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CHOOSING A CAREER: A STUDY OF MOTIVATIONAL FACTORS AND  
DEMOGRAPHICS THAT INFLUENCE P-12 PRE-SERVICE TEACHERS

By

Diane MacKenzie  
B. A., University of Louisville, 1990  
M.A.T., University of Louisville, 1994

A Dissertation  
Submitted to the Faculty of the  
College of Education of the University of Louisville  
in Partial Fulfillment of the Requirements  
for the Degree of

Doctor of Philosophy

College of Education and Human Development  
University of Louisville  
Louisville, Kentucky

August 2013

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A Dissertation Approved on

August 5, 2013

To the following dissertation committee

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Dr. Ann Larson  
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Dr. Michael Bradley Shuck

## DEDICATION

I dedicate this dissertation to God for the gift of life; to my mother Doris, as my dad lovingly called her, for her unconditional love, care, support, and encouragement through my life. I attribute all of my success in life to her. She has always been by my side to rejoice in my success and help me get back on my feet after the darkest moments. To my Dad, Adrian, for his tender love; he helped me build resilience. He taught me to be resourceful face life's challenges with an open mind, and turn these into positive learning experiences. Eventhough he is not physically with me he will always be in my heart.

I also dedicate this dissertation to my beloved siblings Kathleen and Hardy who have been the wind beneath my wings throughout my life. I am deeply grateful for their unconditional love, constant encouragement, and support through this process. Their knowledge and expertise have inspired me to reach new heights. I love them in a way that words cannot express. I also dedicate this work to my aunt Yoly. She instilled in me her love and passion for knowledge. Her resilience and perseverance for learning are virtues that I strive to emulate. In memory to my grandparents Rubén and Martita Corzantes, they always played an important role in my life. They taught me that the wealth of a person is measured by how much a person has learned in life and not by how many tangible possessions a person has acquired through life. I cherish their love and memories forever. In loving memory to my aunt Mayra MacKenzie, and Jose María Carrillo.

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ABSTRACT  
CHOOSING A CAREER: A STUDY OF MOTIVATIONAL FACTORS AND  
DEMOGRAPHICS THAT INFLUENCE P-12 PRE-SERVICE TEACHERS

Diane MacKenzie

August 5, 2013

The purpose of this study was to analyze motivational and demographic factors that influence pre-service teachers' decision to become teachers. The theoretical framework used in this study is the Factors Influencing Teaching Choice (Richardson & Watt, 2006), which is rooted in Expectancy Choice (Wigfield & Eccles, 2000) and Social Cognitive theories (Bandura, 1997).

The results indicated that the motivational factors did not significantly influence respondents choices. The demographic factors, gender, ethnicity, type of program, and type of certification, were not significantly associated with motivational factors that influence pre-service teachers to choose teaching as a career.

Findings suggest in terms of policy, changes to teacher preparation programs should be leveraged to prepare a diverse pool of social persuaders who will shape the future of the teaching profession. In terms of research, future and longitudinal studies which employ mixed methods are needed in order to explore further the motivational factors and the ongoing nature of these in pre-service teacher preparation and induction to the profession. In terms of practice, the teaching profession needs practitioners and teacher preparation programs to address and further develop increased social equity



awareness among pre-service and new teachers. Teacher preparation programs and school districts are advised to design, provide, and upkeep appropriate support systems to help pre-service teachers and teachers new to the profession to successfully navigate and cope with the challenges of the 21<sup>st</sup> century, in their classrooms and for their P-12 students as world citizens.

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## CHAPTER I

### INTRODUCTION

Many factors influence an individual's decision to become a teacher, to remain in the teaching profession, and to leave the classroom. The number of people choosing to become teachers has decreased in recent years, causing researchers to examine factors that influence this decision. Variables such as academic achievement, personality, interests, parental education attainment, parental expectations, socio-economic background, leisure activities, peer pressure, socialization experiences, values, self-perception, task perception have been examined (Kiolbassa, et al., 2011; Richardson & Watt, 2008; Luzzo, 1996); Hall, Kelly, Hansen & Gutwein, 1996). Values, perceptions, social influences, and prior teaching and learning experiences might shape teachers' identity, as well as their attitudes and level of commitment to the teaching profession.

This study examined pre-service teachers' differences in motivational factors related to gender, ethnicity, type of teaching certification program, and desired teaching certification. The teaching certification programs were traditional versus alternative route, and the certifications were special education, elementary education, middle grades education, secondary education, as well as P-12 Art, World Language, Music and Physical Education.

Gender and ethnicity are key factors in shaping the teaching workforce. The profession has been increasingly dominated by females, especially in elementary schools. In 1955, male and female teachers were equally represented in secondary classrooms. In

2007, the proportion of secondary teachers was 76% female and 24% male (Drury & Bear, 2011). In 2007, 80% of the teaching workforce was Caucasian (Drury & Bear, 2011).

Alternative route teaching certifications offer the opportunity to reduce gender and racial imbalances in the teaching workforce by recruiting minorities and males (Shen, 1997). Alternative route teaching certification programs recruit mid-career people who bring diverse backgrounds and experiences to the classroom. These individuals may be parents, community sports coaches, chemists, engineers, business owners, medical technicians, mechanics, carpenters. Their specialized skills and career orientations enhance the learning process with real-world expertise.

During the last decade, there was an influx of mid-career entrants into the teaching workforce. Almost four out of ten teachers choose it as a second career. The U.S. Department of Education reported that between the years of 1987 and 2003 the number of second career teachers almost doubled from 20% to 39% (Drury & Bear, 2011).

Types of teaching certifications were explored in this study. While empirical research is scarce related to motivational factors influencing the certification choices of pre-service teachers, demographic reports are available. National statistics show a slight difference in the number of teachers employed at various grade levels. According to Bureau of Labor statistics (2012), the teaching workforce in 2010 was larger in elementary schools (1,655,800) than in middle schools (641,700) or high schools (1,037,000). Reports also indicate that high school teachers received slightly better



salaries (median \$53,230.00) than middle school (median \$51,960.00) or elementary (median \$51,380) teachers.

The average growth rate for all occupations in the United States is 14%. When comparing the growth in teaching jobs to the overall average, elementary and middle school teaching jobs are growing at a faster rate (17%) while high school teaching jobs are growing at a slower rate (7%) (Bureau of Labor Statistics, 2012-2013). These numbers indicate that well-paid job opportunities exist in the teaching profession.

### **Background of the Study**

Teaching is one of the largest college-educated occupational groups in the United States. However, the retirement of the baby boomer generation and high levels of attrition threaten that ranking. Concern about the complexities in today's teaching environment may discourage potential and experienced teachers. And fewer university students choose teaching majors (Olopade, 2011). This section describes threats to the teaching profession.

### **The 21<sup>st</sup> Century Teacher**

Twenty-first century teachers face challenges in a dynamic environment driven by diversity, innovation, and complex skills (Darling-Hammond, 2010). The student population is more diverse and complex; for example, one in five students suffers emotional, attention, or behavior difficulties (Drury & Baer, 2011). The diverse and fast-paced global economy coupled with technological innovation point to changes in curriculum and teaching methods.

Richardson and Watt (2006) indicate that teachers in the 21<sup>st</sup> century have to be equipped with complex sets of skills to be successful in diverse socio-cultural

environments. To be relevant, teachers must become proficient in the use of technology (smart board, smart document camera, wireless slate, and iPads to name a few) to enhance teaching and learning (Gomez, Gomez & Gifford, 2010). They can incorporate social media (blogs, wikis, twitter, vokis, avatars) into their lesson plans to promote student attention and engagement. At the same time, teachers must balance their time and effort among professional development, planning instruction, assessing, and generating data to analyze student attainment, while also providing a nurturing and safe environment and developing the student as a whole.

Teachers deal with a diverse socio-cultural context that encompasses social, behavioral, civic, economic, and technological dimensions of change. Concurrently, they deal with critical issues such as accountability, student attainment, student engagement, and various workplace demands (Drury & Bear, 2011). Watt and Richardson (2011) affirm that teaching young people is a complex and challenging job.

To make things even more challenging, the teaching profession is under the magnifying glass (Brown & Schinker, 2008; Shen, 2001; Grissmer & Kirby, 1994; Guarino, Santibanez & Dailey, 2006), scrutinized by federal and state governments, parents, media, communities, business, industry and the general public. This creates a public perception that teachers are not as highly regarded as they were in the past. This also leads teachers to express that they feel grossly undervalued (Watt & Richardson, 2011a). After a State audit of a school, a veteran teacher said, ‘the state audit left me feeling like garbage’ (Konz, 2011).

Drury and Bear (2011) noted that teachers’ age mode is 41 years in 1987, and 55 years in 2007. Teacher attrition is impacted when prospective teachers are discouraged by

seeing many teachers leave the field early in their careers. Teacher attrition causes school systems to re-direct resources intended for teaching and learning into hiring and training new teachers with a goal of retaining these teachers. The mode years of teaching experience in U.S. public schools in 2013 is one year (AACTE, 2012). In Kentucky, the mode years of teaching experience is between six and seven years (Education Professional Standards Board [EPSB], 2013).

During World War II, an abundance of war related jobs paying more than teachers' salaries prompted one of the most dramatic teacher shortages in the history of the United States. As a counter measure, the government encouraged people to enter the teaching profession (Roberson, Keith & Page, 1983) by issuing emergency teaching certificates by the thousands (Drury & Bear, 2011). That period was a new beginning of a flourishing teaching profession. Currently, public school teachers represent the largest college educated occupational group in the U.S. In 2009, the number of teachers (3.2 million) was larger than the number of registered nurses (2.6 million), engineers (1.5 million), social workers (0.6 million), lawyers (0.6 million), and doctors (0.5 million) (Drury & Bear, 2011). Presently, the baby boomer generation (1946-1964) is preparing to retire. About 1.5 million teachers will retire during the next ten years (Carroll & Foster, 2010). The U.S., as well as other nations, will need to replace the baby boomer generation with new and improved models of teachers.

### **Teacher Attrition**

Nearly one third of new teachers leave the field within the first three years, and one half leave after five years (Darling-Hammond & Sykes, 2003; Watt & Richardson, 2011a; Drury & Baer, 2011). This high attrition rate makes it difficult for a school district

to build learning communities and to engage and sustain educational reforms. High levels of attrition also disrupt program planning and continuity, and above all, attrition hinders student learning (Shen, 1997).

Some indicators related to teacher attrition are: work pressures, heavy workload, too little time, not being able to leave work at work, low engagement, student behaviors/discipline, lack of positive leadership, low pay, and isolation. This last indicator refers to not having enough time in a teaching schedule to build good working relationships with others; teachers might be unwilling to share difficulties or frustration with colleagues, or teachers experience a lack of support from colleagues and school administrators (American Psychological Association [APA], 2013). Teachers who maintain their high motivation in a not so nurturing environment are likely to burn out. These teachers will experience reduced professional engagement if highly valued goals are not attained. One of the major problems of stress is not being able to balance resources with demands which may result in deterioration of health, skills, and personal, social, emotional and psychological abilities (Watt & Richardson, 2011b). Teacher burnout could lead to dysfunctional teaching behaviors which interfere with students' learning. Instead of being engaged, teachers are often invested in dealing with chronic stressors such as work overload, work pressure, student behaviors/discipline to mention a few. When teachers find themselves dealing with stressors they may not be personally invested in their work (Watt & Richardson, 2011b).

