain them in the classroom longer (Cochran-Smith & Lytle 2001; Cohen, 2010; Day, et al., 2005; Hairrell, Rupley, Edmonds, Larsen, Simmons, Willson, et al., 2011; Gaziel, 1995; Goodnough, 2010; Petty, 2007; Nieto, 2003). Current research identifies several elements that are critical to effective professional development: teachers' input on design, active learning, content

orientation, duration in the range of 30-40 hours, and opportunities for self-reflection and collaboration (Desimone, 2009; Lowden, 2006). Professional development can cover both skill development and improved knowledge base, but these needs vary with the individual teachers. As professionals, teachers move through a variety of career phases that require differing approaches in their continuing education: novices require mentoring; more experienced teachers meet new challenges of responsibility; mid-career teachers may stagnate or become disenchanted; and veteran teachers continue to require intellectual stimulation (Baker, 2007; Dall'Alba & Sandberg, 2006; Day, Stobart, et al., 2006). Teachers need administrative support to find and/or design the kind of professional development that addresses both their personal and students' needs in order to keep the curriculum fresh and their classroom practice dynamic.

Attending to teachers' professional development needs through individualized, active learning for an extended duration can mean additional expense. School and district administrators spend a large percentage of their budgets on the recruitment and hiring of teachers (Barnes, et al., 2007; Miles, Odden, & Fermanich, 2004; Shockley, et al., 2006; Texas Center for Educational Research, 2000); however, they seldom offer the support of time and finances to make extended, individualized, teacher-designed professional development possible (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009).

Teachers need to be accorded the professional respect and freedom to evaluate their personal practice, assess their individual needs, and design the line of study that will best suit them (Boote, 2006; Pearson & Moomaw, 2006; Petty, 2007). Although experienced teachers may want to stay in education, relatively low salaries and social status combined with poor administrative support and lack of intellectual stimulation force many aspiring and effective teachers to leave the classroom and move into administration for its higher salaries and greater respect or to leave education altogether (Ingersoll, 1997, Ingersoll &Perda, 2008; MacLure, 1993; Nieto, 2003). The intellectual challenge of effective professional development, greater professional autonomy and input into decision making, and the perception of respect from administration and/or the community can increase a teachers' morale, encourage them to stay in the classroom, and thereby, increase student achievement (Boote, 2006; Hanushek, Kain, & Rivkin, 2004; Williams, 2003).

Purpose of Study and Research Questions

This study surveyed 750 teachers who have received grants from FFT in order to discover the effects of the fellowship on teacher retention in the classroom. The parameters for the FFT fellowship address critical elements of an effective professional development program as outlined by current research which will be further outlined in the literature review. The purpose of this study is to analyze if and how the FFT grant experience might enhance teachers' relational status and impact teacher retention in the classroom. The research questions are:

1. How does the FFT grant's influence on teacher identity affect the fellows' relational status with peers and administration?

2. Does the FFT grant program encourage teachers to lengthen their career in the classroom?

Background of Study

In 2007, FFT engaged Boston Consulting Group (BCG) to conduct a program evaluation focused specifically on the FFT business model. They interviewed fellows, board members, and contributing partners to discover shared core objectives and assess the best organizational strategies for achieving those. They identified three core objectives the Board of Directors endorsed for the foundation: (a) rewarding teachers, (b) improving the quality of teaching, and (c) improving teacher retention rates.

In addition to identifying teacher retention as a major goal, the consultants found through their research and interviews of the participants that 60% of the teachers viewed professional development as significant to retention in the classroom. The FFT staff was interested in pursuing further research in the specific area of teacher retention. Establishing one of the expected outcomes of the FFT grant experience as teacher retention would add significant value to the FFT model for professional development and advance its efforts on behalf of teachers.

The FFT model for professional development and recognition of teachers is echoed by educational researchers calling for greater acknowledgement of and respect for teachers' educational expertise. The 2008 May/June *Journal of Teacher Education* published open letters from educational leaders and researchers whose work focuses on teacher education to proffer their advice to the incoming president of the United States on sustaining and improving teacher quality. The letters encourage the president to establish education policies that esteem teacher professional education and encourage states and districts to do more to provide better professional development opportunities (Clift, 2008; Lieberman & Mace, 2008). Several of the letters speak directly to individualizing professional development for teachers who could then select the programs best suited to their professional goals as well as having teachers become full partners with administrators and university researchers in reforming the educational system. (Berliner, 2008; Lieberman & Mace, 2008; Rotherham, Mikuta; & Freeland, 2008). And along the same lines as the FFT program, Arthur Levine (2008) encourages the president to establish a major scholarship for teacher study that would bring with it prestige and highlight the importance of the classroom teacher.

These ideas have already been put into practice through many non-profit organizations seeking to provide teachers with the types of recognition, reward, and professional development opportunities schools have been unable or unwilling to fund. It is essential to confirm if the FFT model of professional development whose design is based on best practices for professional development encourages teachers to remain in the classroom longer. The next section will detail the elements of the FFT professional development model as they reflect best practices in professional education for teachers.

The literature review will also develop the need for attention to teacher retention due to several factors: (a) increasing teacher attrition, (b) costs of recruiting and hiring of new teachers, (c) the effect of experienced teachers on student achievement, and (d) overall performance in the classroom. Additionally, this review will examine current research on two other elements pertinent to the FFT program. The first is increasing teacher retention through effective professional development, and the second is the effect of teachers' relational status within the educational community.

Literature Review

The complexity of teaching mandates that teachers master a variety of skills as they progress from novice to experienced and on to veteran teacher, and professional development can help teachers cultivate the range of academic and pedagogical skills necessary to their practice. Strong effective professional development addresses the needs of the individual whose classroom career is dynamic in nature and requires varying types of stimulus and/or sustenance at each phase (Dall'Alba & Sandberg, 2006; Day, Stobart, et al., 2006).

Mary Kennedy (2006) points out that the classroom teacher juggles several different and competing goals in every class (a) imparting academic content, (b) sustaining class energy and student engagement throughout the lesson, (c) maintaining class order, and (d) tending to his/her personal needs. Kennedy describes teachers as developing rules-of-thumb or habits from experience to address different scenarios; envisioning each lesson before it is taught, calling on a repertoire of methods, and finally, making adjustments throughout the lesson as they meet barriers. These myriad skills are developed and honed at varying levels throughout a teachers' career.

This complexity of classroom engagement echoes Schön (1983) and his model of "reflection-in-action" based on three elements: (a) types – examples and patterns from past experiences (b) rules – precepts or techniques, and (c) appreciative systems – assessment based on teachers' personal tenets and experience. Solutions to complex problems require the "knowing-in-action" and "reflection-in-action" of practitioners who can articulate the problem, recognize the goals and then frame the context in which the goals/solutions will be developed (Schön, 1983). This rigorous classroom practice defines

teachers as they stand in this intersection of academic content knowledge, pedagogical technique, the educational community and their personal lives.

Teacher identity both nourishes and directs the professional throughout his/her career as each teacher creates, enhances, and sustains his/her practice over the years. Researchers' analyses and definitions of teacher identity are numerous. Goodnough (2010) draws on Wenger's model of communities of practice to describe teachers as (a) negotiating within the educational community, (b) imagining new trajectories and solutions through self-reflection, and (c) aligning theirs and other's energies toward a common goal. Others describe teacher identity as a confluence of subject matter specialist, pedagogical expert, collaborator, biographer, etc. (Beijaard, Verloop, & Vermut, 2000; Hoffman-Kipp, 2008; MacLure, 1993).

Regardless if teachers are knowing and reflecting-in-action or juggling their functions and positions within their educational community, the consensus among researchers is teachers' demand for professional development that can address the unique combination of needs for the classroom professional (Cohen, 2010; Day, Kington, et al., 2006; Gaziel, 1995). Self-reflective teachers must be agents of their own learning in order to create the program that will best address their combination of needs in the classroom. Most importantly, effective professional development strengthens identity, and a strong teacher identity correlates with teachers' commitment to the classroom as well as their commitment to students (Day, et al., 2005). Teacher identity stands at the core of effective professional development.

FFT Professional Development Model

FFT seeks to provide exceptional professional growth opportunities that bring fresh perspectives, innovation, and expertise to the classroom. The foundation embraces the understanding that individualized fellowships as well as the prestige of winning the competitive award can help retain experienced teachers in the classroom (BCG, 2007).

The FFT grant application process is extensive; it helps direct the applicant in evaluating and articulating personal and professional needs that can be addressed through the fellowship. The teacher(s) must develop a thorough presentation of their vision for a personal professional development opportunity. The grant application encompasses several factors which fall into two general categories: (a) the material elements of developing and organizing the project and (b) the expected outcomes for the teacher, students, and school community. The material or tangible elements are those elements related directly to the execution of the project and include: the project description, plan for implementation, and budget narrative. The second portion of the application addresses the rationale and expected outcomes for the teacher, students, and school community. See chart Elements of FFT Grant Application for a detailed explanation of the application components.

Elements of FFT Grant Application

| Elements of Application | Explanation |
|------------------------------|---|
| Rationale and purpose | Key questions/themes the teacher(s) would like to pursue; |
| | what inspired the grant proposal |
| Project description | Detailed outline of activities including their applicability to |
| | the rationale; time frame for fellowship |
| Plan for implementation | Outline of proposed curricular implementation in the |
| | classroom with focus on content, student outcomes, |
| | effects on school-wide structures |
| Budget narrative | Detailed proposed costs for fellowship including |
| | transportation, lodging, food, fees and materials |
| Teacher growth and learning | How fellowship will answer proposed questions and goals; |
| | how fellowship will help applicant grow as a teacher |
| Student growth and learning | How fellowship will benefit students; describe skills and |
| | understanding to be acquired |
| Benefits to school community | Describe school-wide benefits; how fellowship will |
| | contribute to overall efforts to engage students |

For the FFT staff the selection process is an on-going learning experience; they urge selection committee members to make suggestions for applicants whose proposals do not succeed in receiving a grant. This process helps teachers learn both how to better articulate their goals and to refine their applications for the following year.

As is evident in the application elements, the contribution to the classroom is an important element. Teachers are required to implement their professional development work in the classroom, which includes their promise to return to the classroom for the year following their grant experience. Teachers' proposals can be submitted either singly or as a collaborative effort. With all identifying elements removed, the applications are initially reviewed by FFT staff to filter out weak applications, and then, the remaining applications are presented to a large selection committee of disinterested professionals outside of the FFT staff. These committee members may or may not be familiar with the program but many are affiliated with the program in some way: ex-fellows, Apache Corporation employees, school administrators, and volunteers (FFT Web site, 2012).

Previous FFT studies. FFT commissioned two program evaluations: one in 2006 by Magi Services which assessed teachers' FFT fellowship experiences and a second evaluation in 2007 by the Boston Consulting Group which assisted the Board of Directors in focusing its goals as well as developing a growth strategy for the FFT business model. In each of these evaluations teacher retention in the classroom was included as a secondary element among the primary components they investigated. These evaluations focused on analyses of the FFT recruitment and application process, content areas studied, implementation in the classroom, student impact, perception of the fellowship as a reward, and organizational structure and growth strategies for FFT (BCG, 2007; Magi, 2006).

In the fall of 2006, FFT contracted Magi Services to conduct a program evaluation of the organization and the process of fellow selection. The evaluators surveyed the entire population of 53 New York City teachers who had received grants for the summer of 2006 and used mixed methods (survey, focus groups, and case studies) to capture the fellows' response to the experience of applying for the grant, participating in the summer program, and returning to the classroom (Magi, 2006). Magi used a pre/post test model for the study to gather data on participants' anticipation and preparation for the fellowship, perceptions of the fellowship experience, attitudes toward teaching and the classroom, the impact of implementation on their students and schools as well as demographic information. The focus groups included both members of the selection committee and FFT fellows in order to assess applicants' perceptions, possible improvements of the selection process, and to gain greater insight into teachers' motivations to apply, how their learning was implemented as well as other benefits.

Overall, the Magi study found fellows perceived (a) significant improvement in their teaching practices, (b) held more positive attitudes about the teaching profession, and (c) perceived improved student learning. The Magi survey also included two Likert items directly addressing teacher retention: "I have a strong commitment to teaching" and "I plan to make teaching my lifelong career." The pre- and post-tests revealed a small but significant improvement in the teachers' responses to these two questions and were further discussed in light of teachers' overall improved attitudes toward the profession of teaching (Magi, 2006).

In 2007, FFT engaged Boston Consulting Group to conduct a program evaluation focused specifically on the FFT business model and to develop a growth strategy for the foundation. Using mixed methods (survey and focus groups), the consultants collected primary data on fellows' experiences, educational background, schools where they were employed as well as other demographic information (BCG, 2007). They interviewed fellows, board members, and contributing partners to describe and articulate core objectives and assess the best organizational strategies for achieving those. They identified three core objectives the Board of Directors had for the foundation, (a) rewarding teachers, (b) improving the quality of teaching, and (c) improving retention rates. In addition to identifying teacher retention as a major goal, the consultants found through their research and interviews of all stakeholders that 60 of the teachers viewed professional development as important to retention (BCG, 2007).

Teacher Attrition

Teacher attrition as well as teacher supply shortages are well documented and concern school and district administrations (Boe, 2007; Boe, et al., 2008; Ingersoll, 2001, 2003; National Partnership for Teaching in At-Risk Schools, 2005). Researchers analyzing data from the Schools and Staffing Survey as well as the Teacher Follow-up Survey estimate that over 40% of teachers leave the profession within the first five years of their career, and that those numbers are increasing (Boe, et al., 2008; Ingersoll 2003). Studies further describe teacher attrition in terms of a U-shaped graph where teachers are more likely to leave the profession both early in their careers, within the first five years and later as veteran teachers but prior to traditional retirement age for business careers (Ingersoll 2001, 2003; Guarino, et al., 2006). Borman and Dowling (2008) completed a meta-analysis of 34 teacher attrition studies with a total of 63 attrition moderators, and found that teacher attrition has begun to rise significantly in the fifth and sixth year of teaching, an effect signaling an ever-greater potential loss of experienced teachers.

Along with the already high price of poor student achievement and school instability, the financial aspects of teacher attrition are staggering (Benner, 2000).

Businesses that measure their success in profits are seriously concerned with the cost of employee turnover which is high in terms of dollars, time, and continuity (Ingersoll, 2003). The exact monetary cost of teacher attrition cannot be calculated, but estimates reveal that, at the least, the expense is great and could, in fact, be astronomical. Turnover expenditures include separation compensation, replacement, recruitment and/or hiring, training, and learning curve loss (Darling-Hammond & Sykes, 2003). The Texas Center for Educational Research (2000) found that based on Texas' annual turnover rate of 15.5% the state was losing between 329 million and 2.1 billion dollars per year. The cost per teacher replaced was between 8000 and 48,000 dollars. This costly upheaval consumes administrators' time in recruitment, interviewing, and training as well as disrupts school continuity.(Darling-Hammond & Sykes, 2003; Ingersoll, 2003).

Rates of attrition may vary among different ethnic groups, between genders, or based on school assignment; however, teachers' reasons for leaving the classroom generally fall into two categories, job dissatisfaction and the desire to pursue better job opportunities (Borman & Dowling, 2008; Ingersoll, 2003). The broad category of job dissatisfaction encompasses a number of aspects but according to researchers, the top reasons for teacher attrition include perceived lack of respect by the educational community and lack of personal fulfillment (Borman & Dowling, 2008; Guarino, et al., 2006; Ingersoll, 2003; Johnson, et al., 2004; McGrath & Princiotta, 2005; Nieto, 2003). *Teacher Retention*

Attrition is not always a negative if organizations are keeping the best employees and losing less effective ones, but potentially the most effective teachers leave at a greater rate. Schools are also losing teachers whose positions are more difficult to fill as in the math and science departments; teachers with these degrees that are more attractive to business (Borman & Dowling, 2008).

Teacher retention is a major element in creating school stability and an indicator of the organization's overall health (Borman & Dowling, 2008; Ingersoll 2001, 2003). Retention of experienced, effective teachers is important for a number of reasons, the most important of which are student achievement and school stability. In experiments with random assignment of teachers, researchers have found that teacher effect far out weighed school effects (Nye, Konstantopoulos & Hedges, 2004). Experienced teachers improve their effectiveness as demonstrated by increased student achievement (Rivkin, Hanushek, & Kain, 2005), and teacher effectiveness increases significantly from the first through the fifth year (Rivkin, et al., 2005). High teacher turnover in these formative years increases the instability of schools by generating a debilitating environment for student achievement as well as prompting a lack of strong teaching mentors for novice teachers (Ingersoll, 2001; Smith & Ingersoll, 2004).

Retention of effective teachers is the key to counter-acting each of these negative elements; however, retention is a complex issue of many layers requiring schools, districts, and governments to address working conditions, collaborative efforts, leadership opportunities, as well as personal professional development (Cochran-Smith, 2006). Any one of these elements is vitally important and justifies an in-depth study in itself. However, this research project focuses primarily on how effective professional development as provided by FFT contributes to greater teacher job satisfaction and retention through the fellowship.

Effective Professional Development

Teacher professional development has evolved rapidly in the last few decades. Thirty to forty years ago, teachers chose and pursued professional development independently, if at all, without the mandate or support of the school or district (Darling-Hammond, 2003). In the 1980s and 1990s, teacher professional growth was usually confined to inservice of the district- mandated, one-shot workshop approach (Darling-Hammond, 2000). What Schön (1983) called the "technical rationality" has been giving way in the last decade to research that focuses on the more individualized and reflective model of professional development (p. 21).

Elements of Effective Professional Development. Mary Kennedy (1999) reviewed 93 professional development studies, published between 1979 and 1996, which specifically examined student achievement effects and found two elements that confirm the ineffectiveness of the traditional forms of in-service. Kennedy found the form and structure of the program had little to no positive influence on students' achievement, and one very popular and widely accepted program in particular had negative effects. Kennedy's major finding in this study was that content-specific programs focused on subject matter knowledge and/or on student learning in a specific subject demonstrated the greatest gain in benefits to students.

In addition to condemning traditional models as ineffective, research in the last decade has made strides in identifying those elements that compose effective professional development (Darling-Hammond, 2000). Well-designed professional development should focus on the following attributes:

• planning by participants

- individual and organizational improvement
- intellectual challenge
- expansion of content knowledge
- promotion of continuous inquiry
- substantial commitments of time (longer duration of 40-50+ hours)
- greater funds.

Current research in the area of teachers' expressed needs and desires as well as research on effective professional development that increases student achievement demonstrate these elements are essential. (Blank, Alas, & Smith, 2008; Darling-Hammond & McLaughlin, 1995; Hairrell, et al., 2011; Garet, et al, 2001; Kennedy, 1999; Lowden, 2006).

Traditionally, professional development is provided and directed by the district or school administration, funded by government programs such as Title I and Title II and/or foundations such as the National Science Foundation. Professional development opportunities are also provided through partnerships with universities and professional organizations. Historically, institutions may pay for a faculty or conference workshop or help pay tuition for a graduate degree which in turn can help the teacher qualify for a higher salary; however, extended and highly individualized development opportunities have not been offered to teachers at large (Miles, et al., 2004).

Professional development models. Two models of teacher career development are important in undergirding the importance of the individualization of professional development. The first follows constructivist theory. Cochran-Smith and Lytle (2001) apply this knowledge-generation theory to teachers' knowledge of their practice, "the most significant questions about the purposes and consequences of professional development are connected to teacher agency and ownership" (p. 55). There is a shift with constructivist theory in that knowledge of practice is no longer transmitted to the teacher but is actually generated by the teacher through an:

inquiry as stance [that] permits closer understanding of knowledge-practice relationships as well as how inquiry produces knowledge, how inquiry relates to practice, and what teachers learn from inquiry within communities. (Cochran-Smith & Lytle, 2001, p. 48)

Constructivist theory facilitates adult learning and reflects the way in which teachers describe their personal identity which is as a teacher; teacher is not what they do but what they are and is a mirror of their personal passions which drive the acquisition of knowledge in their practice (Dana, Yendol-Hoppey, & Snow-Gerono, 2006).

Reflection as a significant component of the professional practice of teaching constitutes the second aspect of the individualization of professional development. Reflection is necessary for the growth of the individual, adds meaning to personal experience, and allows teachers to return to the classroom with a deeper understanding of their practice in education (Dall'Alba & Sandberg, 2006; Schön, 1983). This alternative model of teacher development demonstrates the importance of reflection and individualization. Through an extensive survey of empirical studies, Dall'Alba and Sandberg (2006) put forth a new model that contrasts with the traditional stages model of novice, advanced beginner, competent, proficient, and expert levels in professional skill development. Instead, they suggest a model using unfolding circularity which highlights the uneven development of performance skills among professionals. Teachers become proficient at different skills within their practice at varying times. This model uses horizontal and vertical axes to describe advancement of professional skill levels. The horizontal axis of the graph represents the acquired proficiency of the skill, and the vertical axis represents the deepening understanding of practice that may or may not accompany a specific skill acquisition:

Such a shift [in understanding of knowledge transfer] would mean promoting development of professional ways-of-being that can deal with the complexities, ambiguities, and dynamic change inherent in professional practice. (Dall'Alba & Sandberg, 2006, p. 401)

Teacher identity research also reinforces this model of career phases. Professional identity research describes the teacher's personal and professional identity as evolving over the length of the teaching career. In a study of 80 teachers, Beijaard, Verloop, and Vermunt (2000) found teachers' learning experiences had varied widely throughout their careers and that those experiences had differed both in areas of teaching expertise and within subject matter groups. In a mixed methods, longitudinal study of 300 teachers (both elementary and secondary) in 100 schools in England, researchers found that teachers' professional identities varied over the length of their careers and their professional identities varied over the length of their careers and their *Relational Status*

The general lack of prestige associated with a teaching career remains an issue for teacher retention (Ingersoll & Perda, 2008). Research demonstrates many teachers leave the classroom not because of low pay or because they have tired of teaching; teachers tend to leave the classroom because of the disparaging environment they sometimes face

within the educational community of administration and parents (Futernick, 2007). The respect of the administration and/or the community for teachers' expertise along with teachers' professional authority over their classroom practice are critical to their sense of personal professional identity and job satisfaction (Baker, 2007; Boote, 2006; Borman & Dowling, 2008; Day, Kington, et al., 2006; Ingersoll and Perda, 2008; Opdenakkera & Dammea, 2006). Teachers perceive the lack of administrative respect in a variety of ways, and the lack of support for effective professional development also undermines teachers' educational expertise and efficacy in the classroom. In an analysis of policy efficacy in promoting teacher excellence, McLaughlin (1984) recognizes the limited effectiveness of typical administrative and government policies (salary increases/merit pay, proficiency testing, mentors, career ladders, and teacher evaluations) because they "fail to address the incentives necessary to professional growth and neglect altogether the institutional context in which improved practices are supposed to occur" (p. 22).

At the heart of establishing effective professional development is strong administrative support for both personalized and corporate professional development. This type of administrative support fosters life-long learning that, in turn, leads teachers to embrace personal inquiry and action research which can be applied in their own classrooms. Attempting to create and sustain learning communities within schools, administrators look to professional development as a route for teachers to become part of a network of colleagues (Leiberman, 2000; Reynolds, Murrill, & Whitt, 2006). Administrative attention to a well-researched approach to teacher development through needs assessment, appropriate programs, and time for reflection and evaluation can lead to establishing learning communities which nurture a climate of inquiry and intellectual challenge within the school (Leiberman, 2000; Leiberman & Wilkins, 2006). *Summary*

Two of the often-repeated elements describing effective professional development are teachers' personal needs and involvement in designing the program. Teachers' needs are as individual as each classroom, assignment, and student body is unique (Little, 1993). School and district administrations need to recognize teachers as professionals who are capable of assessing their needs and designing appropriate programs for themselves (Kennedy, 1999; Monahan, 1993). Distinctive, exciting, and relevant professional development contributes to the sense of intrinsic reward as well as greater professional respect. In a 1997 survey of 930 elementary, middle, and high school teachers, researchers found teachers' job satisfaction was directly related to their perception of teaching as a profession with status and recognition for highly skilled work (Bogler, 2001). FFT incorporates virtually all of these elements research describes as necessary to effective professional development:

- individual improvement
- intellectual challenge
- expansion of content knowledge
- promotion of continuous inquiry
- planning by participants
- substantial commitments of time (longer duration of 40-50+ hours)
- greater funds.

The hopeful corollary of effective professional development is teacher retention. With the advent of well-funded and individualized professional development, teachers can develop research appropriate to their classrooms and disciplines, address individual intellectual and professional growth, as well as evoke professional recognition.