Other factors that lead teachers down an unavoidable path of attrition are new federal and state accountability policies, the profession's low competitive advantage in comparison to other lucrative professions, gender imbalances, and gaps in teacher

preparation (Barnes, Crowe & Schaefer, 2007; Brown & Schainker, 2008; Haggstrom, Darling-Hammond, & Grissmer 1988; Darling-Hammond & Sykes, 2003). All or a combination of some of these factors result in teachers feeling less effective, burned out, disgruntled, stressed, and/or exhausted (Watt & Richardson, 2011a; Drury & Baer, 2011).

Aud et al. (2011) conducted a study to analyze the conditions of education in 2011 as part of the annual report of the National Center for Education Statistics (NCES). According to the study teachers from private schools tend to leave the profession more often than teachers from public schools. Data indicate that teachers with fewer years of teaching experience tend to leave the profession sooner than those with more years in the field. In 1989, the percent of teachers leaving the profession after three or less years was higher than the percent of teachers leaving with four or more years in the profession. In 1988, 5.6% of public schools teachers and 12.7% of private school teachers left the profession. In 2008, 8.5% of public schools teachers and 15.9% of private school teachers left the profession.

Data for the school year 2008-2009 revealed that attrition is higher at the secondary level; in schools with less than 300 students; in schools with more than 50% Hispanic students; in schools with 26% to 50% of students eligible for free or reduced price lunch; in schools in the South and Northeast of the country; and in schools in suburban areas. Teachers' demographic characteristics for 2008-2009 indicate a higher percent (16.4%) of attrition in women and teachers over 60 years of age. Others who also left the field of teaching are African American teachers (9.9%), teachers with advanced degrees (10.4%), teachers with three or fewer years of experience (11.9%), part-time teachers (18.4%), noncertified teachers (20.9%), special education teachers (12.8%), and

22% of teachers earning less than the median base salary of \$46,000 for 2009-2010 (Aud et al., 2011).

Barnes and Crowe (2007) studied the cost of teacher turnover in five different school districts across the nation: Chicago Public Schools (IL), Milwaukee Public Schools (WS), Granville County Schools (Granville, NC), Jemez Valley Public Schools (NM), and Santa Rosa Public Schools (NM). These school districts varied in size (small, medium, large), location (rural, urban) and demographics. The findings across the five school districts showed, in part, staggering expenditures of seven point three billion dollars a year in recruiting, hiring, and training replacement teachers nationwide as consequence of high teacher turnover.

Brown and Schainker (2008) analyzed high teacher attrition at Overcreek Middle School in North Carolina. According to the study, hiring and training a new teacher would cost \$10,000 to the district. In one year the school lost nine teachers costing the district a staggering amount of \$90,000.00 to fill those positions. Attrition disrupts student learning and costs money (K. A. MacKenzie, July 13, 2013).

In conclusion, the complexities of the 21<sup>st</sup> century, chronic stressors, aging of the baby bommer generation, the professionalization of teaching, and high demands on accountability are accelerating the revolving door of teaching attrition.

The next section summarizes a myriad of high school initiatives geared to assist recent graduates in choosing a career. Most of these initiatives have emerged as a response to policies supporting students' readiness for college and careers. These early career choice initiatives are important because they have embedded essential components of career development theories, which are discussed in chapter two.

## **Early Career Choice**

Countless variables affect the process individuals' go through when choosing a career. When students finish high school, they have the daunting task to choose their future career. For some graduating students, this decision is one of the most difficult ones because it dictates what they will do in the future. They are aware of the monetary and time implications that come with switching a career. Some students are fortunate and know exactly what they want and how to get it. Other students struggle finding "the career field" that will enhance their skills, satisfy their needs, and help them become successful citizens. Many students, upon entering college or a post-secondary institution, change their field of study a few times, striving for the right profession that aligns with their goals, aptitudes, parental influences, peer influences, skills, and abilities.

Congress noted that "three-fourths of high school students (3,400,000) in the United States enter the workforce without baccalaureate degrees, and many do not possess the academic and entry-level occupational skills necessary to succeed in the changing United States workplace" (School to Work Opportunities Act of 1994, Section 2-1). Congress also contended that among a number of areas in college and career readiness, "the United States lacks a comprehensive and coherent system to help its youth acquire the knowledge, skills, abilities, information, and access to the labor market necessary to make an effective transition from school to career-oriented to work or to further education and training" (School to Work Opportunities Act of 1994, Section 2.5).

The U.S. government supports students' process of searching for a career path through the enactment of different laws (e.g., School to Work Act of 1994, Carl D. Perkins Vocational and Technical Education Act of 1984, 1990, 1998, and 2006). These

laws cascade into a myriad of school initiatives devoted to assist students in their career choice process. The goal of these initiatives is to help students become aware of their career choice preferences and explore career options. Some of these career choice programs begin as early as elementary school; other programs begin in middle school (e.g., Junior Achievement education programs). Most career choice programs are found in high school.

The scope and complexity of career programs in schools vary from state to state and school to school. Most of these programs do one or more of the following: (a) teach students how to fill-out job applications; (b) prepare students for standardized test taking (e.g., ACT, SAT, PLAN); (c) administer personality tests; (d) administer career interest inventories; (e) administer learning styles inventories; (f) provide job shadowing opportunities; (g) provide career seminars; and/or (h) conduct college visits, etc.

Some high schools have comprehensive “school to career programs” designed to smooth students’ transition from school to career. These programs provide high school students with school-based learning (integration of academics and career counseling), work-based learning (i.e. job shadowing and education career academies), and service-learning (volunteer) opportunities. These components were embedded in the School to Work Opportunities Act of 1994. Even though the School to Work Opportunity Act is long gone, its main goals are found in the Carl Perkins Act (2012) in the form of school-based, work-based, and connecting activities.

Job shadowing provides students with the opportunity to shadow a professional in the career of their choice. This enables students to obtain first-hand experience and information about what it is like to be a professional in that



career. Education career academies are joint ventures between teachers, educational administrators, and post-secondary partners. Their goal is to interest and attract future teachers into the profession. This development is a positive one in the context of the focus of the present study.

### **Policy Around Education**

Federal and State legislations in the U.S. exist, in part, to reform teacher education, licensing, and compensation with the intent to improve student achievement and the professionalization of teachers (Darling-Hammond & Berry, 1988). The educational reforms proposed in the 1920s, 1950s, 1970s came about because education was believed to be too rigid and too passive to foster critical thinking, creative thinking, and transformational thinking. These attempts to reform education didn't gain momentum instead helped tightened regulations and centralization of education took place (Darling-Hammond & Berry, 1988).

In 1965, Congress enacted the Elementary and Secondary Education Act (ESEA) under President Lyndon Johnson as part of his War on Poverty initiative. ESEA directed billions of dollars to school districts with large concentrations of low income students to improve educational equity (Drury & Bear, 2011, p. 7). Between 1978 and 1986, every state implemented new policies governing the teaching profession and created new provisions for the certification and employment of teachers through alternative route programs. These policies focused on teacher training, licensing, compensation and were intended to decentralize school decision making and professionalize teaching (Darling-Hammond & Berry, 1988). In the 80's to ensure high teacher quality, teacher preparation programs implemented policies to screen program applicants. States mandated post-

secondary institutions to require a minimum grade point average and results on one or more academic ability tests.

The “No Child Left Behind” (NCLB) law enacted during the presidency of George W. Bush in 2001 was the seventh reauthorization of Act ESEA (Dee & Jaboc, 2010). NCLB’s main goal remained the same: to improve the educational opportunities for children from lower income families. NCLB required all teachers to be highly qualified. In order to be highly qualified, teachers must demonstrate content knowledge in each core subject taught. This is measured by the praxis test. A teacher should have a bachelor’s degree and a teaching certification, whether traditional or alternative route.

Teachers who were not new to the profession could demonstrate subject matter competency by High Objective Uniform State Standard of Evaluation (HOUSSE). This was not an accurate competency assessment because each state developed its own HOUSSE. Special education teachers, limited English proficiency teachers, and teacher from high poverty, high-minority schools were amongst the majority of teachers not meeting State’s requirements to be considered “highly qualified teachers under NCLB.”

Districts launched strategies aimed to recruit and retain highly qualified teachers, especially in high-minority, high-poverty urban and rural areas. Some of these strategies included financial incentives and alternate certification routes. Individual schools reported needing and receiving technical assistance to recruit and retain highly qualified educators. NCLB required states to report the percent of teachers participating in “high-quality” professional development (PD). However, NCLB did not provide indicators describing “high-quality” PD making it difficult to determine the validity of the data collected. Teachers in high-poverty, high-minority areas and Title I schools were more

likely to participate in PD during 2003-2004. Special education teachers were less likely to report PD focused on instructional strategies, active learning, and/or districts or state standards. Title I and Title II part A, provide funds to support ongoing PD for all teachers to ensure teachers are highly qualified.

In September 2011, the Obama administration outlined how states could get flexibility from provisions of NCLB or ESEA. States could receive flexibility through a waiver if they implemented: a) college-and-career-ready standards and assessments to measure students' achievement and growth; b) a differentiated accountability system to reward high achieving/high progress schools; and c) teacher and principal evaluation and support systems to improve instruction (New America Foundation, 2013).

In 2012, the Task Force on Transforming Educator Preparation and Entry into the Education Profession, formed by the Council of Chief State School Officers (CCSSO) made recommendations to improve educator preparation. Examples of their recommendation were: states should implement highly selective criteria for teaching certification program entry. Admission into teaching certification programs should be granted based on districts and states critical shortage areas to avoid a surplus of teachers who are unable to find jobs. Cap enrollment of candidates in licensure areas where there is an oversupply of teachers.

The report gives further insight of the licensure shortages exists and teachers are needed. Some examples are as follow: mathematics, science, and learning disabilities teachers, as well as, teachers who are proficient in technology (CCSSO, 2012).

According to the government, critical shortage areas for low income schools are: bilingual education, English language acquisition, foreign language, mathematics,

reading specialist, science, and special education (Teacher Shortage Areas Nationwide Listing, 2013, p. 6). In Kentucky for 2013-2014 critical shortage areas are: career and technical education, English, English as a second language, exceptional children, mathematics, science, social studies and world languages (Teacher Shortage Areas Nationwide Listing, 2013, p. 57).

The Task Force on Transforming Educator Preparation and Entry into the Education Profession also suggested that educators need to develop strong cultural competency and be prepared to teach every student literacy across the curriculum. Clinical preparation should not be based on the number of hours spent in a classroom instead it should be based on the quality of experiences (e.g., co-teaching instead of observing). Teacher preparation programs should have a process in place to screen P-12 teachers in the field where they demonstrate effective instructional practices and positively impact students' growth and achievement. Teacher preparation programs should receive incentives for preparing teachers in shortage areas and underrepresented populations. States should revise and enforce licensure requirements (CCSSO, 2012).