Methodology

This study on FFT and its effects on teacher retention stems from the findings of Magi Services and Boston Consulting Group who were employed by FFT to evaluate the fellowship program. A small pilot survey was conducted in spring and summer 2009 and the current survey reflects that one. This research differs from the Magi and BCG evaluations in several ways. Both of the previous studies were broad-based and looked at the entirety of the program from recruitment and selection to student achievement after the fellowship (BCG, 2007; Magi, 2006). These studies surveyed and interviewed fellows who had participated most recently in the program (within 1-2 years of following the fellowship) and in the case of the Magi evaluation, a very small geographic area, only 53 New York City fellows. The current study specifically addresses the effects of the FFT experience on teacher retention as well as other possible outcomes of professional development relating to teachers' career expectations that can contribute to greater retention.

Since 2001, over 4000 teachers across the United States have received grants for summer professional development from FFT. With FFT's assistance this study seeks to learn if FFT grants have served to produce greater teacher retention among FFT fellows and if so, for how long. Although the Magi survey instrument included two questions regarding teachers' commitment to teaching, these questions asked for the teachers' intent in making a lifelong commitment to the classroom. Current research demonstrates teachers in the 25-40 year-old age bracket are more likely to change jobs several times throughout their working lives (Lankard, 1995). Therefore, rather than examine teachers' intention to remain in the classroom for their lifetime, this study will concentrate on the numbers of teachers who have stayed in the classroom longer than they had originally intended and teachers' intentions to lengthen their careers in the classroom as result of the FFT experience.

This study was an extension of an earlier pilot survey conducted in 2009. The FFT staff distributed the survey via email to a small random sample of 200 of approximately 3500 teachers who had received an FFT grant between 2001 and 2008. The findings from this first survey indicated teachers' overall job satisfaction was increased by their experience through the fellowship. The initial study found teachers felt refreshed and energized by the FFT fellowship; they implemented new curriculum; they felt honored and respected by their colleagues and the community for their achievements; and they were motivated to remain in the classroom for a longer period.

Participants

This survey was sent to a random sample of 750 FFT fellows from across the nation who have received grants from the foundation between the years of 2001 and 2008. FFT recruits applicants through several regional partners, and the choice of local schools from which teachers are recruited depend on each regional partner's particular mission statement. Most of the partners are city or state-oriented government services or nonprofit organizations serving the public and/or independent schools and districts located within the boundaries of that region. One local FFT partner does not serve a geographic area: Expeditionary Learning Schools works with approximately 150 public and charter schools from around the country and recruits teachers to apply for FFT fellowships from only those schools. The FFT staff provided a complete alphabetic list of approximately 2600 fellows from 2001 through 2008 for whom they had viable contact

information. After taking the random sample of 750 from the list provided, it was found that eight of these fellows had additional errors in their contact information and so, were dropped from the sample for a final number of 742 fellows.

Instrument

The survey was developed using existing surveys of teachers' working conditions. Additionally, the FFT staff indicated a desire for more information on specific factors leading to teacher retention in the classroom as those factors might interact with the type of professional development they offered. I reviewed items from the Magi and BCG surveys (BCG, 2007; Magi, 2006) as well as two additional surveys used in multiple states across the nation. I reviewed the Teacher Working Condition (TWC) questionnaire developed by the New Teacher Center which has been used in several states and large school districts since 2002: Alabama, Arizona, Illinois, Kansas, Maine, Massachusetts, North Carolina, West Virginia, and Fairfax County, VA (New Teacher Center, 2009). I also reviewed the Arizona Teachers Working Conditions Survey distributed by the Center for Teaching Quality.

Focusing on four elements which reflected current teacher retention and professional development literature research, I developed questions to elicit fellows' responses concerning:

- personal satisfaction with their career
- intention to remain in teaching
- benefits perceived in the classroom
- sense of personal recognition, and respect.

From the Magi study, I used elements of its items on the effect on teaching practices and attitudes toward the teaching profession. Since I had access to only the BCG summary of findings, I reviewed the reported effects of how teachers perceived the FFT grant as a meaningful reward, the importance of continuing education as an element of teacher retention, and how fellows implemented their experiences in the classroom. I then turned to the TWC questionnaire form to create additional survey questions. Using the two teacher working conditions surveys, I specifically reviewed the sections on empowerment, leadership, and professional development to glean additional ideas for survey items and wording. The current instrument was designed to reflect the research questions, as identified in the first chapter, concerning teacher retention, relational status, and effects of professional development. Then, because this research specifically targets the effects of receiving the competitive FFT grant, I developed additional questions regarding the prestige of winning an award and how that may have affected the attitudes of administration and the community toward the fellow in terms of perceived respect. I was unable to find existing surveys or sample questions for the effects of prestige, so I used a similar format found in the empowerment and leadership sections of the TWC survey to develop those questions.

The resulting survey contains approximately 70 questions with 44 of those items using a five-point Likert scale (1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, and 5 = strongly disagree). These items were intended to elicit teachers' attitudes and/or changes in attitudes regarding the fellowship, its impact on them personally and professionally as well as classroom implementation of the fellowship (for text, see Appendix A). Additionally, fellows answered demographic questions on age, years of experience, marital status, type of school/district, grade level and discipline taught, race/ethnicity, and year of fellowship.

The FFT staff and I felt it would be clearer for the respondents if I wrote the survey questions in two different versions: one worded for participants who had remained in teaching and the other worded for survey participants who had left the classroom since completing their fellowship. One of the early survey questions asked if the respondent has remained in the classroom or has left teaching and/or education. If the respondent answered he or she has left the classroom, the survey switched to a parallel option worded in the past tense so the questions would be clearer. The questions on the two versions were the same with one exception. Respondents who had remained in teaching are asked their current plans to remain in the classroom, and respondents who had left the classroom or open-ended question at the end of the survey gave participants the opportunity to voice their opinions on either the fellowship experience or the survey.

Data Collection

The FFT staff sent me their most current listing of all teachers who had received grants since 2001 and for whom they had viable contact information for a total of 2614. Out of that population a random sample of 750 was selected and those names were returned to the FFT staff. Using Constant Contact, the FFT staff distributed the survey anonymously via email to the randomly selected fellows. The survey was initially launched in May 2010, with a cover letter from me explaining the purpose of the survey (for text, see Appendix B). Additionally, a postcard requesting their participation in the survey was mailed to the home address of each of the members of the sample group two

different times (for text, see Appendix C). The FFT staff sent email reminders in June and then resent the survey in October 2010 with an additional postcard and final email reminder. Participants have remained anonymous as no identifying elements were assigned to the responses.

Analysis

The responses were analyzed to discover the fellows' career intentions and how the FFT experience may have directly influenced those intentions. In addition, responses were analyzed for indications of how the FFT experience may have had ancillary positive effects on their teacher identity, relational status, and job satisfaction.

Initially, the fellows' demographic responses were reviewed and compared with the 2007-2008 Schools and Staffing Survey results to identify under or overly represented groups based on age, ethnicity, teaching background (education and certification), and school characteristics (type and setting of school). Review of the respondents' teaching background and school characteristics was based on their teaching position at the time of receiving the grant.

Using SPSS, a factor analysis was initially performed on all of the Likert scale items to determine latent variables. Using principal component analysis as the method of extraction and varimax rotation the factor analysis revealed eight latent variables which were then recomputed into new variables in order to run multiple regression analyses. New means and standard variations were calculated for the eight factors as well. Multiple regression analyses were run for each of the research questions to determine predictor variables. Several of the survey items addressed teachers' years of experience and career intentions prior to and following the FFT experience which were compared for changes in career plans as directly influenced by the fellowship. The years of experience were averaged and compared by cohort to determine if teachers who received the grant in earlier years were in fact remaining in the classroom longer. Combining the fellows' current years of experience with their years of experience at the time of the survey an additional comparison was made with fellows' stated career intentions both before and after the FFT experience to determine if the fellows would meet or fall short of their original intentions to teaching their career.

The survey items regarding the design and driving force of the fellowship were examined to see if they corresponded with the research literature and how the fellowships did or did not reflect those elements identified as necessary for effective professional development: personal planning, individual or organizational improvement, expansion of content knowledge and promotion of continuous inquiry.

Validity and Reliability

Multiple survey items were employed to measure the variables of interest and improve the validity of the instrument. The factor analysis revealed eight latent variables with Cronbach's Alpha for each of the components in the range of .8 to .948, with one exception that had an Alpha of .735. Additionally, the results of the regression analysis revealed that the construct corresponded to the elements it was designed to test.

This instrument was used with minor differences in the wording of some items for an earlier small pilot survey of the same FFT fellow population. Although factor and regression analyses were not performed on the initial pilot survey, a comparison of the descriptive statistic results from each survey demonstrates that the item results for the two constructs were very similar.

Results

The results section begins with a general demographic description of the sample followed by an explanation of the organization and coding of the survey questions. The next section describes the methods used to analyze the data. The first procedure was a factor analysis to identify the latent variables based on fellows' perceptions of professional development and specifically, the Fund for Teachers grant experience. Then forced entry regression analyses tested for predictors of the fellows' relational status and job satisfaction. The results for each research question will be addressed with its factor and regression analyses and corresponding descriptive statistics.

Sample Description

Demographics. The total number of survey respondents was 205 with 12 participants did not fully complete the survey. All but one of the 12 gave most of the answers and so were included on those portions of the analysis where it was appropriate. One fellow gave no answers beyond the initial demographic information and therefore that case was excluded. Of the FFT fellows 84 % were female and 16 % were male with 28 respondents not answering the question. Table 1 presents the approximate ages of the respondents. The majority of them were between the ages of 31 and 60.

| Fellows | ' Ages |
|---------|--------|
|---------|--------|

| Years | Frequency | Valid Percent |
|-------|-----------|---------------|
| 20-30 | 16 | 8.2 |
| 31-40 | 53 | 27.3 |
| 41-50 | 43 | 22.2 |
| 51-60 | 64 | 33.0 |
| 60+ | 18 | 9.3 |

n = 194

Table 2 provides the ethnic breakdown of the respondents. The majority of the respondents were Caucasian, and the second largest group classified themselves as Black/African American.

Table 2

Fellows' Ethnicity

| Ethnicity | Frequency | Valid Percent |
|----------------------------------|-----------|---------------|
| Asian | 8 | 4.1 |
| Black/African American | 24 | 12.3 |
| Hispanic | 10 | 5.1 |
| Native American/ Alaskan | 2 | 1.0 |
| Native Hawaiian/Pacific Islander | 1 | .5 |
| Caucasian | 145 | 74.4 |
| Combination of ethnicities | 5 | 2.6 |

Tables 3 and 4 present the fellows' educational background of certification and degree at the time of their FFT application. The majority of the fellows were traditionally certified (see Table 3) and had already earned an advance degree by the time they applied for the FFT grant (see Table 4).

Table 3

Educational Certification

| Certification Type | Frequency | Valid Percent |
|---------------------------|-----------|---------------|
| Traditional University | 151 | 86.1 |
| Alternative Certification | 24 | 13.4 |
| Other | 1 | 0.5 |

n = 194

Table 4

Degree at Time of Application

| Degree | Frequency | Valid Percent |
|-----------|-----------|---------------|
| Bachelor | 72 | 35.6 |
| Master | 127 | 63.9 |
| Doctorate | 3 | 1.5 |

n = 202

School Background. The fellows taught in schools that were primarily medium to large public schools set in mostly urban and suburban areas. Table 5 provides the percentages for each category of school size; Table 6 gives the percentage for the different types of schools; Table 7 indicates their setting.

School Enrollment

| Number of Students | Frequency | Valid Percent |
|--------------------|-----------|---------------|
| 101-500 | 82 | 44.5 |
| 501-1000 | 62 | 34.0 |
| 1001-2000 | 19 | 11.0 |
| 2000+ | 19 | 10.0 |
| | | |

n = 200

Table 6

School Types

| 93.5 |
|------|
| 2.5 |
| 4.0 |
| |

n = 200

Table 7

School Setting

| Frequency | Valid Percent |
|-----------|-----------------|
| 105 | 57.7 |
| 51 | 28.0 |
| 26 | 14.3 |
| 182 | 100.0 |
| | 105 51 26 |

n = 200

Study Analysis

Research Questions. This study focused on two research questions regarding the FFT summer grant program and the ultimate influence that experience had on increased teacher retention in the classroom.

1. How does the FFT grant's influence on teacher identity affect the fellows' relational status with peers and administration?