This CCSSO report calls all chief state school officers and leaders of education systems to commit to ten recommended actions in Licensure as follows: four related to program approval; four related to data collection, analysis and reporting; and two related to actions to ensure “an education workforce prepared to enter the profession ready to teach and ready to lead” (CCSSO, 2012, p. 27).

### **Problem Statement**

Knowing what motivates individuals to choose teaching as a profession is valuable information to researchers and educational leaders, particularly in the 21<sup>st</sup>

century when one of the major challenges for educators is to be prepared to understand and educate diverse populations (Drury & Bear, 2011, p. 9). Such information should be the foundation of human resources and support systems developed by districts to recruit and retain pre-service teachers.

The literature is clear that teachers choosing to stay in the teaching profession may be the result of relevant and sustainable support systems developed in school districts to recruit, hire, retain, and further develop these individuals as education professionals. In order to provide pre-service teachers with relevant, impactful, and sustainable support systems, it is essential to identify which relevant motivational factors influence new teachers to pursue a career in teaching.

Macro issues such as attrition, definitions of teacher quality including teacher effectiveness and assessment framework, national and state education policies, workplace conditions and culture influence the teaching profession. These issues are often cited as reasons for individuals not choosing teaching as a career and contribute to the ongoing decay in morale of new entrants into the field (Richardson & Watt, 2006; Grissmer & Kirby, 1987).

### **Purpose of the Study**

The purpose of this exploratory study was to identify motivational factors that influence pre-service teachers to choose teaching as a career using data gleaned from the FIT-Choice scale (Watt & Richardson, 2007). The scale examines individuals' motivations for choosing teaching as a career; perceptions of teaching; and career choice satisfaction. The motivational factors for choosing teaching as a career were studied from four different angles: gender, ethnicity, type of program, and type of certification. The

theoretical framework for this study is the FIT-Choice (Richardson & Watt, 2006).

Supporting theories for the theoretical framework are expectancy value theory and social cognitive theory from the fields of psychology and career development, respectively.

### **Significance of the Study**

The study analyzed empirical evidence of factors that influence one group of P-12 pre-service candidates to choose teaching as a profession. Study results could be used to improve district recruitment and retention programs for P-12 teachers, saving funding to districts and states and contributing to longevity of greater numbers of teachers who stay in teaching. University based teacher preparation programs may find this study's findings and recommendations of interest in regard to admissions, course content in teacher preparation coursework, supporting graduates in their first years of teaching, and coaching and mentoring individuals in advanced teacher preparation at the university and in classrooms.

Post-secondary institutions could also use empirical evidence from this study to develop strategies to enhance their academic programs, increase recruitment, and retention strategies. Partnerships between high schools and post-secondary institutions may strengthen as they commit to and craft professional development opportunities geared to retain teachers in the teaching profession. As potential pre-service teachers visit post-secondary institution campuses, university education faculty should convey an understanding of "knowing" who the pre-service teacher is. High quality degree programs that account for pre-service teachers' needs and expectations should have no problem attracting and retaining applicants. Post-secondary institutions should consider

addressing the key motivational factors identified in the present study to support and retain students/teacher candidates enrolled in teaching certification programs.

Additionally, educational administrators could find this study of use to enhance school districts' P-12 teacher retention programs in order to reduce early career teacher attrition. Findings from the present study will provide empirical information to enhance school districts' P-12 career choice programs, strategies, and follow-up.

### **Need for the Study**

This study was needed based on a review of the literature which revealed that pre-service teachers motivations have not been studied using the FIT-Choice scale (Watt & Richardson, 2007) in the U.S. This study also contributed to a body of knowledge concerning with career choice of P-12 pre-service teachers. Study findings may give P-12 school systems insight to be better prepared to recruit and retain teachers. Factors influencing individuals' motivations to become teachers provide new information and insights to address the looming problem of teacher attrition. Information gained from this research provides a target recruitment audience. Post-secondary institutions offering P-12 teaching certificate programs could benefit by knowing the motivational factors of their incoming pre-service teachers when it comes to recruiting and retaining these students in their programs and as they transition to the school upon successful exit from the program. Results could also provide valuable information to guide the design and implementation of career choice programs. This study advances the body of knowledge of pre-service teachers' motivation to choose teaching as a career. This is the first study to use the FIT-Choice scale (Watt & Richardson, 2007) to understand pre-service teachers and occurred in a mid-size, state funded public research university in the Midwestern region of the

United States. The University of Michigan and Eastern Michigan University are currently conducting longitudinal studies to explore P-12 pre-service teacher motivations, using the FIT-Choice scale (Watt & Richardson, 2007) to determine variables associated with individuals electing teaching as a career.

### **Theoretical Framework**

The present study used the Factors Influencing Teaching Choice (FIT-Choice) theoretical framework developed by Richardson and Watt (2006). See figure 1 for a visual representation of the FIT-Choice theoretical framework. The purpose of FIT-Choice is to guide researchers in a comprehensive and coherent way through the motivational factors influencing individuals to choose teaching as a career. The FIT-Choice framework develops constructs and conceptual scaffolding to bridge some of the differences regarding expectancy value theory and offers relevant findings in the teacher education research literature. Richardson and Watt (2006) rooted their conceptual framework on expectancy value theory (Wigfield & Eccles, 2000) and the social cognitive theory (Bandura, 1997). Expectancy value theory is the most comprehensive motivational model to explain academic achievement and career choices (Wigfield & Eccles, 2000). According to Richardson and Watt (2006), Bandura's social cognitive Theory (SCT) is also intertwined in the FIT-Choice framework because SCT resembles expectancy value theory. SCT constructs are goals, self-efficacy, and outcomes. The "Fallback" construct in the FIT-Choice framework is a combination of constructs found in literature and is used to predict career choice based on current trends and motivational factors. The FIT-Choice framework includes altruism, personal utilitarian and intrinsic



motivations; an individual's perception of the demands and rewards of teaching; and other measures of career satisfaction (Richardson & Watt, 2006).

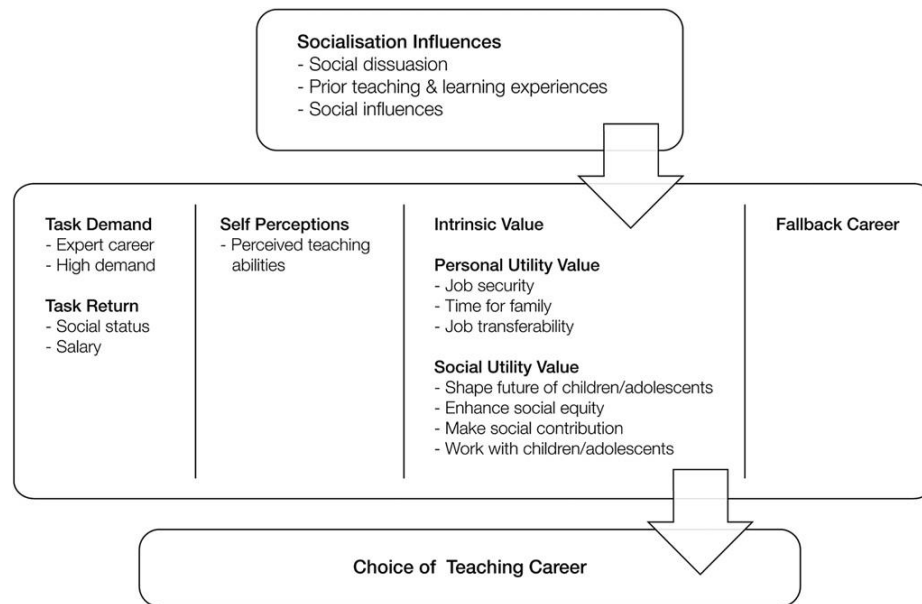


Figure 1. FIT-Choice Framework, Watt et al. (2012)

## Supporting Theories

### Expectancy Theory

Atkinson (1957) conducted one of the seminal studies in expectancy theory. His study presented a theoretical model to explain how the motive (desire) to achieve and the avoidance of failure influence an individual's behavior in any given situation where performance is assessed against some standard of excellence. Crandall, Katkovsky, and Preston (1962) conducted a similar study to evaluate the relationship between early grade school children's achievement, motivations, attitudes and children's performance when presented with different intellectual achievement tasks. Results were congruent with Atkinson's expectancy theory. Children whose attitudes, motivations, and desire to achieve were high tended to have better performance in complex intellectual tasks. Eccles (2005) proposed that achievement choices are directly related to two sets of

beliefs: an individual's expectation to succeed, and the importance or value an individual attaches to options perceived as available.

### **Social Cognitive Theory**

Bandura's social cognitive Theory (SCT) describes factors that affect and determine human behavior (Bandura, 1997). The core constructs of SCT are goals, self-efficacy, outcome expectancies, facilitators, and impediments. Goals are described as the ones that direct human behavior. An individual's perceived self-efficacy is the belief that one is capable of performing the goal behavior in spite of obstacles or challenges. Outcome expectancies are individual's perceived costs and benefits as a result of a behavior. In other words, outcome expectancies are reflected in the expectation that an outcome will follow a given behavior that would be beneficial to the individual. SCT also identified facilitators and impediments, which are social structural factors that encompass environmental aspects which potentially could predict goals and behavior (Atkinson, 1964; Plotnikoff, Lippke, Corneya, Birkett, & Sigal, 2008; Wigfield & Eccles, 2002).

According to Bandura (1997), people with high self-efficacy exercise more control on their choice of careers. Research shows that these people consider more career options, show more interest in preparing themselves better for a career, and persevere in the pursuit of their career goals.

Expectancy theory and Social Cognitive theory are pivotal in the research continuum of career development in teaching that seeks to determine factors which influence individuals' decision to choose teaching as a career.

## **Research Questions**

The following research questions served as a framework for the researcher to study motivational factors that influence pre-service teachers to choose teaching as a career, taking into account identified demographic factors. The research questions are as follow:

1. Are the motivational factors that influence pre-service teachers to choose teaching as a career different between males and females?
2. Are the motivational factors that influence pre-service teachers to choose teaching as a career different between minority and non-minority?
3. Are the motivational factors that influence pre-service teachers to choose teaching as a career different between traditional route and alternative route certification programs?
4. Are the motivational factors that influence pre-service teachers to choose teaching as a career different among elementary and special education, elementary education, middle grades education, secondary education, and P-12 education certification programs?

## **Statement of Hypotheses**

Four null hypotheses are formulated from the research questions and were tested in this research study. The null hypotheses are:

$H_01$ : There is no significant difference in motivational factors influencing male and female pre-service teachers when choosing teaching as a career.

$H_02$ : There is no significant difference in motivational factors influencing minority and non-minority pre-service teachers when choosing teaching as a career.

*H*<sub>03</sub>: There is no significant difference in motivational factors influencing pre-service teachers enrolled in traditional route and alternative route certification programs when choosing teaching as a career.

*H*<sub>04</sub>: There is no significant difference in motivational factors influencing pre-service teachers enrolled in elementary and special education, elementary education, middle grades education, secondary education, and P-12 education certification programs when choosing teaching as a career.

### **Definitions of Terms**

The following terms are defined in order to support the reader's understanding of the content of the study.

**Attrition** – is used in education to describe teachers who voluntarily leave the profession.

**Baby Boomers** – according to the United States Census Bureau, the term represents anyone born between 1946 and 1964.

**Burnout** – is a state of physical, emotional and mental exhaustion from chronic work pressure and stress (Watt & Richardson, 2011a).

**Career** – is a professional occupation that an individual trains for and chooses to work in.

**Drive** – is the activator or cause of response (Littman, 1958).

**Ethnicity** - are physical and cultural characteristics that make a social group distinctive. These may include, but are not limited to national origin, ancestry, language, shared history, traditions, values, and symbols, -all of which contribute to a sense of distinctiveness among members of the group.

**Expectancy** – is a cognitive anticipation triggered by a situational event that after performed, will be followed by a consequence (Atkinson, 1957, p. 360).

**Expectancy Variable** – is defined as the subjective probability that an individual’s behavior will result in the achievement of a goal (Wigfield, 1994, p. 50).

**Habit** – is a passive, inert variable that has little or nothing to do with motivating a response.

**Habits of the mind** – disciplined acquisition of content (Shulman, 1986, p. 12).

**Habits of the hand** – are skilled practice of learning (Shulman, 1986, p. 12).

**Habits of the heart** – are emphatic commitment to service (Shulman, 1986, p. 12).

**Incentive** – represents the relative attractiveness or unattractiveness of a specific goal that is offered in a situation or might occur as a consequence of some act. (Atkinson, 1957, p. 360).

**Learner-ready teacher** - is one who is ready on day one of his or her career to model and develop in students the knowledge and skills they need to succeed today including the ability to think critically and creatively, to apply content to solving real world problems, to be literate across the curriculum, to collaborate and work in teams, and to take ownership of their own continuous learning. More specifically, learner-ready teachers have deep knowledge of their content and how to teach it; they understand the differing needs of their students, hold them to high expectations, and personalize learning to ensure each learner is challenged; they care about, motivate, and actively engage students in learning; they collect, interpret, and use student assessment data to monitor progress and adjust instruction; they systematically reflect, continuously improve, and collaboratively problem solve; and they demonstrate leadership and shared responsibility for the learning of all students (CCSSO, 2012).

**Motivation** – is the tendency of behavior to persist until the end or goal is attained (Atkinson, 1964, p. 274).

**Motive** – is a disposition to strive for some sort of satisfaction in the attainment of an incentive. (Atkinson, 1957, p. 360).

**Pre-service teachers**– Individuals admitted to or enrolled in programs for the initial preparation of teachers. They could be undergraduate or graduate students (NCATE, 2012).

**Professionalism** – refers to alternative forms of regulation and accountability, with continual adjustments made on all sides to enhance the public good (Darling-Hammond & Berry, 1988).

**Professionalization** – “represents the extent to which members of an occupation share a common body of knowledge and use shared standards of practice in exercising that knowledge on behalf of clients” (Darling-Hammond & Berry, 1988).

**Social Media** – group of internet-based applications that build on the ideological and technological foundation of Web 2.0 which allows for the creation and exchange of user-generated content (Kaplan & Haenlein, 2010).

**Teacher Candidates**– Individuals admitted to or enrolled in programs for the initial or advanced preparation of teachers. They could be undergraduate or graduate students (NCATE, 2012).

**Turnover** – The rate at which an employer gains and loses employees. A simple way to describe turnover is the rate of personnel through the revolving door. High turnover poses many risks for the employer, especially if skilled employees leave, and unskilled employees stay.

## Summary

Research related to an individual's choice to pursue a teaching career is connected, in part, to issues of teacher quality, retirement of baby boomers, altruistic values, and early career choice programs. Issues such as teacher attrition, constant change to education policies, teaching being labeled as a "flat ladder" because of limited professional advancement opportunities, and decision making (Shen, 2008) deter, in part, individuals from pursuing teaching as a career (Darling-Hammond & Sykes, 2003; Friedman, 2006; Guarino, Santibañez & Daley, 2006; Nieto, 2005; Kyriacou, & Coulthard, 2000; Kyriacou, Hultgreen & Stephens, 1999; Papanastasiou & Papanastasiou, 1998; Pop, 2008; Richardson & Watt, 2005, 2006, 2008, 2010; Saban, 2003).

This was an exploratory study using the FIT-Choice scale (Watt & Richardson, 2007) in a mid-size, state funded public research university in the Midwestern region of the United States. The study intended to uncover any significant differences influencing motivational factors between gender, ethnicities, type of program, and level of certification pursued. The theoretical framework of the study was the FIT-Choice (Richardson & Watt, 2006) which was developed with the intent "to provide a comprehensive and coherent framework to guide systematic investigation into the question of why people choose a teaching career" (Richardson & Watt, 2006, p. 410). The FIT-Choice framework (Richardson & Watt, 2006) uses conceptual frameworks of expectancy value theory from the field of psychology and social cognitive Theory from the field of career development. The FIT-Choice framework was developed with the

intent to assist researchers to conduct a systematic investigation in the quest of learning about why people choose teaching as a career.

The next chapter reviews literature directly related to theoretical and conceptual frameworks in the fields of career development and psychology (motivation). Career development and motivational constructs were reviewed in relation to early career choice initiatives. The literature review pertained to career choice and gender; ethnicity; traditional route vs. alternative route teaching certification programs; and different levels of teaching certifications, all of which provided topics for the literature foundation for the study. As the study progressed and after the dissertation proposal was defended, additional literature was identified to review and included.



## CHAPTER II

### LITERATURE REVIEW

The purpose of the study was to determine whether the motivational factors that influence pre-service teachers to choose teaching as a career differ by gender (men and women); ethnicity (minority and non-minority); type of programs (traditional route and alternative route); and type of certification (elementary and special education, elementary education, middle grades education, secondary education, and P-12 education).

This chapter reviews the theoretical framework in the fields of career development and psychology. Career development and motivational constructs are reviewed in relation to early career choice initiatives (school to work), gender and teacher preparation, ethnicity and teacher preparation, type of teaching program and type of teaching certification.

#### **Career Development Theories**

This section includes a general overview of the most influential career development theories. Parson (1854-1908) developed the first conceptual framework for career decision making in the early 1900s. This was the first guide for career counselors to help people through the process of choosing a career. Parson is considered the founder of vocational guidance. His theoretical framework consists in understanding: (a) self, (b) the profession, and (c) the alignment and congruence between self and the profession (Brown & Brooks, 1996). High school counselors typically focus their initiatives and efforts in helping students understand the profession (Brown & Brooks, 1996).

Parson posited that when people actively choose their career path instead of leaving it to a random act, people are more satisfied with their career choice (Brown & Brooks, 1996). Employees are more productive and satisfied with their jobs; employers minimize costs while maximizing deliverables. Early in the twentieth century emphasis was given to placing workers where they had the skills so they could perform jobs successfully.

Differential psychology's contribution to the career development field was the use of intelligence tests. These tests were used during World War I and the early 1920s to determine the best occupational fit for new recruits of the U.S. armed forces (Brown et al., 1996; Osipow, 1983). World War II stirred the inclusion of interest, aptitudes, and personality on intelligence tests known as "trait and factor" theory (Brown et al., 1996).

Holland's theory of career development (1985) builds upon Parson's (1854-1908) conceptual framework. Holland's created a model to show the relationship between personality and environment types. Holland (1985) developed the Self Directed Search (SDS) instrument to assist individuals match their personality types with the appropriate career. SDS is one of the most common assessments used in high school to assist teenagers choose a career. Holland's theory and instrument are described in the next section.

Holland's (1985) theory of career development intends to help people select jobs, change jobs, or attain vocational satisfactions. This theory builds on the trait and factor model from Parson (1854-1908). Holland (1985) developed the theory of career development based on his experience as a vocational counselor while serving for the

military in educational and clinical settings. His theory is one of the most prominent in the field, and it has generated hundreds of research studies (Brown et al., 1996).

Holland's theory (1985) makes four assumptions: (a) people can be categorized in one of the six personality types; (b) there are six environmental types, each environment type is dominated by one personality type; (c) people seek for environments that will allow them to use their skills and abilities and will respect their values; and (d) behavior is the result of the interaction between individuals personalities and their environments.

According to Holland (1985), when individuals are matched to their corresponding environments certain desirable outcomes can be predicted and understood based on the level of congruency among each other. Examples of desirable outcomes are work satisfaction, vocational stability and achievement, educational choice and achievement, personal competence, susceptibility to influence, and social behavior. His theory also predicts the undesirable outcomes that will be observable when a mismatch between a person and the environment occur.

Holland's theory (1985) describes "realistic" individuals as more inclined toward explicit, ordered, or systematic manipulation of objects, tools, or machines.

"Investigative" individuals observe more, they are symbolic, and systematic. They observe, understand, and then control phenomena. "Artistic" individuals are free and manipulative. They tend to create things, ideas, or realities. "Social" individuals prefer activities that entail social interactions; things such as training, recruiting, and developing are enticing to them. "Enterprising" individuals prefer activities that allow them to lead others in order to achieve goals or economic gains. "Conventional" individuals prefer

explicit, ordered, systematic manipulation of data to acquire organizational or economic goals.

Holland (1985) positioned his six personality types in a hexagon to: (a) determine consistency of individuals' personality patterns, (b) determine the degree of consistency among the six environments, and (c) determine levels of congruency between individuals and their environments. If personality types are adjacent in the hexagon, there is strong consistency in an individual's personality pattern. If personality types come apart, consistency is weak. The same rules apply to the six environments when these are positioned in the hexagon.

Holland's SDS (1985) instrument helped improve career counseling services because it "quickly produced theory-based diagnostic scores and information related to congruence, differentiation, commonness, consistency and vocational identity" (Reardon et al., 1996, p. 217) that added understanding to the field. People could compare their individual results against the theoretical perspective initially designed for them. SDS results help people learn about themselves, their job choices, and their career.

The next section reviews four career development theories: Rogers (1951), Super (1953), Roe (1957), and Bandura (1997), as well as, the expectancy theory (Wigfield & Eccles, 2000) from the field of psychology. These theories are the foundation of many studies geared to determine the motivational factors that influence individuals' decision to choose a career.

Carl Rogers (1951) client-centered therapy focuses on individuals' responsibility to shape their own lives. In 1951, Ginzberg, Ginsburg, Axelrad, and Herma asserted that

career development was a life-long process (Brown et al., 1996). This new approach generated extensive research interest, leaving behind Holland's theory.

Super's (1953) developmental self-concept theory of vocational behavior published in 1953 became very popular among career counselors. His developmental self-concept theory is based on three psychological areas: (a) the assumption that any person possesses the potential (interests and abilities) for success and satisfaction in a variety of occupational settings; (b) the self-concept theory that attributes individuals' vocational concepts to observations of themselves and their environment during their childhood; and (c) career patterns developed by Buehler's principles of developmental psychology (Brown et al., 1984; Osipow, 1983).