2. Does the FFT grant program encourage teachers to lengthen their career in the classroom?

Factor Analysis. A factor analysis was initially performed on all of the Likert scale items to determine latent variables. Using principal component analysis as the method of extraction and varimax rotation which converged in seven iterations (values above .50), SPSS extracted eight components (KMO = .812; Bartlett's Test of Sphericity, $\chi^2 = 4702.459$, df = 666 p < .000 (n = 176). The eight components had eigenvalues over one and collectively accounted for 71.72% of the variance (see Table 8). The items that clustered suggest the following labels as presented in Table 8.

| Factors | Eigenvalue | % of Variance | Cumulative % |
|--|------------|---------------|--------------|
| 1 Effect of school professional | 6.138 | 16.589 | 16.589 |
| development | 0.138 | 10.389 | 10.389 |
| 2 FFT grant effect on relational status | 4.575 | 12.366 | 28.955 |
| 3 Teacher Identity | 3.899 | 10.538 | 39.493 |
| 4 Tangible influences on teacher retention | 2.946 | 7.963 | 47.456 |
| 5 FFT grant effect on classroom work | 2.751 | 7.434 | 54.891 |
| 6 FFT grant effect on teacher retention | 2.505 | 6.770 | 61.661 |
| 7 Personal influences on teacher retention | 1.890 | 5.109 | 66.770 |
| 8 Relational influences on teacher | 1.830 | 4.946 | 71.715 |
| retention | 1.650 | 4.740 | /1./13 |

n = 176

Each of the eight components found in the rotated factor analysis are listed with their item loadings and Cronbach's Alpha in Table 9. All of the factor loadings are at the .6 level and above with the exception of one item in the Teacher Identity component that loaded at .529. Cronbach's Alpha for each of the components except one is very good in the range of .8 to .948, and the component Effect of FFT grant on the classroom had an Alpha of .735 which is considered good (Hair, Bush & Ortinau, 2006; Patten, 2005).

Factor Loadings and Cronbach's Alpha of survey items

| Factors and Items | Loadings | α |
|--|----------|------|
| Effect of School Professional Development | | .948 |
| Gave me valuable insights I can use in the classroom. | .925 | |
| Offered by my school was profitable or good experience. | .904 | |
| Enhanced my teaching skills. | .893 | |
| Increased my personal satisfaction with teaching. | .855 | |
| Has been incorporated into my teaching. | .851 | |
| Gave me new insights in my discipline/content area. | .805 | |
| Increased my personal satisfaction with ed. as a career. | .801 | |
| Significantly impacted my teaching reversed. | .728 | |
| FFT Grant Effect on Teacher Relational Status | | .906 |
| My FFT grant advanced my reputation with the school | | |
| community/parents. | .866 | |
| The community was impressed by my receipt of FFT | 017 | |
| grant. | .817 | |
| My FFT grant advanced my reputation with the | 01.6 | |
| district/administration. | .816 | |
| My school/district was impressed by my receipt of FFT | 741 | |
| grant. | .741 | |
| My FFT grant advanced my reputation with my peers. | .738 | |

| My school/district encouraged me to share my FFT | .673 | |
|---|------|------|
| experience with teachers. | 1070 | |
| My school/district made it possible for me to share my | .602 | |
| FFT experience. | .002 | |
| Teacher Identity | | .872 |
| I feel I am involved in making decisions about | .848 | |
| educational issues at the department level. | .848 | |
| I feel I am trusted to make sound professional decisions | 044 | |
| about instruction. | .844 | |
| I feel I am involved in making decisions about | 925 | |
| educational issues at the school level. | .835 | |
| I feel I am supported by my school | .754 | |
| I feel I am respected as an educational expert. | .683 | |
| I feel I am involved in making decisions about | 520 | |
| educational issues at the district level. | .529 | |
| Tangible Influences on Teacher Retention | | .846 |
| Remaining in the classroom depends on family demands | .844 | |
| Remaining in education depends on family demands | .833 | |
| Remaining in education depends on money/salary | .797 | |
| Remaining in classroom depends money/salary | .766 | |
| FFT Grant Effect on Classroom | | .735 |
| FFT gave me valuable insights I can use in the classroom. | .726 | |
| FFT enhanced my teaching skills. | .689 | |
| | | |

| FFT gave me new insights in my discipline/content area. | .679 | |
|---|-------------|------|
| FFT was profitable or good experience. | .666 | |
| FFT has been incorporated into my teaching. | .609 | |
| Effect of FFT Grant on Teacher Retention | | .884 |
| FFT increased my personal satisfaction with teaching as a | 022 | |
| career. | .832 | |
| FFT increased my personal satisfaction with education as | 020 | |
| a career. | .829 | |
| FFT increased my interest to remain in the classroom as a | 5 04 | |
| teacher. | .794 | |
| Personal Influences on Teacher Retention | | .872 |
| Remaining in the classroom depends on personal job | 006 | |
| satisfaction | .906 | |
| Remaining in education depends on personal job | 004 | |
| satisfaction | .904 | |
| Relational Influences on Teacher Retention | | .847 |
| Remaining in classroom depends on administration/ | | |
| community support | .875 | |
| Remaining in education depends on administration/ | a (- | |
| community support | .847 | |
| | | |

The eight identified factors reflected the literature-supported variables of interest and served as the independent and dependent variables for the subsequent regression analyses. The next sections describes the linear multiple regressions and descriptive statistics used for data analysis.

Multiple Regression. Using forced entry method analysis, two separate regressions were run. One model used the factor effect of FFT grant on relational status as the dependent variable, and the other model used the effect of FFT grant on teacher retention as the dependent variable. In the first model, the construct of teacher relational status is based upon teachers' identity rising from both the respect accorded the teacher as an educational professional and the effect of professional development on the classroom.

Teacher identity is revealed in the sense of respect accorded the teacher by the various levels of school administration, and the factor mean of 2.22 (SD 1.05) indicates that fellows agreed that they were respected as educational professionals (see Table 10). Additionally, the mean for effect of FFT grant on classroom of 1.31(SD .54) indicates fellows strongly agreed that the FFT grant experience made a positive impact in their classroom. Contrary to the effect of the FFT grant on the classroom, fellows were more neutral concerning the effect of school professional development whose factor had both a higher mean and standard deviation (2.63 and 1.10, respectively) as well as a lower beta score that was not found to be significant.

Regression Variables Mean and SD

| Regression Variables | Mean | SD |
|--|------|------|
| Effect of FFT grant on teacher relational status | 2.22 | 1.01 |
| Effect of FFT grant on teacher retention | 1.50 | 0.75 |
| Teacher Identity | 2.22 | 1.05 |
| FFT grant effect on classroom | 1.31 | 0.54 |
| Relational influences on teacher retention | 2.18 | 1.13 |
| Personal influences on teacher retention | 1.41 | 0.76 |
| Effect of school professional development | 2.63 | 1.10 |
| Tangible influences on teacher retention | 2.99 | 1.19 |

n = 176

I will address the variables and analysis results for each of the research questions separately: first, how does the FFT grant's influence on teacher identity affect the fellows' relational status with peers and administration and second, does the FFT grant program encourage teachers to lengthen their career in the classroom.

Research Question 1: How does the FFT grant's influence on teacher identity affect the fellows' relational status and reputation with peers, administration, and the community?

For the first research question, in order to evaluate the awarding and experience of the FFT grant effects on the teacher's relational status and reputation with peers, administration and the community, a linear regression analysis was conducted using the component effect of FFT grant on teacher relational status and reputation as the dependent variable. In this model, six other factors (effect of school professional development, teacher identity, effect of FFT grant on classroom, tangible influences on teacher retention, relational influences on teacher retention, and personal influences on teacher retention) were entered as independent variables to determine their predictive effects.

The independent variables of teacher identity (β = .413, p < .001) and effect of FFT on the classroom (β = .265, p < .001) were significantly predictive of the teachers' relational status when effect of school professional development, tangible influences on teacher retention, relational influences on teacher retention, and personal influences on teacher retention were accounted for (see Table 11). None of the other independent variables were found to be significant.

Table 11

Research Question 1: Results of Regression Analysis: Effect of FFT Grant on Relational Status as Dependent Variable (n=176)

| Independent Variables | β | Sig |
|--|------|--------|
| Teacher Identity | .413 | .000* |
| FFT grant effect on classroom | .265 | .000* |
| Effect of school professional development | .131 | .041** |
| Personal influences on teacher retention | .076 | .247 |
| Tangible influences on teacher retention | .024 | .713 |
| Relational influences on teacher retention | 020 | .771 |

Note. $R^2 = .351$, F = 15.26, *p < .001, **p < .05

Research Question 2: Does the FFT grant program encourage teachers to lengthen their career in the classroom?

For the second research question, in order to evaluate the awarding and experience of the FFT grant effects on teacher retention, a linear regression analysis was conducted using the component effect of FFT grant on teacher retention as the dependent variable. In this model, six other factors (effect of school professional development, teacher identity, effect of FFT grant on classroom, tangible influences on teacher retention, relational influences on teacher retention, and personal influences on teacher retention) were entered as independent variables to determine their predictive effects. In this analysis the independent variable of FFT grant effect on classroom ($\beta = .472$, p < .001) was significantly predictive of FFT influence on teacher job satisfaction when effect of school professional development, tangible influences on teacher retention, relational influences on teacher retention, and personal influences on teacher retention, when effect of school professional development, tangible influences on teacher retention, relational influences on teacher retention, and personal influences on teacher retention, relational influences on teacher retention, and personal influences on teacher retention, relational influences on teacher retention, and personal influences on teacher retention,

Research Question 2: Results of Regression Analysis: Effect of FFT Grant on Teacher

| Independent Variables | β | Sig |
|--|------|------|
| FFT grant effect on classroom | .472 | .000 |
| Tangible influences on teacher retention | .128 | .063 |
| Effect of school professional development | 105 | .117 |
| Personal influences on teacher retention | .063 | .359 |
| Teacher Identity | .036 | .609 |
| Relational influences on teacher retention | .029 | .679 |

Retention as the Dependent Variable (N = 176)

Note. $R^2 = .282$, F = 11.20, p < .001

The 1.31 mean (SD of .54) for the variable FFT grant effect on classroom indicates the fellows strongly agreed on the positive influences the FFT grant had on their classroom practice (see Table 10).

Teacher design of FFT fellowship. FFT fellowships are teacher designed, and the majority of the fellows designed their professional development to affect their content/academic discipline (see Table 13).

Teacher Design of FFT Fellowship

| Design Type | Frequency | Valid Percent | |
|-----------------------------|-----------|---------------|--|
| content/academic discipline | 147 | 71.7 | |
| classroom teaching skills | 34 | 16.6 | |
| teacher/student relations | 12 | 5.9 | |
| other | 12 | 5.9 | |
| | | | |

N = 204

FFT grant effects on years of classroom experience. Of the 204 respondents, 179 were still teaching in a classroom setting, and 18 had left the classroom at the time of the survey. Eight fellows did not respond to the question as to whether they were teaching or not. Within the responses of the 179 still in the classroom an additional six were either incomplete (not responding to all of the questions regarding years of experience, when they received the grant, and current years of experience) or nonsensical (saying they had more years of experience when they received the fellowship than they do currently). These responses were dropped from this portion of the analysis.

The years of classroom experience when they applied for the grant and at the time of the survey setting were compared for the 173 participants who were still teaching in a classroom. Table 14 gives the average of the fellows' years of experience at the time of application, which was 13.20 (SD 8.40), and the average years of experience at the time of the survey, which was 16 (SD 8.60). These two figures were compared to find the number of years fellows have remained in the classroom following their grant experience which was an average of 2.84 (SD 1.73).

Fellows' years of classroom experience at time of application and survey

| Variable | Average | SD |
|---|---------|------|
| Years of experience. at time of application | 13.11 | 8.4 |
| Years of experience at time of survey | 16 | 8.6 |
| Years of experience following grant | 2.84 | 1.73 |

n = 173

Additionally, I isolated the individual years of cohorts to see if there was a difference between the younger and older cohorts in the number of years fellows had devoted to the classroom past the time of the grant. The 2008 cohort of fellows was the largest, and since the survey was distributed in 2010 not much time had pasted since their grant experience. In Table 15, you can see the slight increases in the number of years the fellows continued to teach past the time of the grant. Although the averages of the participants' ages at both the time of application and the time of the survey tend to fluctuate the average of the years teaching beyond the grant experience makes a gradual increase from 3.24 (SD 1.16) for the 2007 cohort to an average of 6 (SD 2.12) years for the 2001-03 cohort.