Super (1953) defines interests as objects or activities individuals choose to focus their attention. He defines specific interests as superficial or transient interests in the context of an object or activity. Super (1953) initially classified basic interests as: (a) scientific, (b) humanistic, (c) commercial/economic, and (d) linguistic. The first step in vocational achievement and adjustment is to identify these interests.

Super's (1953) theory posits that individuals follow specific patterns, that if studied closely, could be predicted or inferred (Smart & Peterson, 1997). These patterns are the result of the physical, psychological, situational, and societal factors that configured individuals' interests and behaviors. Super (1953) acknowledges that several vocational patterns exist (e.g., stable, conventional, unstable, and multiple trial) and affirms that individuals go throughout different patterns or cycles during their life (Smart & Peterson, 1997). Individuals' self-concept begins with their search for identity that becomes a self-differentiation process. Role-playing stimulates the development of

vocational self-concept. The self-concept theory in vocational psychology is a matching theory, in which individuals consider both their own attributes and the attributes required by occupations (Brown et al., 1984). Research supports the construct that vocational choices are the result of self-concept implementation.

Roe's theory of career choice (1957) asserts that there is a relationship among genetic factors, early childhood experiences, and vocational behavior (Brown et al., 1996). Roe's (1957) theory roots in Maslow's (1943) theory of Human Motivation (Osipow, 1983). Roe's (1957) theory has two levels. The first level is somehow intangible and difficult to measure because it indicates that people have genetic background abilities and interests that are related to vocational choices. The second level refers to the manner in which the development of pattern and strengths of the fulfillment of individuals' basic needs are affected by childhood experiences (Osipow, 1983).

Level two is measurable because it is explicit. Research was conducted in an attempt to prove empirically that parents influence individuals' vocational choice. Studies conducted by Green and Parker (1965), Grigg (1959), Hagen (1960), Kinnane and Pable (1962), Medvene (1969), Medvene and Shueman (1978), Switzer, Grigg, Miller and Young (1962) found that parents do not influence individuals' vocational choice (Osipow, 1983).

Bandura's social cognitive theory (1997) describes factors that affect and determine behavior. Personal factors coupled with environmental behavior shape career choice.

Bandura's (1997) core constructs of the social cognitive theory are: goals, perceived self-efficacy, outcome expectancies, facilitators, and impediments.

Goals direct [individuals'] behavior[s]. Perceived self-efficacy is the belief that one is capable of performing the goal behavior in spite of obstacles. Outcome expectancies are the perceived costs and benefits of the behavior, that is, the expectation that an outcome will follow a given behavior that would be beneficial [to the individual performing the goal behavior]. Facilitators and impediments are social structural factors that include environmental aspects that could potentially predict goals and behaviors (as cited in Plotnikoff et al., 2008, p. 630).

Bandura's social cognitive theory (1997) asserts that people learn by observing others. Bandura's theory (1997) is commonly known by its focal concept "self-efficacy." Self-efficacy explains individuals' ability to organize and execute tasks in order to attain a specific goal. People with high self-efficacy tend to be more persistent and put more effort in the achievement of their goals. They control their lives and destiny. People with low self-efficacy tend to give up easily or believe their goals are unattainable. They feel like they are not in control of their lives. Consequently, individuals tend to gravitate toward careers that they believe come easily to them or will be easy to master. They tend to move away from careers that are difficult or present themselves with little probability of success.

Farmer, Wardrop, Anderson, and Risinger (1995) conducted a longitudinal study of women's career choices in the science, math, and technology fields. Their theoretical framework derived from Bandura's social cognitive theory (1997). The science, math, and technology subsample derived from with Holland's (1985) occupational classification system. Results indicated that women's science ability had an indirect effect on persistence, and science ability had an indirect effect on math self-efficacy.

Women's persistence was related to the number of elective science courses taken in high school. Women who had high career commitments were likely to switch their aspirations to another career field.

Richardson and Watt (2006) used an expectancy theory to identify motivational factors that influence individuals to choose teaching as a career. They used constructs predicting motivation and academic choice from expectancy value theory. They also used constructs that are a combination of current education trends to predict motivations when choosing teaching as a career. They added the fallback construct which is a contingency plan, if goals and expectations fail, individuals still have a fallback career to lean on. The FIT-Choice framework includes altruistic, utilitarian, and intrinsic motivations; individuals' perceptions of demands and rewards of the teaching profession, as well as measures of career satisfaction (Richardson & Watt, 2006).

### **Career Development Summary**

Parson (1854-1908) and Holland (1985) focused their attention in careers and the skills required to succeed in a given career. Most of their emphasis was on learning about specific careers and the relationship between careers and individuals' skills. Then, Rogers' (1951) client-centered theory shifted the career development paradigm, placing less attention on careers and more attention on individuals, making them accountable for their career decision.

Super's (1953) theory studies interactions between individuals and their respective environments. This theory places more importance on individuals' perceptions of themselves from when they were children (Smart & Peterson, 1997). Roe's (1957) theory is similar to Super's (1953). Roe's (1957) theory adds genetic factors as predictors



of career choice. Bandura's theory (1997) shares similarities with Super's (1953) and Roe's (1957) theories, asserting that self-efficacy in conjunction with goal setting will produce the expected outcome. Lastly, the FIT-Choice framework includes the fallback career as a contingency plan if individuals' goals and expectations fail they still have a fallback career to lean on.

Most of the existing career development initiatives that are available to high school students take into consideration the theories mentioned before. The next section addresses the federal School-to-Work Opportunity Act of 1994, describing several activities that assisted high school students explore and experience the career world.

### **School to Work**

The goal of the federal legislation that created School-to-Work (STW) (Public Law 103-239, 108 Stat 568, 1994) was to meet the educational, economic, occupational, and skill-training needs of the future work force and the needs of employers competing in a global economy (Hopkins, Naumann & Wendell, 1999). According to the National STW Office (2000), students experience opportunities and equal access through high academic standards, industry-recognized skill standards, teaching and learning in the context of real-life applications and career development infused throughout the curriculum, career pathways/clusters, and academic technical curricula integrated within and across subjects areas and grade levels.

Under the federal School-to-Work Opportunity Act of 1994, Colorado created a system of partnerships linking employers and public schools. The partnership started in October 1995 with a five-year grant of 24 million dollars. Three years later, 89 partnerships existed. Twenty thousand employers, 130 school districts, and 89% of

Colorado public school students were participating in this initiative. Among the state efforts to support this initiative the Colorado General Assembly passed a law in 1997 creating a ten percent tax credit for investment in a School to Career program (Eslinger, 1998).

Colorado's School to Career Regional Centers (1999) surveyed Colorado's high school seniors to understand their motivations and their level of preparedness for their future. Survey results indicated that about 80% of students who had participated in career experiences such as job shadowing, job connected to a class, an internship, a written academic and career plan were more likely to enroll in postsecondary programs. Also, they were more likely to select a college and a major based on their interests. The study also revealed that students with career experiences were more likely to know their career interests and abilities and be excited about the future.

Vandegrift and Larson (1997) reported a STW initiative that took place in Arizona. The state developed a model of STW opportunities for students. This model was supported by a grant from the U.S. Department of Labor and Education. The program was administered through the STW division of the Office of Workforce Development Policy, sponsored by Arizona's Department of Commerce. In 1997, Arizona surveyed students in tenth grade (2,131) because the School-to-Work Opportunities Act of 1994 suggested that tenth grade was the benchmark for students' comparisons of attitudes and participation toward career activities. Findings indicate that nearly 40% of students who participated in eight or more activities related to School-to-Work were sure of their career interest.

Students indicated that job shadowing, paid internships, and business mentors were the activities that helped them the most to define their career interest. Students who participated in School-to-Work: (a) were able to articulate better their career interest; (b) took courses during high school related to their interests; (c) described teachers, business people, community or family members as helpful; (d) characterized the career guidance offered at school as helpful; and (e) participated in the majority of School-to-Work activities and found them helpful (Vandegrift & Larson, 1997).

Another example is the Washington State final evaluation report (Northwest Regional Education Laboratory, 1995) that indicates that 45 local school districts comprising of 61 high schools and 78 middle schools received State STW grants amounting to two and a half million dollars. Among the Washington State STW strengths are: (a) its goals are embedded into the overall mission and goals of the district; (b) many academic and occupational teachers are heavily involved; (c) teachers and counselors are provided with opportunities to attend conferences, training sessions, and have internship experiences in local business to see what knowledge and skills are needed in the workplace and how these might become part of classroom activities.

Some recommendations drawn from the Washington final evaluation were (a) improve STW communications (e.g., staff, students, parents, and community); (b) integrate STW with other programs; (c) generate greater articulation among high schools, middle and elementary schools to build a comprehensive P-12 STW program; (d) integrate STW activities with academic and technical courses; (e) promote curriculum development and sharing; (f) conduct a comprehensive evaluation; and (g) increase student involvement (Northwest Regional Education Laboratory, 1995).

A team of four high school juniors conducted a field study to determine the value that college admissions directors place on STW experiences. Their sample was 36 colleges and universities across the country (lower, middle and high tier). Findings indicated that the higher the quality of the college/university, the greater the value placed on extracurricular activities, including STW. Two thirds of the admission directors placed high value on service learning and internship programs (Balbale, Stamoolis, Lawson, & Woodiwiss, 1999).

### **Gender and Career Choice**

Career development theories were originally based on white males from middle and middle upper class backgrounds (Coogan & Chen, 2007). Richardson and Watt (2005 & 2006) posited that gender differences between men and women in the teaching profession are an issue. “In Australia, women make up two thirds of all teachers...” (Richardson & Watt 2006). Demographic data show that when the number of females entering a profession increases, the number of males decreases (Jacobson & Moore, 2005). The number of men entering the profession is decreasing in the US, Canada, and Australia. Teaching has been feminized during the last century. Consequently, it becomes very difficult for post-secondary institutions to recruit male students for teaching careers, especially for elementary schools. Then, the chain effect unravels, preventing schools principals from having a gender balanced teacher faculty, especially in elementary schools where male role models are highly needed.

George (2006) found a huge disparity between the number of male (six percent) and female (94%) pre-service teachers. Aud et al. (2011) reported that in 2007-2008 the majority of full time teachers were female. A similar report was released in 1999-2000,

indicated that 75% of teachers were identified as female and only 25% were male (Provasnik & Dorfman, 2005).

Male stereotyped occupations traditionally exert autonomy, leadership, assertiveness, and independence while female stereotyped occupations exert expressiveness, social relations, and passive behaviors (McCauley & Thangavelu, 1991). Males might perceive a female dominated occupation as an economically undesirable and uncomfortable fit with their gender identity (Jacobson & Moore, 2005). Gender occupational stereotypes play a significant role during individuals' process of choosing teaching as a career because these predict the likelihood of success in a career (Croxtton, Van Rensselaer, Dutton, & Ellis, 1989). Coulter and McNay (1993) conducted a longitudinal qualitative study in Canada to explore the experiences of elementary male school teachers. Their findings noted that male elementary school teachers struggle with societal stereotypes about men in non-traditional occupations.

Male teachers' gender is overly magnified when it comes to interaction with students. In Coulter and McNay's (1993) study, male teachers used their masculinity as a teaching resource. Male teachers reported enjoying working with children as one of the most important motivational factors to chose teaching as a career.

Betz, Wohlgemuth, Serlig, Harshbarger, and Klein (1995) indicated that in order to provide appropriate career counseling to female high school students, it is necessary to distinguish the unique issues that affect women's career development (Betz et al., 1995). Initially, psychology ignored women's career development because women were not expected to pursue a career. In the mid-sixties, things changed, women were expected to hold temporary jobs (low-level, low status) until they married and became housewives.

The message for young women was “do what you want to do” and “be happy.” Young men’s messages were “get good grades so you can get into the best schools and be successful in a career” (Easley, 1999). This thinking created underutilization of women’s abilities and undermined women’s potential to succeed in a career.

When one talks about careers, “women, like men, need a variety of major sources of satisfaction in their lives” (Walsh and Osipow, 1994, p. 3). According to Freud (1856-1939), a psychologically well-adjusted human being is able to love and to work effectively. Farmer, Wardrop, Anderson, and Risinger (1995) indicated that work is a vital component of women’s well-being, therefore, the fulfillment of individual potential for achievement is extremely important for both men and women.

In Sears and Barbie’s (1977) study of women and life satisfaction indicated that the most psychologically disturbed women had high IQ’s (above 170) and didn’t work outside the home; employed women reported the highest levels of life satisfaction.

The 21st century brings new challenges to women’s role in society. The life style of women in the 1990s was “dual-career” or “working couple” (Walsh and Osipow, 1994, p. 6). Women working in non-traditional occupations earn 20-30 percent more than women working in traditional occupations (e.g., teachers, nurses) of the young women who received high school diplomas in 1992, 31% did not incorporate into the workforce or went to college. Their male counterparts, only 15% did not incorporate into either work or college. Women entering the work force after high school earn 25% less than men, especially due to the type of occupations they they choose. Women make up 42% of executives, administrators, and managers. Their salaries are 65% of what their white male counterparts earn in those positions. Minority males, on the other hand, earn 72% of

what white men earn (Chicago Area Partnership, 1996). In 2011, female full-time workers made only 77 cents for every dollar earned by men, producing a gender gap of 23 percent (Institute for Women's Policy Research, 2010).

Hollinger (1991) indicates that young women faced the same problems in the 90s as in the 70s. Young women were not acknowledged for their potential. Some of the problems were occupational sex-segregation and sex based wage discrimination (Ferraro, 1984). Even though women constitute 45% of the labor force, they continue to be concentrated in small number of traditionally female jobs and professions (Matthews & Rodin, 1989). Another problem was the underutilization of abilities which is concomitant with the problems mentioned above –salary and type of job. If women are not pursuing challenging careers, but on the contrary are left with “traditionally female jobs”, their intellectual abilities and skills are not being developed to the fullest.

Arnold's (1993) longitudinal study documented that women were not acknowledged for their potential in the Illinois Valedictorian project. The study focused on 80 students: 46 women, and 34 men, who graduated in 1981 as valedictorian or salutatorian of their high school classes. All but four students (2 males and 2 females) did not finish college. The study found that as soon as students started college, women's self-confidence declined. Women planned to reduce or interrupt their labor force participation to accommodate childrearing. Most women ended up pursuing traditional female “helping” professions and in some cases nonprofessionals or homemakers' roles.

Betz et al. (1995) identified environmental and individual barriers that emerge to women's career choices. Environmental barriers consist of: gender-role stereotypes, occupational stereotypes, gender bias in education, higher education entry barriers, lack

of role models, gender-biased career counseling, and race discrimination. Individual barriers consist of: conflict between family and career, math avoidance, low self-esteem, weak expectations or self efficacy, and low expectations to succeed in life.

Betz et al. (1995) lists facilitators of women's career choices. Facilitators are environmental and individual. Environmental facilitators are: working mother, supportive father, highly educated parents, girls' schools/women's colleges, female role models, proactive encouragement, androgynous upbringing, and work experience. Individual facilitators are: single or late marriage status, no or few children, high self-esteem, strong academic self-concept, androgyny, and pro-feminist attitudes.

Women's career choice is influenced by their personal abilities, skills, potential, and desire to succeed. It is one of the missions of career counseling to provide women with the necessary tools and advice to help them overcome the barriers that have been clearly identified in women's career development (Farmer et al. 1995).

Phelps (1991) suggests that one of the first steps to help young women in their career development is to help them develop their identity. One of the cornerstones of developing identity is to develop intellectual, physical/manual, and social/interpersonal competencies. It can be assumed that women possess intellectual competencies, but it cannot be assumed that they are aware of them or appreciate them. Therefore, young women should be given the opportunity to appreciate and value their intellect while in school. Young women also need to develop their interpersonal competencies. They should receive training in a non-threatening environment in order to help them interact and function in environments that are traditionally not for women. A major difference between how the socialization process differs between women and men is that men say to



themselves “I am, therefore I do,” while women say, “I do, therefore I am” (Phelps, 1991).

Another key element noted by Phelps (1991) is that women should control the expression of their emotions and should experiment different ways of expressing these. Creative writing would be a mechanism through which women can develop their uniqueness and individuality. This self-expression is a supporting element in the process of helping to develop autonomy in thoughts and actions. The sooner women start taking control of their own lives, their chances of personal and professional success are likely to increase.

Phelps (1991); Farmer, Wardrop, Anderson, and Risinger, (1995) indicated that one of the most challenging jobs for career counselors is to help young women to think and develop a plan for their lives which is compatible with their interests, personality, skills, and values. This concept is oversimplified by the label “career choice.” The label limits career counselors focus because it creates the perception that the goal is to help female students find a suitable career without accounting for the intricacies of women’s development and role in today’s society. Along the same lines, Farmer et al., (1995) reported that counselors should help women make informed choices that will empower rather than restrict their lives.

### **Ethnicity and Teacher Preparation**

Through the years, the United States has experienced a shortage of African American (AA) teachers. This issue has been reported by many organizations such as the Carnegie Forum on Education and Economy in 1986, Education Commission of the States in 1990, Joint Center for Political Studies in 1989, and the Southern Education

Foundation in 1990 (King, 1993). In 2011, two percent of teachers were African American men (Olopade, D. 2011). In order to improve the education of youth and prospective teachers it is imperative to improve policy strategies that aim to recruit and retain AA teachers.

AA teachers expose their students to a wide range of experiences and knowledge to succeed in this society despite some AA teachers endure poverty, racial discrimination, and many other social inequities (King, 1993). AA teachers are needed in the classroom because AA youth need pedagogy that is culturally relevant and which contributes to achieving pride, equity, power, wealth, and cultural continuity. It comes natural for AA teachers to integrate subject matter to the realities of students' lives, experiences, and culture (Ladson-Billings, 1994).

AA teachers implement in the classroom discussion about AA community issues and ways to mitigate these; use of rap music to ease students' learning; use of African proverbs to help cultivate students' sense of self, history, and their culture; and positive use of students' energy are some of these pedagogical strategies. AA teachers use as a pedagogical style open affection to students fostering themes of social and personal responsibility and value (Ladson-Billings, 1994).

These effective AA teachers use emancipator pedagogy which involves engaging students in critical reflection about realities such as social injustices and which enable them to change and improve society, rather than accepting a society that negates, oppresses, and disaffirms African Americans. These AA teachers serve as role models and social persuaders. Study's findings show the need for AA role models for students in

their learning environment to ensure that their aspirations, achievement and sense of self-worth will continue developing rather than being diminished.

Professors from Hispanic descent are rarely visible in post secondary education. Nuñez & Murakami-Ramalho (2012) indicate that 4 percent of tenured or tenure-track female faculty members in the United States are from Hispanic descent as are only three percent of female full professors. Post secondary demographics were reported as being 78 percent white, 7 percent African American, and 7 percent Asian American. Hispanic descent faculty represent 4 % nationwide (Ponjuan, 2013). The same scenario is mirrored in P-12 education. The number of Hispanic descent teachers in P-12 classrooms does not represent the number of Hispanic descent students enrolled in P-12 education. These data have implications for individual career choice and recruiting particular groups of individuals into a teaching career.

### **Type of Program and Type of Certification**

The goals of alternative route certification programs are to increase quantity and quality of teachers. Increase the number of males and minority teachers, and attract mature people with previous work and life experiences (Evans, 2011; Richardson & Watt 2006; Suell, & Piotrowski 2006). Alternative route teaching certification programs vary in requirements, responsible agency, length, and intensity. Some programs teach in two weeks of training two years worth of coursework and up to three years of mentoring (Suell & Piotrowski, 2007). These programs are offered by school districts, regional service centers, universities, teacher unions, business communities or a combination of agencies (Haberman, 2001).

In 1983, eight of 51 US states offered alternative route programs to certify teachers. In 2005, forty three of 51 states offered alternative route certification programs (Auguste, 2010). According to the National Center for Policy Analysis, the number of alternative route teaching certificates increased from 4,000 in 1996 to 60,000 in 2006. These figures indicate that one third of new teacher hires have completed alternative route certification programs (Education & The Workforce Committee, 2012). The New Jersey State Department of Education noted that about one third of new teachers hired had completed alternative route certification programs (Auguste, 2010).

Coyle-Rogers and Rogers (2003) conducted a study to compare the adaptability of a new computer environment between graduates from traditional route and alternative route certification programs. Results indicated that alternative route certificate graduates were able to adapt and manage the environment of the technology education laboratory better than graduates from a traditional route program. Researchers hypothesized that this significant difference between groups might be due to the fact that students in the alternative route program were older and more experienced. Alternative route certification students enter the profession with a plethora of experiences from their previous career that enhances the teaching and learning process.

Suell and Piotrowski (2006) conducted a study to compare confidence in instructional skills between graduates from alternative route and traditional route certification programs in Escambia county in northwest Florida. The county employed over 2,500 teachers representing both certification routes. Findings indicated no significant differences between the two teacher groups.

The average age of brand-new teachers in 1999–2000 was 29 years old (the median was 26 years old), suggesting that many teachers do not enter the teacher workforce in their early twenties, an age that is traditionally associated with being “right out of college.” The average age of all elementary, middle, and high school teachers was 42 (the median was 44 years old) (Provasnik & Dorfman, 2005, p. 3).

Burkman (2012) indicates that novice elementary school teachers benefit from having a teacher program in conjunction with meaningful professional development programs to overcome classroom challenges. It is implausible to think that business people will leave their jobs to join the teaching workforce (Richardson & Watt 2005). Second career choice students and alternative route program students bring their practitioner experience blended with academic preparation. Fayne and Trammell (2010) reported that middle school teachers benefited from partnering with post-secondary institutions to understand themselves, their learners and their environment. Middle schools teachers improved their teaching as a result of this partnership. Again these data have implications for individuals’ career choice and for the need for explicit recruitment and retention strategies to hire and retain teachers who have compelling reasons and choices for choosing teaching as a career.