2001-07 Annual FFT cohort years of classroom experience at time of application and survey

| Variable | 2007 (SD) | 2006(SD) | 2005-04(SD) | 2001-03(SD) |
|----------------------------|--------------|--------------|--------------|--------------|
| Yrs. of exper. at app. | 14.79 (9.24) | 13.36 (8.42) | 10.53 (7.06) | 15.81 (8.85) |
| Yrs. of exper. at survey | 17.97 (9.5) | 17 (8.38) | 15.88 (7.06) | 22.25 (9.43) |
| Yrs. of exper. after grant | 3.24 (1.16) | 3.61 (0.94) | 5.06 (1.0) | 6 (2.12) |
| Number of fellows | 33 | 28 | 17 | 9 |

Fellows' intent to remain in the classroom. Two items asked participants to estimate their intent to remain in the classroom both at the beginning of their career and at the time of the survey:

When I began my teaching career, I planned to stay in the classroom 1-2 years, 3-

10 years, 11-20 years, or 20+ years.

My current career plans are to remain in the classroom for 1-2 years, 3-5 years, 6-10 years, 11-20 or 20+ years.

The two questions regarding their intent to remain in the classroom as a career were compared to find if they met or would meet their original career intention to remain in the classroom. This comparison required some estimation because the items regarding their intent asked participants to respond on a Likert scale rather than give an explicit number as they had in the two questions about their classroom experience. I compared their original expectation of the length of their teaching career with their current years of experience plus their intent to remain in the classroom. In making the assessment I added the minimum number of years in the span of years they had indicated as their current intent to remain in the classroom. As an example, if a respondent had originally intended to teach for 20+ years, had 15 years experience at the time of the survey and responded that he/she planned to stay in the classroom three to five years, I recorded that participant as not meeting the original expectations. If the combined score was within one to two years of their original intent, then I noted that proximity. Of the 173 included in the analysis, only five percent would not meet or come with a year or two of their original intentions for a classroom career.

Fellows' who had already left the classroom. Of the 18 who had left the classroom, 14 had remained in the field of education and only four had left education altogether as a career. Eleven of these fellows indicated a desire to return to the classroom in the future and that FFT had influenced them to remain in the classroom an additional 1-5 years.

Limitations

Some limitations exist for this study, and first and foremost of these is the lack of a control group. Teachers who had applied for a FFT fellowship but were not selected for the program were not surveyed. It was beyond the scope of this researcher and the FFT staff to locate and contact a suitable cohort from which to select a sample for control. Using a control group as an expansion of this area of research is certainly warranted given the positive results of this study and would increase it generalizability.

Differences in teacher characteristics are a limitation that may reduce the generalizability of the study. After comparison with data from the 2007-2008 Schools and Staffing Survey, I found the teachers who received FFT grants were fairly similar to

teachers in elementary/secondary and public/private school teachers in respect to their ages, ethnicities, and certification; however, they differed markedly in their educational levels. One-third more fellows had earned masters degrees prior to their application than had teachers in the Schools and Staffing Survey data. The pursuit of an advanced degree may indicate the individual possessed more drive and persistence and/or additional resources for both financial and personal support. This result indicates teachers who applied for and won FFT grants may have been more motivated to apply for and predisposed to their success by virtue of their more extensive and advanced academic experience. The application process, while not difficult or complicated in and of itself, does require teachers to envision, design and create a budget for their program. For teachers who may not have traveled widely, the logistics (determining the location, appropriate housing, and transportation costs) along with designing a professional learning program from scratch could be overwhelming.

One limitation originates in the general population of fellows. In spite of the fact that nearly 3500 teachers had received FFT grants since 2001, the most updated listing of viable contacts for fellows in May 2010 totaled only 2614. This loss of almost 900 potential participants could indicate a lack of interest on the fellows' part in maintaining contact with the foundation or distraction with life events (moves, job changes, retirement). However, this loss could also suggest some of these fellows did not remain in education and had not benefitted from the program.

Limitations in regards to the survey instrument are two-fold: response rate and instrument design. Of the 742 surveys sent to former FFT grant recipients, 206 were returned (28% response rate), and of those 206, several were incomplete in their

responses. Although the response rate is acceptable, the hope was that there would be a greater number. The FFT staff emailed the survey multiple times and also mailed two postcard reminders to the fellows' last known home address.

Possible issues that could have caused the lower than hoped for response include: change of email addresses and/or disappointment with the program. Email has become the primary contact vehicle in almost every business, and it is no different for FFT. Fellows apply online and correspond with the staff throughout their fellowship primarily through email, and these contacts can be easily lost. In addition to personal and institutional decisions to change email addresses, every change in schools (even within a district) may necessitate a new email address for a teacher. For this reason postcard reminders were mailed to the fellows' home addresses. Additionally, general disappointment with the program or fellows leaving the classroom and/or education altogether meant some fellows may have lost contact with FFT. To improve the response rate the survey was sent at different times during the school year and deliberately planned to avoid especially busy months like the beginning or end of the academic term. However, the general workload for classroom teachers can be overwhelming at any time of the year, and on a teacher's priority list, taking a survey is well below doing lessons plans or getting tests graded.

Although an earlier version of this survey was used for a previous study, the study's sample size was too small to allow for analysis beyond descriptive statistics. This current study is therefore a true pilot, and as such, has some additional limitations that were not discovered in the analysis of the initial survey. Great care was taken in the initial design of the survey to be consistent in its wording and presentation; however, problems remained. Item non-response weakened some elements of the analysis. In the comparison of items detailing the teachers' years of experience some of the questions were open-ended asking teachers to fill in an exact number while other questions about teacher's experience asked for ranges of years. This difference in the items' designs made comparison difficult. Additionally, in the years of experience items the question stem was not as clear as it could have been. Some teachers seem to have counted the current school year as a year of experience while other teachers did not.

Findings

The FFT fellowship strongly influences teachers' professional practice, relational status, and retention. The two original research questions asked if the FFT experience and its influence on teachers' identity affected their relational status within their educational community and if the FFT experience increased their desire to remain in the classroom. First and foremost, the FFT experience has a decidedly profound influence on teachers' professional identity and commitment to the classroom through its effect on their professional practice. When the data were analyzed quantitatively, the factor analysis revealed eight latent variables that reflected key elements found in contemporary research literature regarding professional development and teacher retention. Most notably, the impact of the FFT experience on classroom practice was found to be significantly predictive of both relational status and teacher retention. The research questions and the findings for each will be discussed in turn.

Additionally, when given the opportunity to comment on the survey or the FFT experience, three-quarters of the respondents took the time to make extensive statements regarding their FFT experience and its direct impact on their classroom practice and professional identity. The greatest number of comments dealt with the quality of FFT professional development, its impact on their relational status, its impact on their classroom practice, and most importantly, its impact on their students. The fellows shared how the experience had increased their sense of professional identity as a teacher and their desire to continue teaching. Some of their statements are incorporated in the discussion as the comments address the various findings. *Relational Status*. The teaching profession suffers from a general lack of prestige with the public at large (Ingersoll and Perda, 2008); therefore, relational status within the educational community can be a decisive factor for teachers' job satisfaction and retention (Baker, 2006; Boote, 2006; Borman & Dowling, 2008; Day, Kington, et al., 2006; Opdenakkera & Dammea, 2006). The first research question sought to identify how the result of the FFT fellowship's influence on teacher identity affected the fellows' relational status with peers, administration, and the community. The regression model demonstrates that the variables, teacher identity ($\beta = .413$; p < .001), FFT's effect on classroom practice ($\beta = .265$; p < .001), and effect of school professional development ($\beta = .131$; p < .05) are all significantly predictive of relational status.

Relational status incorporates two aspects of respect for the classroom teacher. The first aspect is teachers' desire to feel their position and accomplishments merit prestige. The second element of this respect is for teachers to be regarded as a professional with educational expertise and authority over their classroom practice. A distinctive element of the FFT program is the combination of promoting effective professional development with the conveyance of honor through the winning of a generous fellowship which can bring with it admiration and deference: "When my teammate and I received the grant, the level of respect was increased by leaps and bounds I was elected 'Teacher of the Year'" (FFT fellow). The recognition that comes with the awarding of a substantial grant has the effect of raising a teacher's status within the educational community and adding to job satisfaction (Bogler, 2001; Kennedy, 1999; Monahan, 1993). In the survey items related to the effect of winning an FFT grant on their professional reputation, the fellows agreed that the community, their peers, and the administration were impressed with their receipt of the grant. Calling the grant inspirational and invaluable, teachers asserted the honor and respect they felt as a result of winning the grant and explained that the fellowship, "enhances a teacher's understanding of herself as valuable to the community-at-large." Along the same line as the honor of winning a prestigious , many fellows described the FFT experience as the "highlight," "milestone," or "landmark" of their careers and several went on to describe the fellowship as "life-changing" both professionally and personally:

I am a changed person from having had the experience that Fund for Teachers provided. Your organization changed my life and has further inspired me to instill an unquenchable desire for personal growth and development as a professional in the lives of those around me.

The opportunity for FFT grant winners to design their professional development speaks to the second aspect of relational status: to be regarded as a professional with educational expertise and authority over their classroom practice. The effect of the FFT grant on classroom practice was significantly predictive of relational status which supports current research demonstrating teachers' desire for self-designed professional learning that will increase student achievement (Dana, et al., 2006, Day et al., 2005; Day & Stobart, et al. 2006). Relating to teachers' desire for professional development, research demonstrates that student achievement hinges on the teachers' being knowledgeable and enthusiastic about new developments within their respective fields (Beijaard, et al., 2000; Long & Hoy, 2006; Long & Moore, 2008; Nieto, 2003; Wenglinsky, 2000). And this association of classroom practice, relational status, and student achievement further underscores the importance of administrators' understanding the varying types of professional development each teacher may require at different points over the course of their tenure (Baker, 2007; Futernick, 2007; Kardos & Johnson, 2007; Kirkpatrick, 2007).

Teachers' desire to be regarded as professionals with personal educational expertise to offer leads directly to their resistance to professional development that is thrust upon them and fails to value their personal expertise as educators (Kennedy, 1999; Lowden, 2006; Petty, 2007). Many of the comments by fellows simply thanked FFT for treating teachers as professionals:

[FFT]was an amazing opportunity to tailor professional development to my interests and needs. I was pleased as an educator I was trusted to know what would benefit myself and my students.

Some respondents went beyond thanking FFT and contrasted their fellowship to schoolmandated professional development:

This was a fantastic experience because it trusted me to be a professional and to design my own learning [the] PD we receive from our district and other sources treats us like children or does not value the experience we have.

And some of the comments even fell into the category of disdain: "[Administrators who] have little or no experience in the classroom make horrible decisions regarding professional development."

The enthusiasm of the FFT fellows about the freedom of personally designing professional development also reflects teachers' desire for autonomy in their classroom practice. Teachers thrive on autonomy and appreciate the respect of administrators who trust them to make decisions on curriculum and student needs (Futernick, 2007; Day, Stobart, et al. 2006; Ingersoll & May, 2010; Ingersoll & Perda, 2007; Kirkpatrick, 2007; Williams, 2003). As professionals with authority over their classroom practice, teachers seek learning and intellectual stimulation, and these elements are critical to strengthening teacher identity (Cohen, 2010; Nieto, 2003, Wenglinsky, 2000). Additionally, effective professional learning must include the sense of teacher agency: that is, teachers must be active throughout the process of professional development in both its design and learning process (Beijaard, Meijer, & Verloop, 2004; Boote, 2006; Goodnough, 2010; Williams, 2003).

Teachers' identities evolve over the length of their career and require different types of professional development to address their varying needs at each stage (Dall'Alba & Sandberg, 2006; Day, et al., 2005; Day, Kington, et al., 2006). Teacher agency is both the emphasis and highlight of the FFT model of professional development because FFT focuses entirely on the individual teacher and allows complete freedom in the design of the project to address each teacher's (or collaborative effort's) personal professional needs. The project may be individual or collaborative and may focus on subject matter content, pedagogy, or schools issues:

[FFT] provided my co-teacher and I the chance to explore a topic in depth and at length. We not only gained personal knowledge, content area knowledge and professional development, but we became a dynamic teaching team confident in each other's skills and strengths. (FFT fellow)

These dynamic and confident teams reflect the fellowship's impact on teachers' sense of professional identity: "I feel the experience from developing and participating in a

teacher designed experience like this has enhanced my classroom technique, attitude, and viewpoint tremendously"(FFT fellow).

Finally, the freedom FFT offers teachers contrasts with virtually every other organization that provides educational professional development. Schools and districts generally provide and/or encourage teacher education in the form of additional degrees and/or short workshops or conferences (Darling-Hammond, et al., 2009). Furthermore, mirroring school policies that direct the content and style of teachers' learning, foundations and government entities that provide grants directly to teachers for professional development restrict the awarding of grants to serve their organizations' interests in specific fields: math, sciences, technology, arts, etc. Teachers wishing to apply for a professional development grant must research myriad programs to find one that might fit their classroom and personal needs, or they must design their study to fit the requirements of what is offered. As one fellow put it:

The fact that there is an organization that puts the professional development of the teacher as its first priority is commendable. There are many teachers who devote time to researching grants for their classrooms, and most grants are very specific, offering materials or technology for a particular subject, grade level, or subgroup.