### **Summary**

This chapter reviewed literature directly related to theoretical frameworks in the fields of career development and psychology. Career development and motivational constructs were reviewed in relation to early career choice initiatives. The literature review also pertained to career choice and gender, ethnicity, type of program, and type of certification, all of which provide the literature foundation for the study.

## CHAPTER III

### METHOD

This chapter addresses the purpose of the study, reviews the study's research questions, hypotheses, research design, population and sampling, instrumentation, and a summary of relevant methodological components.

#### **Purpose of the Study**

The purpose of this exploratory study was to identify motivational factors that influence pre-service teachers to choose teaching as a career using data gleaned from the FIT-Choice scale (Watt & Richardson, 2007). The scale examines individuals' motivations for choosing teaching as a career; perceptions of teaching; and career choice satisfaction. The motivations factors for choosing teaching as a career were studied from four different angles: gender, ethnicity, type of program, and type of certification. The theoretical framework for this study is the FIT-Choice. Supporting theories for the theoretical framework are expectancy value theory and social cognitive theory from the fields of psychology and career development, respectively.

#### **Research Questions and Hypotheses**

This study will be guided by four research questions:

1. Are the motivational factors that influence pre-service teachers to choose teaching as a career different between males and females?

2. Are the motivational factors that influence pre-service teachers to choose teaching as a career different between minority and non-minority?
3. Are the motivational factors that influence pre-service teachers to choose teaching as a career different between traditional route and alternative route certification programs?
4. Are the motivational factors that influence pre-service teachers to choose teaching as a career different among elementary and special education, elementary education, middle grades education, secondary education, and P-12 education certification programs?

To explore these four research questions, four research hypotheses will be tested:

*H<sub>0</sub>1*: There is no significant difference in motivational factors influencing male and female pre-service teachers when choosing teaching as a career.

*H<sub>0</sub>2*: There is no significant difference in motivational factors influencing minority and non-minority pre-service teachers when choosing teaching as a career.

*H<sub>0</sub>3*: There is no significant difference in motivational factors influencing pre-service teachers enrolled in traditional route and alternative route certification programs when choosing teaching as a career.

*H<sub>0</sub>4*: There is no significant difference in motivational factors influencing pre-service teachers enrolled in elementary and special education, elementary education, middle grades education, secondary education, and P-12 education certification programs when choosing teaching as a career.

## **Research Design**

The FIT-Choice theoretical framework (Richardson & Watt, 2006) emerges from constructs in the fields of psychology and career development. The FIT-Choice scale was designed to collect empirical evidence of motivational factors influencing P-12 pre-service teachers choosing teaching as a profession. The FIT-Choice scale falls under the quantitative paradigm and, consequently, it is a quantitative research method.

Firestone (1987) and McCracken (1988) contrasted assumptions of qualitative and quantitative paradigms in five dimensions: ontological (what is real?); epistemological (what is the relationship of the researcher and research?); axiological (what are the values of the study?); and rhetorical (what is the language of the research?). In the quantitative paradigm, reality is independent from the researcher. The researcher should be distant and independent of what is being researched. Researchers' values are not involved in the study. The language is impersonal and formal. It includes words like relationship, comparison, and within-groups. This paradigm follows a deductive logic that tests theories and hypothesis in a cause and effect order. Concepts, variables and hypothesis are constant throughout the study. The intent is to develop generalizations that will contribute to the theory and allow better understanding and prediction of a phenomenon (Creswell, 1994).

Firestone (1987) and McCracken (1988) noted that a qualitative paradigm's reality is constructed by the individual involved in the research. The researcher should minimize the distance between self and what is being researched. Researchers' values are part of the study. The language becomes personal, informal and is based on definitions that evolve during a study. This paradigm follows inductive logic. Categories emerge



from subjects participating in the study. These categories provide “context-bound” information leading to patterns or theories which help explain a phenomenon. The researcher could verify the accuracy of the information with participating subjects or by triangulating data from other sources (Creswell, 1994). Quantitative and qualitative studies are consistent with their corresponding paradigms (Creswell, 1994). Quantitative methods include experiments and surveys. Qualitative methods include ethnographies, critical ethnography, grounded theory, case studies, and phenomenological studies (Creswell, 1994). The present study involved the use of a survey with one open ended question; therefore, it used a mixed research method (qualitative and quantitative). FIT-Choice scale was used “for data collection with the intent of generalizing from a sample to a population” (Babbie, 1990, as cited in Creswell, 1994, p. 11).

The researcher used the tailored design method presented by Dillman (2000) to conduct the quantitative research for this study. The purpose of the tailored design is to administer surveys that produce high quality information and that yield high response rates. The high quality of a survey is present when the overall survey error is reduced (Dillman, 2000.) According to Dillman (2000), there are three types of errors that can be countered by the use of the tailored design method. The three types of errors in a survey are: (a) sampling error, (b) coverage error, and (c) measurement error.

The tailored design method describes ways in which the researcher can minimize or avoid each of the errors. The sampling error occurs when a researcher distributes a survey to a reduced population intended for the study, which results in an inaccurate measure by the survey. The tailored design method provides guidelines for the researcher to select an adequate representative target population. The error of coverage is addressed

in the tailored design by identifying the list that will contain most of the intended audience with means to be contacted by the researcher to receive the survey. The last error is the measurement error, which can be accounted for when the results obtained from a survey cannot be compared in any way or are inaccurate. The tailored design method provides guidance to choose adequate wording of the questions, and effective construction of the questionnaire. Last, the tailored design provides guidelines that will help a researcher achieve a 40% response rate or better for online surveys, as recommended by Dillman. These guidelines refer to specific details such as length of the survey, number of questions, initial contact with the target audience, and communication reminders to ensure higher response rates during the research timeframe.

### **Population and Sample Size**

The study utilized a convenience sample comprised of 447 pre-service teachers (undergraduate and graduate students) enrolled in initial licensure teaching certification programs during the 2013 spring semester at the college of Education and Human Development (CEHD) in a mid-size, state funded, public research university in the Midwestern region of the United States. All 447 students were invited to participate in the study.

The CEHD is aligned with the university's mission to be a "metropolitan research university committed to advancing the intellectual, cultural, and economic development of their diverse communities and citizens" (Anonymous, 2012). The CEHD and university's mission is responding to the current call to prepare educators to understand and educate diverse communities (CCSSO, 2012).

For this study, key concepts such as probability, underlying contributions and sampling should be accounted for when making inferences about characteristics of a population from measures of a sample (Hinkle, Wiersma, & Jurs, 1994). Factors such as level of significance ( $\alpha$ ), power of the test ( $1-\beta$ ), population error variance ( $\sigma^2$ ), and effect of size (ES) should be taken into account when determining the appropriate sample size. Level of significance ( $\alpha$ ) is the probability of making a Type I error (to reject the null hypothesis when it is true). Power ( $1-\beta$ ) is the probability of making a Type II error (to not reject the null hypothesis when it is false). The power of the test is increased and the standard error is decreased by increasing the sample size (Hinkle, Wiersma, & Jurs, 1994). The present study expected to use a sample size of approximately 300 participants (pre-service teachers) to strengthen the statistical power of the study and reduce the probability of Type II error.

### **Instrument**

The study used the Factors Influencing Teaching Choice (FIT-Choice) scale was developed to assess motivations of pre-service teachers by Watt and Richardson in 2007. The FIT-Choice scale has been used in Australia, United Kingdom, Germany, Turkey, Norway, and in the United States at Michigan State University and Eastern Michigan University. There are studies using the FIT-Choice scale which are being conducted in Canada, Belgium, China, Malaysia, Ireland, Estonia, the Netherlands, West-Indies, India, Kenya, New Zealand, Philippines, and Croatia (Watt et al., 2012). As previously mentioned, expectancy value theory and social cognitive theories were used as a foundation for the FIT-Choice theoretical framework (Richardson & Watt, 2006).

The FIT-Choice scale is divided in three sections: (a) motivations for teaching, (b) perceptions about teaching, and (c) career choice satisfaction. See appendix A for a visual presentation of the FIT-Choice constructs.

The first section: motivations for teaching which will be referred throughout the study as motivations, explores the motivational factors that influenced participants to choose teaching as career choice. This section is measured by 12 constructs comprised in 38 items. These items assign a numerical value in a 7 point Likert-type scale ranging from 1 (not at all important) through 7 (extremely important). One open-ended question is included at the beginning of this section asking participants to state briefly what influenced them to become teachers. Constructs in this section are: ability, intrinsic career value, fallback career, job security, time for family, job transferability, shape future of children/adolescents, enhance social equity, make social contributions, work with children/adolescents, prior teaching and learning experiences and social influences.

The second section: perceptions about teaching which will be referred throughout the study as perceptions, explores participants perceptions about the teaching profession. This section is measured by 5 constructs comprised in 17 items. These items assign a numerical value in a 7 point Likert-type scale ranging from 1 (not at all) through 7 (extremely). Constructs in this section are: expertise, difficulty, social status, salary, and social dissuasion.

The third section: career choice satisfaction which will be referred throughout the study as satisfactions, explores the participants satisfaction with choosing teaching as career choice. This section is measured by 1 construct comprised in 2 items. These items assign a numerical value in a 7 point Likert-type scale ranging from 1 (not at all

important) through 7 (extremely important). The construct in this section is satisfaction with choice.

At the end of the FIT-Choice scale, Watt and Richardson (2007) included participants' socio-demographic background questions including gender, age, ethnicity, undergraduate or graduate enrollment, degree (secondary, primary or early childhood teacher education), past and present occupations, parents' profession, parents' combined income when participants were in high school, language mainly spoken at home, and countries in which each of the participants' parents were born (Richardson & Watt, 2006). For this study, the following demographics were added: type of program enrolled (traditional route or alternative route) and certification level (elementary and special education, elementary education, middle grades education, secondary education, and P-12 education).

The FIT-Choice scale was validated in 2002 with two cohorts of Pre-service teacher education candidates ( $N=488$ ) at a major urban university in Sydney, Australia. To assess the internal validity of the FIT-Choice scale, researchers validated the scale in 2003 across an independent cohort ( $N=652$ ) from another urban university in Sydney, Australia. The researchers conducted exploratory factor analysis (EFA) with image extraction and oblimin rotation ( $\Delta=0$ ) and confirmatory factor analysis (CFA). After the researchers conducted statistical analyses, they concluded convergent and divergent construct validity and good reliability across factors influencing the choice of teaching as a career in two independent samples (Watt & Richardson, 2007). "The FIT-Choice scale developed from the basis of expectancy-value theory provides a psychometrically and

theoretically strong framework to guide future research into the choice of teaching as a career” (Watt & Richardson, 2007, p. 195).

### **Cronbach’s Alpha Coefficient.**

Cronbach’s alpha coefficient was computed to assess the internal reliability of the FIT-Choice scale (Watt and Richardson, 2008). Reliability is the consistency of measurement, or the degree to which a test, or whatever is used as a measurement, measures the same way each time it is used under the same conditions with the same subjects (Salkind, 2008). The reliability coefficient ranges from zero (0) to one (1). Scores closer to one suggest that the items in the scale are measuring the same thing (Vough & Johnson, 2011). Watt and Richardson (2008) conducted Cronbach alphas for each one of the FIT-Choice scale constructs. This study also conducted Cronbach alphas each construct. Table 1 provides Cronbach alpha coefficient comparisons for each one of the FIT-Choice scale constructs between the study conducted by Watt and Richardson in 2008 and this study.