Teacher Retention. "If there were more professional development opportunities like Fund for Teachers, teacher retention would be much higher. Fund for Teachers was a great learning experience and a huge morale booster" (FFT fellow). Professional learning is at the heart of teacher motivation and job satisfaction, and as discussed previously, the second regression model reveals that the effect of the FFT experience on fellows' classroom practice ($\beta = .472$) is predictive of teacher retention. Whereas in the first regression model, both the effect of the FFT fellowship on classroom practice and school professional development are predictive of relational status, only the effect of FFT on classroom practice was predictive of teacher retention in this model. The majority of respondents (88%) agreed the FFT experience increased their personal satisfaction with teaching as a career which contrasts notably with the far fewer fellows (42%) who said their school's professional development increased their personal satisfaction with teaching.

In addition, to the teachers' answers on the specific retention items, their intense responses to the open-ended question spoke of a heightened sense of commitment and revitalized interest in the classroom: the FFT experience "renewed excitement and commitment"; "refresh[ed] our spirits and renew[ed] our passion for education"; "made me a passionate advocate of educating the whole child." Not only does the fellowship increase job satisfaction which improves teacher identity which in turn improves commitment to the classroom, research also demonstrates that greater job satisfaction motivates teachers to give more of themselves to the classroom and can equate to greater instructional support for students (Opdenakkera & Dammea, 2006).

This finding on the impact of the FFT experience on the classroom practice is noteworthy not only because it is significantly predictive of teacher retention model but also because it supports current research that demonstrates effective professional development as an essential component for job satisfaction which results in better teacher retention and greater student achievement (Ingersoll, 2001, 2002; Ingersoll and May, 2010; Nieto, 2003; Petty, 2007). The participants' responses to the survey items regarding the effect of the FFT experience on their classroom practice were overwhelmingly positive, and they responded far more positively to the FFT experience than they did to school/district professional development. Whereas the fellows tended to be more neutral in their assessment of the professional development offered by their school/district, over 99% of participants agreed that the FFT experience was a profitable one. They also overwhelmingly agreed that the fellowship gave them valuable insights for use in the classroom (97%) and gave them new insights in their discipline/content area (94%). The respondents credited the program with specific elements they would have been unable to grasp through a study of texts: "It allowed me to experience an indepth study of art and architecture . . . see the original artwork and take a week long class in creativity"; "used pictures in math for geometric shapes used in architecture through the centuries"; "It added so many more threads to the fabric of instruction in earth science."

As discussed in the second chapter, few teacher-learning opportunities reflect or implement all or even most of the characteristics research describes as important elements in effective professional development (Darling-Hammond, 2009). Along with teacher input and design of the learning program, the characteristics of effective professional development include the opportunity for personal reflection, focus on content knowledge, and substantial commitments of time in the range of 40 to 50 plus hours over an extended period, all elements which FFT encourages and makes possible for teachers (Blank, et al., 2008; Darling-Hammond & McLaughlin, 1995; Garet, et al, 2001; Kennedy, 1999; Lowden, 2006).

The discussion on relational status illustrates those elements that speak to teachers as respected professionals with educational expertise and authority over their classroom practice. Just as they need to feel respect from the educational community for their professional expertise and abilities, teachers need to exercise autonomy through the selection and design of their learning programs (Darling-Hammond & McLaughlin, 1995; Garet, et al, 2001; Kennedy, 1999; Lowden, 2006). As a model of what research has described as strong professional development, the FFT fellowship provides teachers with the independence (time, money, and personal design) to address individual needs in the classroom because the program is completely open-ended. The teacher is the designer, implementer, evaluator, as well as the end-product.

Personal reflection is an important element of that teacher-design model for effective professional development. As discussed in chapter one, FFT applicants submit an extensive grant proposal that details the rationale, vision, logistical implementation, as well as details of the expected impact of the results in their classroom or school. This application process of in-depth analysis fosters teachers' personal reflection on their classroom practice and professional needs; it encourages their personal vision. This vision can be one of their own interest or, in many cases, it can be the result of student inquiry which the teacher takes on for the project. The driving force for teachers as they envisioned their professional development experiences was either personal or student inquiry (98%), and most fellows (73%) addressed both personal and student interests in their program design. Virtually no fellows pursued research that was district mandated.

Teachers derive a great deal of their personal authority and professional identity in the classroom as a result of being subject-matter experts (Beijaard, et al., 2000; Nieto, 2003). Fellows' responses to specific survey items and in the open-ended question reflected this need for personal inquiry and, specifically, to further their content learning.

75

The majority of fellows (71%) created summer programs that addressed curricular or subject-matter concerns. The fellows described the experience as an opportunity to "gain a deeper understanding"; "cause me to rethink and revise my curriculum"; "renew my passion for my subject- matter." This finding regarding teachers' desire to pursue personal or student interests is not surprising as current research also demonstrates that the most effective professional development is content-oriented (Blank, et al., 2008; Darling-Hammond & McLaughlin, 1995; Kennedy, 1999; Nieto, 2003; Petty, 2007; Wenglinsky, 2000; Williams 2003).

This authority, interest, and personal enthusiasm for their discipline is critical to engaging students, but as one fellow stated it, "We are role models and must provide examples of life learning." Research demonstrates that student interest in a discipline and achievement are directly related to teacher interest and that students distinguish between teachers who are more or less interested in what they are teaching (Long & Hoy, 2006; Long & Moore, 2008). Not only does teacher interest in the subject matter correlate with student achievement, but teacher interest also relates to their professional identity: i.e., the continuing personal inquiry of teachers' in their discipline of interest correlates significantly with the strengthening of teacher identity which, again, strengthens commitment and instructional support (Beijaard, et al., 2000; Goodnough, 2010; Wenglinsky, 2000).

One of the often repeated aspects in the evolution of professional identity throughout the teacher's career is the importance of professional learning both as a role model for students as well as for the benefit of their students' achievement (Cohen, 2010; Dana, et al., 2006; Day, et al., 2005; Day, Stobart, et al., 2006). The strength and depth of teachers' professional identities contribute to their positive attitudes towards teaching and are highly influenced by their work environment (Flores & Day, 2006). More importantly, this sense of professional identity is a key element in sustaining teacher's enthusiasm for and commitment to the classroom (Day, et al., 2005; Day, Kington, et al., 2006). Closely linked with this identity is the teachers' commitment to professional learning, its content, and its effect on student achievement (Day, et al., 2005; Day, Stobart, et al., 2006; Goodnough, 2010; Hairrell, Rupley, Edmonds, Larsen, Simmons, Willson, et al., 2011). The fellows linked the importance of connecting professional development with student achievement and one of them put it plainly:

Professional growth, in my opinion, can only be measured and attained if the experience is meaningful and connectable for the teacher, the content, and most importantly the students.

The value of a committed, experienced teacher who can increase student achievement cannot be overestimated. As discussed earlier, research demonstrates teacher effect on student achievement outweighs background influences such as age, gender, and income level as well as outweighing school effects (Clotfelter, et al. 2006, Day, Stobart, et al., 2006; Nye, et al., 2004; Rockoff, 2004). Unfortunately, teachers are leaving the classroom at an increasing rate, and the void they leave behind takes our tax dollars as well as our students' improved achievement. This loss of potential student achievement and the high monetary costs of teacher turnover put an added strain on budgets sucking out the financial support for better professional development in a vicious and toxic cycle. An analysis of teachers' attitudes can demonstrate a direction and hope, but more tangible evidence is in the number of years participants actually stay in the classroom. Ninety percent of all the survey participants were still in the classroom at the time of the survey. The number of years these fellows remained in the classroom following the grant was approximately three to six years depending on the year they had received the grant. More importantly because of the fellowship, the participants were being saved from burnout, as one fellow expressed the sense of frustration:

I teeter on the edge of burnout in a job I feel is vitally important. The grant made me feel respected by a larger community, refreshed my outlook on my subject matter and life in general.

Not only were the fellows able to continue teaching as long as they had originally intended when they began their career, but thankfully, many were extending their teaching career beyond their original intention. Of the remaining ten percent who had left the classroom, more than half remained in education-related fields. Moreover, these fellows indicated the FFT experience had encouraged them to extend their teaching career and expressed a desire to return to the classroom in the future.

This study demonstrates that the FFT program truly honors teachers and inspires high-quality professional development that has a substantial and positive influence on students. The experienced and committed teacher constantly seeks the professional learning that will shape and improve his or her students' achievement. The positive impact the fellowship had on students was the single most frequent observation by the fellows in the open-ended question: "Kids were fascinated and read my entire blog"; "the impact on my students is immeasurable"; and "my students have expressed an interest in traveling and going to college out of state." When the teacher sees that his/her students are more engaged, there can be real improvement in student achievement. The FFT model of professional development can improve student engagement and achievement, and the expense of the FFT grant is cheap in any comparison with the costs of losing experienced teachers.

Implications

This study focuses on a single program, the Fund for Teachers fellowship, but its findings underscore and expand previous research concerning the effects of strong professional development on teacher retention. Schools and districts spend far more in recruiting and hiring new teachers than FFT provides in its grants. Administrative recognition of the results of this and other studies on professional development could provide real and lasting positive reform in schools. Allowing teachers to design and pursue their own professional development can demonstrate professional respect for teachers' classroom expertise and create new school leaders. Energized faculty leaders can solidify the core of a veteran faculty who can take on today's challenges in the classroom and equip novices the skills they will need to remain in the classroom. The advantages of retaining an effective experienced teachers are myriad, but they begin with increasing student achievement, having strong mentors for new teachers, adding stability to the school environment, and saving money.

Administrators do not need to provide total funding for individualized professional development; many non-profit organizations already exist that provide grants for continuing studies in specific disciplines or locations. What is necessary is the administrative resolve to first respect teachers' professional expertise as educators, and make policies in accord with that respect. They must encourage teachers to pursue personally directed professional development aimed at meeting his/her needs in the classroom and provide assistance in finding and applying for the appropriate programs. *Further Research*

Research on teachers' professional development has expanded over the last decade, but much of it has focused on what schools and districts offer their teachers and its effects on student achievement. With the advent of No Child Left Behind, annual testing, accountability, and performance pay, researchers have been obliged to focus efforts on the individual teacher's effect on student achievement. This cataloging of effective teacher characteristics should be an area of continued research but with greater attention paid to veteran teachers and their preparation for the classroom outside of school/district oriented training. However, this study also opens new territory for researchers to discover the wealth of options nonprofit foundations have afforded teachers and the outcomes of teachers' participation in these programs. Little or no research has been done on the effects of these professional development opportunities that are afforded teachers through nonprofit foundation grants.

Additionally, researchers should continue to examine teachers' experience in relation to their status within the educational community as well as the long-term effects of professional development. Just as the one-shot professional development movement was undercut by further research, the validation of individualized, personally designed professional development can help direct both school and nonprofit efforts in school reform.

The way to confirm and extend the findings of this study would be to implement a longitudinal study of all FFT fellows over a ten-year period. The drawback to such an endeavor would be the exorbitant costs in manpower for a non-profit organization whose priority is to reward and encourage teachers rather than to conduct research on teacher retention. To answer that need organizations like FFT could work with universities or other research institutions to pursue this mutually beneficial goal. As an alternative, the Schools and Staffing Survey already asks teachers their priorities for professional development, the areas and length of study they pursued, and if that professional development was useful. Survey fatigue is certainly a concern, but an additional question or two on the actual design and source of teachers' professional development would provide extensive and invaluable information that could save taxpayer dollars and increase student achievement in the long run.

Finally, researchers should continue to generate cost-benefit analyses of selfdirected/designed professional development and its effects on teacher turnover. For administrations entrenched in district-mandated training and reluctant to explore a new paradigm, the financial itemization provided in these studies could reveal more concretely the monetary advantages of spending a portion of turnover costs on professional development in order to keep an effective teacher for an additional two to three years.

Conclusion

Numbers will never capture the spirit and animation of the passionate teacher who creates and expands the appetite for learning in a student. The results of this study illustrate only a partial view of the phenomenon which one of the teachers best captured in her response:

I felt honored, empowered, and obligated all at the same time. I felt honored to have been selected. Empowered that I could achieve more in my teaching career. Obligated to share what I had learned with my students.

The hope of experienced, committed teachers choosing to stay in the classroom longer brings with it the promise to infuse younger generations of both students and teachers with their spirit and ambition for learning.

REFERENCES

- Baker, V. D. (2007). Relationship between job satisfaction and the perception of administrative support among early career secondary choral music educators. *Journal Of Music Teacher Education*, 17(1), 77-90.
- Barnes, G., Crowe, E., & Schaefer, B. (2007). The cost of teacher turnover in five school districts: A pilot study. Washington, D.C. National Commission on Teaching and America's Future. (ERIC Document Reproduction Service No. ED497176).
- Beijaard, D., Meijer, P., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, 20(2) 107-128.
- Beijaard, D. Verloop, N., & Vermunt, J. D. (2000). Teachers' perceptions of professional identity: An exploratory study from a personal knowledge perspective. *Teaching* and Teacher Education, 16 (7), 749–764.
- Benner, A. D. (2000). The cost of teacher turnover. Austin Texas Center for Educational Research. Retrieved April 23, 2006, from

http://www.sbec.state.tx.us/SBECOnline/ txbess/turnoverrpt.pdf

- Berliner, D. (2008). Letter to the president. Journal of Teacher Education, 59, 252-256.
- Blank, R., Alas, N., & Smith, C. (2008). Does teacher professional development have effects on teaching and learning?: Evaluation findings from programs in 14 states.The Council of Chief State School Officers. Washington, DC.
- Boe, E. E., Cook, L. H., & Sunderland, R.J. (2007). The prevalence of various aspects of teacher preparation, induction, mentoring, extra support, professional development, and workload factors for beginning teachers in special and general

education. Data Analysis Report No. 2007-DARI. Philadelphia: University of Pennsylvania, GSE Publications.

- Boe, E. E., Cook, L. H., & Sunderland, R. J. (2008). Teacher turnover: examining exit attrition, teaching area transfer, and school migration. *Exceptional Children*, 75, 7-31.
- Bogler, R. (2001). The influence of leadership style on teacher job satisfaction. *Educational Administration Quarterly*, *37*, 662-683.
- Borman, G. D., & Dowling, M. N. (2008). Teacher attrition and retention: A metaanalytic and narrative review of the research. *Review of Educational Research* 78, 367-409.
- Boston Consulting Group. (2007). Approach to growth: Summary of findings. Boston.
- Boote, D. (2006). Teacher's professional discretion and the curricula. *Teachers and Teaching: Theory and Practice*, 12(4), 461-478.
- Center for Teaching Quality. (2007). *Arizona teachers working conditions survey*. Retrieved July 4, 2007, from http://www.aztwc.org/library/attachments/ SampleSurvey.pdf
- Clift, R. T. (2008). A letter to the 44th president of the United States. *Journal of Teacher Education*, 59. 220-225.
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L., (2006). Teacher credentials and student achievement: Longitudinal analysis with student fixed effects. *Economics of Education Review*, 26 (6), 673 682.
- Cochran-Smith, M. (2006). *Stayers, leavers, lovers, and dreamers: Why people teach and why they stay.* New York, Bank Street College of Education.

- Cochran-Smith, M. & Lytle, S. (2001). Beyond certainty: Taking an inquiry stance on practice. In A. Lieberman & L. Miller (Eds.), *Teachers caught in the action: Professional development that matters* (pp. 45-58). New York: Teachers College Press.
- Cohen, J. (2010). Getting recognized: Teachers negotiating professional identities as learners through talk. *Teaching and Teacher Education*, 26, 473-481.
- Dall'Alba, G. & Sandberg, J. (2006). Unveiling professional development: A critical review of stage models. *Review of Educational Research*, *76*, 383-412.
- Dana, N. F., Yendol-Hoppey, D. & Snow-Gerono, J. (2006). Deconstructing inquiry in the professional development school. *Action in Teacher Education*, 27(4), 59-71.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8, Retrieved November 21, 2007 from http://epaa.asu.edu/ojs/article/viewFile/392/515.
- Darling-Hammond, L. (2003) Keeping good teachers: Why it matters what leaders can do. *Educational Leadership*, 60(8) 6-13.
- Darling-Hammond, L., Macdonald, L., Maritza, B., Snyder, J., Whitford, B.L., Rusco, G., & Fickel, L. (2000). *Studies of Excellence in Teacher Education; Preparation at the Graduate Level*. New York, National Commission on Teaching & America's Future.
- Darling-Hammond, L. & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, *76*, 597-604.
- Darling-Hammond, L. & Sykes, G. (2003). Wanted: A national teacher supply policy for education: The right way to meet the "highly qualified teacher" challenge.

Education Policy Analysis Archives, 11 (ERIC Document Reproduction Service No. EJ 680103).

- Darling-Hammond, L., Wei, R., Andree, A., Richardson, N., & Orphanos, S. (2009). State of the profession. *Journal of Staff Development*, 30(2), 42-50.
- Day, C., Elliott, B., & Kington, A. (2005). Reform, standards, and teacher identity:
 Challenges of sustaining commitment. *Teaching & Teacher Education*, 21, 563-577.
- Day, C., Kington, A., Stobart, G., & Sammons, P. (2006). The personal and professional selves of teachers: Stable and unstable identities. *British Educational Research Journal*, 32(4), 601-616.
- Day, C., Stobart, G., Sammons, P., & Kington, A. (2006). Variations in the work and lives of teachers: relative and relational effectiveness. *Teachers & Teaching*, 12(2), 169-192.
- DeVellis, R.F. (2003). *Scale development: Theory and applications* (2nd ed.). Thousand Oaks, CA: Sage.
- Desimone, L. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, *38*, 181-199.
- Fraenkel, J. & Wallen, N. (2006). *How to design and evaluate research in education* (6th ed.). New York: McGraw-Hill.
- Flores, M., & Day, C. (2006). Contexts which shape and reshape new teachers' identities: A multi-perspective study. *Teaching & Teacher Education: An International Journal Of Research And Studies*, 22(2), 219-232.

- FFT 2012 Individual Application Guidelines. (2011). Retrieved September 21, 2011, from http://www.fundforteachers.org/apply/texas.php
- Futernick, K. (2007). A possible dream: Retaining California's teachers so all students learn. Sacramento: California State University.
- Garet, M., Porter, A., Desimone, L., Birman, B., &Yoon, K. S. (2001). What makes professional development effective?: Results from a national sample of teachers. *American Educational Research Journal*, 38, 915–945.
- Gaziel, H. (1995). Sabbatical leave, job burnout and turnover intentions among teachers. *International Journal of Lifelong Education*, 14 (2) 331-338.
- Goodnough, K. (2010). The role of action research in transforming teacher identity:
 Modes of belonging and ecological perspectives. *Educational Action Research*, 18(2), 167-182.
- Guarino, C., Santibañez, L., & Daley, G. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research*, 76, 173-208.
- Hair, J., Bush, R. & Ortinau, D. (2006). *Marketing research: Within a changing* environment (3rd ed.). Boston: McGraw Hill.
- Hairrell, A., Rupley, W. H., Edmonds, M., Larsen, R., Simmons, D., Willson, V., Byrns,
 G., & Vaughn, S. (2011). Examining the impact of teacher quality on fourth-grade students' comprehension and content-area achievement. *Reading and Writing Quarterly*, 27, 239-260.

- Hanushek, E. A.; Kain, J. F.; & Rivkin, S. G.(2004). The revolving door: A path-breaking study of teachers in Texas reveals that working conditions matter more than salary. *Education Next*, 4(1) 76-82.
- Hoffman-Kipp, P. (2008). Actualizing democracy: The praxis of teacher identity construction. *Teacher Education Quarterly*, 35(3), 151-164.
- Ingersoll, R. M. (1997). Teacher turnover and teacher quality: The recurring myth of teacher shortages. *Teachers College Record*, 9941-44.
- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, *38*, 499-534.
- Ingersoll, R. M. (2002). The teacher shortage: A case of wrong diagnosis and wrong prescription. *NASSP Bulletin*, 86, 16-31.
- Ingersoll, R. M. (2003). The teacher shortage: myth or reality?. *Educational Horizons*, 81, 146-152.
- Ingersoll, R. M. & May, H. (2010). *The Magnitude, Destinations, and Determinants of Mathematics and Science Teacher Turnover*. Research Report # RR-66.
 Consortium for Policy Research in Education, (ERIC Document Reproduction Service No. ED519789).
- Ingersoll, R. M. & Perda, D. (2008). The status of teaching as a profession. In J.Ballantine & J. Spade (Eds.), Schools and society: a sociological approach to education (pp. 106-118). Los Angeles: Pine Forge Press.
- Ingersoll, R. M. & Smith (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60(8), 30-33.

- Johnson, S. M., Baldacci, L. & Project on the Next Generation of Teachers. (2006). Why new teachers leave . . . and why new teachers stay. *American Educator*, *30*(2), 9-21, 45.
- Kardos, S. M., & Johnson, S. (2007). On their own and presumed expert: New teachers' experience with their colleagues. *Teachers College Record*, 109(9), 2083-2106.
- Kennedy, M. (1999). Form and substance in mathematics and science professional development. National Institute for Science Education. (ERIC Document Reproduction Service No. ED472719).
- Kennedy, M. (2006) Knowledge and vision in teaching. *Journal of Teacher Education*, 57(3), 205-211.
- Kirkpatrick, C. L., (2007) To invest, coast or idle: Second-stage teachers enact their job engagement, Paper presented at the annual meeting of the American Educational Research Association, Chicago, April 2007.
- Lankard, B. A. (1995). Career development in generation x: Myths and realities.Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.(ERIC Document Reproduction Service No. ED 388801).
- Levine, A. (2008). Letter to the president. Journal of Teacher Education, 59, 240-241.
- Lieberman, A. (2000). Networks as learning communities: Shaping the future of teacher development. *Journal of Teacher Education*, *51*, 221-227.
- Lieberman, A. & Mace, D.H.P. (2008). Teacher learning: The key to educational reform. *Journal of Teacher Education*, 59, 226-234.
- Lieberman, J. M. & Wilkins, E. A. (2006). The professional development pathways model: From policy to practice. *Kappa Delta Pi Record*, *42*, 124-8.

- Little, J. W. (1993) Teachers' professional development in a climate of educational reform. New York: National Center for Restructuring Education, Schools, and Teaching. (ERIC Document Reproduction Service No. ED 373049).
- Long, J. F., & Hoy, A.W. (2006). Interested instructors: A composite portrait of individual differences and effectiveness. *Teaching and Teacher Education*, 22, 303–314.
- Long, J. F., & Moore R. (2008). Motivating content: How interest and self-efficacy respond to subject matter taught in an alternative teacher education program. *Catholic Education*, 11, 442-64.

Lowden, C. (2006). Reality check. Journal of Staff Development, 27(1) 61-64.

- Magi Services: A Measurement Incorporated Company. (2006). New visions for public schools/funds for teachers summer fellowship in New York City. White Plains, NY.
- McGrath, D. & Princiotta, D. (2005). *Private school teacher turnover and teacher perceptions of school organizational characteristics*. National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubs2005/2005061.pdf
- McLaughlin, M. (1984). *The limits of policies to promote teaching excellence* (American Educational Research Association Project: Research Contributions for Educational Improvement ED 273 571). Washington, DC: American Educational Research Association.
- MacLure, M. (1993). Arguing for your self: Identity as an organising principle in teachers' jobs and lives. *British Educational Research Journal*, 19(4), 311.

- Miles, K., Odden, A., & Fermanich, M. (2004). Inside the black box of school district spending on professional development: Lessons from five urban districts. *Journal Of Education Finance*, 30(1), 1-26.
- Monahan, T. C. (1993). Teacher principal agreement of perceptions and expectations for professional development. Paper presented at the annual meeting of the Eastern Educational Research Association, Clearwater, FL.
- National Partnership for Teaching in At-Risk Schools. (2005). *Qualified teachers for at risk schools: A national imperative*. Washington, DC.
- New Teacher Center. (2009). *Teaching and learning conditions survey*. Retrieved October 31, 2009 from http://www.newteachercenter.org.
- Nieto, S. M. (2003). What keeps teachers going?. Educational Leadership, 60(8), 14-18.
- Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis*, 26, 237-257.
- Opdenakkera, M. & Dammea, J. V. (2006). Teacher characteristics and teaching styles as effectiveness enhancing factors of classroom practice. *Teaching and Teacher Education* 22, 1–21.
- Patten, M. (2005). Understanding research methods: An overview of the essentials (5th ed.). Glendale, CA: Pyrczak.
- Pearson, L. C. & Moomaw, W. (2006): Continuing validation of the teaching autonomy scale, *The Journal of Educational Research*, 100(1), 44-51.
- Petty, T. (2007). Empowering teachers: They have told us what they want and need to be successful. *The Delta Gamma Bulletin*, 73, 25-28.

- Rivkin, G. Hanushek, E. A., & Kain, J.F. (2005). Teachers, schools, and academic achievement. *Econometrica*, *73*, 417-458.
- Rockoff, J. E., (2004). The impact of individual teachers on student achievement: Evidence from panel data. *The American Economic Review*, 94(2), 247-252.
- Rotherham, A., Mikuta, J., & Freeland, J. (2008). Letter to the next president. *Journal of Teacher Education*, 59, 252-256.

Schön, D. A. (1983). The reflective practitioner. New York: Basic Books.

- Shockley, R., Guglielmino. P., & Watlington, E. (2006). *The Costs of Teacher Attrition*. Paper presented at the International Congress for School Effectiveness and Improvement, Fort Lauderdale, FL.
- Smith, T. M., & Ingersoll, R.M. (2004). What are the effects of induction and mentoring on beginning teacher turnover?. *American Educational Research Journal*, 41, 681-714.
- Texas Center for Educational Research. (2000). *The cost of teacher turnover*. Austin, TX: Author.
- U.S. Department of Education. (2007) *Teacher questionnaire: Schools and staffing survey, 2007-08 school year*. Retrieved February 3, 2012, from http://nces.ed.gov/surveys/ sass/pdf/0708/sass4a.pdf
- Wenglinsky, H., & Educational Testing Service. (2000). How teaching matters: Bringing the classroom back into discussions of teacher quality. (ERIC Document Reproduction Service No EJ628703).

Williams, J. S. (2003). Why great teachers stay. *Educational Leadership*, 60(8), 71-74.

APPENDIX A

FUND FOR TEACHERS SURVEY

FFT Fellows Survey 2010

I designed my FFT experience to impact my:

content/academic discipline knowledge.

classroom teaching skills.

teacher/student relations.

Other

The driving force in designing my FFT experience was:

personal inquiry.

student needs/inquiry.

both student and personal inquiry.

district/administratively directed.

Other

Answer the following questions based on your employment at the time you received the

FFT grant.

When I applied for the FFT grant I had _____ years of classroom experience.

On average, the teachers I worked with had ______ of teaching experience.

1-5 years

6-10 years

11-20 years

over 20 years

In a typical year, how many days beyond what is required by your district do/did you devote to professional development?

1-2

3-5 6-10 10+ None

What was the approximate enrollment of your school?

Less than 100 101-500 501-1000 1001-2000 2001+

What was the school type?

Public

Private

Charter

What was the school setting?

Urban

Suburban

Rural

Approximately what percentage of your school's population was on free or reduced price

lunch?

- 0-20% 21-40%
- 41-60%

61-80%

81-100%

Approximately what percentage of your school's population participated in an ESL

program?

0-20% 21-40% 41-60% 61-80% 81-100%

What was your average class size?

Less than 10 students 10-15 students 16-20 students 21-30 students

30+ students

What grades did you teach? (Select all that apply.)

PreK-4th grade

5th-6th grade

7th-8th grade

9th-12th grade

What content areas did you teach? (Select all that apply.)

All Subjects (Self-Contained)

Foreign Language

Computer / Technology

English / Language Arts

ESL

History/Social Studies

Literacy

Math

PE / Health

Science

Special Education

Visual/Performing Arts

Other

Highest degree held at the time of your fellowship:

Associates

Bachelors

Masters

Doctorate

Answer the following questions using the scale: Strongly Agree (SA), Agree (A), Neutral

(N), Disagree (D) or Strongly Disagree (SD).

Generally, the professional development offered by my school/district

was profitable or a good experience.

gave me valuable insights I can use in the classroom.

enhanced my teaching skills.

has been incorporated into my teaching.

did not significantly impact my teaching.

increased my personal satisfaction with education as a career.

increased my personal satisfaction with classroom teaching as a career.

gave me new insights in my discipline/content area.

My Fund for Teachers experience:

was a profitable/good experience.

gave me valuable insights I can use in the classroom.

enhanced my teaching skills.

has been incorporated into my teaching.

did not significantly impact my teaching.

increased my personal satisfaction with education as a career.

increased my personal satisfaction with classroom teaching as a career.

increased my interest to remain in the classroom as a teacher.

did not increase my interest to remain in the classroom as a teacher.

gave me new insights in my discipline/content area.

The following question divided the participants into two groups: those who were still working in the classroom and those who had left the classroom for administrative duties or out of education. Those who had left the classroom had a survey that was worded in past tense so as to be clearer (see below).

*Choose the following statement that best identifies your current state of employment:

I am still teaching in a classroom or classroom like setting.

I made a career change out of the classroom, but remain in education.

I made a career change out of the classroom and out of education.

Answer the following questions using the scale: Strongly Agree (SA), Agree (A), Neutral

(N), Disagree (D) or Strongly Disagree (SD).

My future plans are to remain in education but to leave the classroom.

I have made plans to leave the classroom, but remain in education.

I have made plans to leave the classroom and to leave education.

My remaining in the classroom depends primarily on:

money/salary.

family demands.

the support of the administration or community.

personal job satisfaction.

My remaining in education depends primarily on:

money/salary.

family demands.

the support of the administration or community.

personal job satisfaction.

My current career plans are to remain in the classroom for:

1-2 years.

3-5 years.

6-10 years.

11-20 years.

20+ years.

Would you apply for another Fund for Teachers grant?

Yes

No

Are you currently employed at the same school as when you received the FFT grant?

Yes

No

Have you been awarded other education grants?

Yes

No

If you answered yes to the previous question, which grants have you been awarded?

Did receiving the FFT grant encourage you to apply for other grants?

Yes

No

On average, the teachers I currently worked with have ______ of teaching experience.

1-5 years6-10 years

11-20 years

over 20 years

Answer the following questions using the scale: Strongly Agree (SA), Agree (A), Neutral

(N), Disagree (D) or Strongly Disagree (SD).

Professional Development and My Teaching

When I began teaching I had strong mentors.

Professional development can improve/enhance my teaching skills.

Professional development is readily available through my school/district.

My school/district administration encourages professional development.

I am able to motivate students who show no interest in the subject matter

I am able to maintain discipline in my classroom.

My instruction makes it easy to understand difficult concepts

My Fund for Teachers (FFT) Grant:

My school/district was impressed by my receipt of a FFT grant.

The community was impressed by my receipt of an FFT grant.

My FFT grant advanced my reputation with the district/administration.

My FFT grant advanced my reputation with my peers.

My FFT grant advanced my reputation with the school community/parents.

My school/district encouraged me to share my FFT experience with teachers.

My school/district made it possible for me to share my FFT experience.

My dept. head encouraged me to share my FFT experience with teachers.

My dept. head made it possible for me to share my FFT experience.

Teacher as Educational Expert

I feel I am:

respected as an educational expert.

supported by my school.

supported by my school.

involved in making decisions about educational issues at department level. involved in making decisions about educational issues at the school level. involved in making decisions about educational issues at the district level. trusted to make sound professional decisions about instruction. What year did you receive your Fund for Teachers grant?

| 2001 |
|----------------|
| 2002 |
| 2003 |
| 2004 |
| 2005 |
| 2006 |
| 2007 |
| 2008 |
| Multiple years |

When I began my teaching career, I planned to stay in the classroom:

1-2 years3-10 years11-20 years20+ years

I have _____ years of classroom experience.

On average, the teachers I currently work with have ______ of teaching experience.

1-5 years

6-10 years

11-20 years

over 20 years

Ethnicity:

White/Caucasian

Hispanic

Native American/Native Alaskan

Native Hawaiian/Pacific Islander

Asian

Two or more of the preceding races

Educational Certification

Traditional University

Alternative

Not Certified

Other

Age:

20-30 31-40 41-50 51-60 Over 60

Gender:

Female

Male

Open Response Question

We appreciate your feedback. If you would like to make any general comments about

Fund for Teachers or this survey, please do so.

FFT Fellows No Longer Teaching Survey 2010

*The following questions were used for respondents who had left the classroom.

*Choose the following statement that best identifies your current state of employment:

I am still teaching in a classroom or classroom like setting.

I made a career change out of the classroom, but remain in education.

I made a career change out of the classroom and out of education.

My FFT fellowship influenced me to remain in the classroom for an additional

1-5 years.

6-10 years.

11-15 years.

The fellowship did not influence me to remain in the classroom.

My current career plans are to return to teaching in:

1-5 years

6-10 years

11-15 years

Never

When I began my teaching career, I had planned to stay in the classroom:

- 1-2 years
- 3-10 years

11-20 years

20+ years

When I left teaching, I had ______ years of classroom experience.

Answer the following questions using the scale: Strongly Agree (SA), Agree (A),

Neutral (N), Disagree (D) or Strongly Disagree (SD).

My remaining in the classroom depended primarily on:

money/salary.

family demands.

the support of the administration or community.

personal job satisfaction.

My remaining in education depended primarily on:

money/salary.

family demands.

the support of the administration or community.

personal job satisfaction.

If you had continued teaching, would you have applied for another Fund for

Teachers grant?

Yes

No

Have you been awarded other education grants?

Yes

No

If you answered yes to the previous question, which grants have you been awarded?

Did receiving the FFT grant encourage you to apply for other grants?

Yes

No

Answer the following questions using the scale: Strongly Agree (SA), Agree (A),

Neutral (N), Disagree (D) or Strongly Disagree (SD).

Professional Development and My Teaching

When I began teaching I had strong mentors.

Professional development can improve or enhance teaching skills.

Professional development was readily available through my

school/district.

My school/district administration encouraged professional development.

I was able to motivate students who showed no interest in the subject matter.

I was able to maintain discipline in my classroom.

My instruction made it easy to understand difficult concepts

My Fund for Teachers (FFT) Grant

My school/district was impressed by my receipt of a FFT grant.

The community was impressed by my receipt of an FFT grant.

My FFT grant advanced my reputation with the district/administration.

My FFT grant advanced my reputation with my peers.

My FFT grant advanced my reputation with the school

community/parents.

My school/district encouraged me to share my FFT experience with teachers.

My school/district made it possible for me to share my FFT experience.

My dept. head encouraged me to share my FFT experience with teachers.

My dept. head made it possible for me to share my FFT experience.

Teacher as Educational Expert

When I was a classroom teacher, I felt I was:

respected as an educational expert.

supported by my school.

involved in making decisions about educational issues at department level. involved in making decisions about educational issues at the school level. involved in making decisions about education issues at the district level. trusted to make sound professional decisions about instruction.

What year did you receive your Fund for Teachers grant?

White/Caucasian

Hispanic

Native American/Native Alaskan

Native Hawaiian/Pacific Islander

Asian

Two or more of the preceding races

Educational Certification

Traditional University

Alternative

Not Certified

Other

Age:

| 20-30 |
|---------|
| 31-40 |
| 41-50 |
| 51-60 |
| Over 60 |

Gender:

Female

Male

Open Response Question

We appreciate your feedback. If you would like to make any general comments about Fund for Teachers or this survey, please do so. APPENDIX B

SURVEY COVER LETTER

Dear FFT Fellow,

You are invited to participate in a survey about Fund for Teachers and teacher retention in the classroom being conducted by a doctoral student from the University of Houston.

This is a great opportunity for Fund for Teachers to gain insight on the impact of FFT fellowships as well as to collect hard data that can be shared with potential donors and community members.

This survey uses an online survey provider and should take 10-15 minutes to complete. Your answers are confidential and cannot be traced back to the respondent. If you have not already received an email with a link to the survey, we encourage you to participate by logging onto <u>(url)</u>.

This project has been reviewed by the University of Houston Committee for the Protection of Human Subjects (713) 743-9204."

Thank you,

Fund for Teachers

APPENDIX C

SURVEY REMINDER POSTCARD

Fund for Teachers Needs Your Help!

DEAR FFT FELLOW,

You are invited to participate in a survey about Fund for Teachers and teacher retention in the classroom. The survey is being conducted by a doctoral student from the University of Houston.

This is a great opportunity for Fund for Teachers to gain insight on the impact of FFT fellowships as well as to collect hard data that can be shared with potential donors and community members.

This survey uses an online survey provider and should take 10-15 minutes to complete. Your answers are confidential and cannot be traced back to the respondent. If you have not already received an email with a link to the survey, we encourage you to participate by visiting: http://survey.constantcontact.com/survey/a07e2vy4fdpg91lcgfi/start.



This project has been reviewed by the University of Houston Committee for the Protection of Human Subjects, 713-743-9204.

Thank you, Fund for Teachers