Table 1

FIT-Choice scale, comparison of Cronbach's alpha coefficient

	Constructs	*Cronbach's $\alpha$	Cronbach's $\alpha$ present study	# of items
Motivations	Ability	0.82	0.82	3
	Intrinsic career value	0.59	0.41	3
	Fallback career	0.65	0.43	3
	Job security	0.84	0.76	3
	Time for family	0.80	0.82	5
	Job transferability	0.69	0.71	3
	Shape future of children/adolescents	0.79	0.86	3
	Enhance social equity	0.83	0.81	3
	Make social contributions	0.82	0.83	3
	Work with children/adolescent	0.88	0.90	3
	Prior teaching and learning experiences	0.87	0.86	3
	Social influences	0.82	0.85	3
Perceptions	Expertise	0.73	0.80	3
	Difficulty	0.73	0.68	3
	Social status	0.90	0.84	6
	Salary	0.94	0.91	2
	Social Dissuasion	0.60	0.83	3
Satisfaction	Satisfaction with choice	0.92	0.93	2

\*Watt and Richardson (2008)

### Procedures

Data for this study were gleaned from an Internet-based self-report survey. Self-report is the most direct type of attitude assessment because the researcher assumes that individuals whose attitudes are being assessed have the self-awareness to recognize their own beliefs and feelings, that they have the ability to articulate them, and that they do not have a reason to lie (Henerson, Morris, & Fitz-Gibbon, 1987). Internet-based self-report surveys offer time efficiency and cost savings (Dillman, 2000). The next sections in this

chapter describe Internet survey research and sampling procedures proposed for this study.

### **Internet Survey Research**

Educators began using Electronic Surveys in the early 1990s (Tarby, 2000). In the last decade, electronic surveys evolved from disk-by mail surveys, to e-mails with attached or embedded surveys, to web-based surveys posted on the Internet (Shannon, & Bradshaw, 2002). In this type of survey, participants receive a link via e-mail message or mailed cover letter to a specific URL (Uniform Resource Locator) on the World Wide Web to the survey (Tarby, 2000). Web-based surveys are visual, allowing the researcher manipulation of font size, color, layout, graphics, and animation (Couper, 2000). Participants are prompted to answer questions either from a closed format in which participants choose from predetermined responses such as pull-down menus, checkboxes or open-ended format in which participants write responses that are relevant or important to them in relation to the issue at hand. Close response format allows the researcher to produce accurate summaries in a short period of time. Open-ended formatted questions bring unanticipated outcomes (Henerson et al., 1987; McMillan, & Schumacher, 1989). When participants complete the survey, they are prompted to submit it. By submitting the survey, participants' responses are forwarded to a database from where researchers extract and manipulate data (Tarby, 2000). Salant and Dillman (1994) indicate that measurement errors in surveys are deviations of the respondents' answers from the actual answers. Salant and Dillman (1994) list three sources of web-based surveys: (a) the survey method, (b) the questionnaire design, and (c) the respondent.



## **Internet Based Self Report Survey**

Self-report surveys include all procedures by which individuals can be asked to report on their own attitudes (Henerson et al., 1987, p. 20). Self-report surveys are the most direct type of attitude assessment unless the researcher has reasons to doubt individuals participating in the attitude assessment are unable or unwilling to provide the necessary information sought for study (Henerson et al., 1987, p. 20). Internet-based surveys ask individuals to provide their answers electronically. Individuals may receive an e-mail message with the URL web address or a mailed cover letter asking them to participate in the internet-based self-report survey (Tarby, 2000).

### **Advantages of Internet-Based Self Report Surveys**

Internet-based self-report surveys present researchers with many advantages such as quicker response time, lower cost (no postage, printing, or reproduction), and automated data gathering (Couper, 2000). Some web-based survey packages allow sophisticated data analysis reports to be generated as data are being collected or after data have been collected. This feature might eliminate the need to buy additional statistical analysis software (Tarby, 2000).

Another advantage of this type of survey is that the interface makes it look similar to the paper and pencil questionnaires which individuals are accustomed to seeing with an increased manipulation of font size, color, layout, graphics, and animation (Couper, 2000). Researchers may design graphic and interactive hypertext links with the purpose of offering more information to the individual answering the survey in the form of prompts (e.g., messages indicating missing responses, beginning survey, ending survey)

and/or branching when an individual, based on a response, individually will be directed to skip questions or more questions will be asked (Tarby, 2000)

### **Limitations of Internet-Based Self Report Surveys**

The technology infrastructure and online support network that exist in a university do not extend to rural and low income populations. It could be a deterrent to a study to use web-based self-report surveys in rural areas where Internet access is less available because there could be a low response rate (Timmerman, 2000). However, in 2012, these concerns have lessened to some extent as Internet access and competencies of the general public in using the Internet are more prevalent than they were a decade ago.

Salent and Dillman (2000) posited the importance of having a representative sample which accurately describes the target population to increase accuracy in the responses. The researchers note four sources of error in survey research which can lead to an inaccurate description of the population: (1) sampling error is the result of surveying only one subset of the population; (2) coverage error is when the sample does not represent all elements of the survey population; (3) measurement error is the result of poor question wording as a result inaccurate information; and (4) nonresponse error is when individuals who responded to the survey are different from those individuals who did not respond the survey and who are important for the study (Salent & Dillman, 2000).

### **Sampling Procedures**

Dillman, Smyth, and Christian's (2009) Tailored Design Method was integrated throughout the procedures for conducting this research study. Tailored Design Method "is a set of procedures for conducting successful self-administered surveys that produce both high quality information and high response rates" (Salent & Dillman, 1994, p. 29).

First, permission to conduct the study was requested to and granted by the University's Institutional Review Board (IRB). The goal was to provide each member of a defined population an equal opportunity to participate in the survey, check wording, and determine appropriateness of questions in order to increase response rate. The four guidelines are: (a) survey content ought to be reviewed by knowledgeable colleagues and analysts, (b) the researcher will conduct interviews to assess cognitive and motivational qualities of content, (c) the researcher will conduct a small pilot study, and (d) the researcher will do a final check. Table 2 acknowledges each step of the Tailored Design Method and provides the purpose of each step (Dillman et al., 2009).

Table 2.

Steps in Dillman et al.'s (2009) Tailored Design Method

Steps	Purpose of Step
1. Survey content should be reviewed by knowledgeable colleagues and analysts	This step is designed to elicit suggestions on research content by those who have experience with previous surveys and study objectives.
2. Conduct interviews to evaluate cognitive and motivational qualities of content	The step is designed to test the appropriateness of questions, the order of questions, and the delivery methods works as intended.
3. Conduct a small pilot study	The step is designed to emulate the procedures that will be used for the research study
4. Do a final check	The step is designed to finalize any last changes to the study and seeks the opinion of someone not involved in study to review the instrument for missing information.

To follow Dillman et al.'s (2009) recommendations, knowledgeable colleagues such as educators and a survey design expert reviewed the survey content to obtain suggestions to improve the quality of the survey. Next, the researcher conducted interviews with a survey research expert to evaluate the overall qualities of the survey content, such as the wording of the questions, the order of the questions, and the intended delivery of the questions. Third, a pilot study was conducted. The pilot study included distributing the survey instrument to 10 - 15 working adults who had agreed to participate in the pilot study. The primary purpose of this pilot study was to evaluate the construction of the questions for ease of use as well as to estimate the length of time for completing the survey (Fowler, 2002). Feedback from the pilot study was incorporated into the design of the survey instrument and was used to complete the final stage of Dillman et al.'s (2009) guidelines, which was the final check. To complete the final check, the researcher asked someone not involved in the study to review the instrument in an attempt to be reasonably certain nothing was missing. Feedback from the final check was incorporated into the design of the final survey instrument.

Next, permission was requested to conduct the study at the College of Education and Human Development to students enrolled in initial certification teacher education programs. E-mail addresses for all potential participants were accessed through a CEHD instructional programs' administrator in the unit who was asked to forward all research-related communication for this study, including the survey link, to potential participants on behalf of the researcher.

Once an agreement between the researcher and the CEHD instructional programs unit had been reached, the researcher sent the survey for administration to the research

sponsor. For scheduling purposes, Dillman et al. (2009) recommend an interval-scheduling framework for making initial contact, administering the survey, and sending follow-up reminders to participants. Table 3 contains the scheduling framework that was used for this study in accordance with Dillman et al.'s (2009) Tailored Design Method.

Table 3.

Proposed Scheduling Framework: Based on Dillman et al.'s (2009) Tailored Design Method

Time Frame	Action
Week One	Invitation pre-notification
Week Two	Survey e-mail sent
Week Three	Reminder e-mail sent
Week Four & repeated each 15 days until minimum response received	Reminder e-mail sent
Conclusion of survey	Thank you e-mail sent

Adhering to Dillman et al.'s (2009) Tailored Design Method, participants received a pre-notification e-mail from the researcher inviting them to participate in the study one week prior to the survey being administered. One week later, participants received an e-mail with a welcome message, an invitation to participate in the study, a confidentiality notice, and instructions to assist in completing the survey instrument. The survey was administered via a computer survey tool (Survey Monkey<sup>®</sup>). Participation was voluntary, and participants were able to opt out of the study at any point. After participants submitted the completed survey, participants' data was recorded in an electronic file accessible only to the researcher and principal investigator. Because the file did not contain any identifying information, participant anonymity could be reasonably assured. Specific individual responses were not shared with any member of a participating organization or the research sponsor. Participants who had not responded to

the survey one week after the e-mail received a reminder e-mail to encourage their participation in the study. A reminder e-mail was sent every seven days, until the desired response rate was reached.

Data from the surveys were downloaded, saved on an external hard drive, and kept in a locked file in a home office. Data will be kept for three years from the completion of the study after which time the data will be erased, following ethical standards for human subjects' research.

### **Data Analysis**

All quantitative data were entered into the SPSS database (version 21.0 for Windows) and examined for statistically significant relationships using T-test and analysis of variance (ANOVA). T-test distributions are a “family of symmetrical, bell shaped distributions that change as the sample size changes” (Hinkle et al., 1994). T-test distributions were used with dependent variables gender (masculine or feminine) and type of program (traditional route or alternative route). ANOVA analyze difference of groups mean scores of three or more groups; it is an extension of the t-test (Hinkle et al., 1994). ANOVA was used with dependent variables ethnicity (white, black, Hispanic, Asian Native Hawaiian or other pacific islander, American Indian/Alaskan Native and two or more ethnicities) and desired level of teaching certification (elementary and special education, elementary education, middle level education, secondary education and P-12 education).

Characteristics of the responses were analyzed using descriptive statistics including percent, frequency, mean, and standard deviation. An alpha level of .05 was used in the four hypothesis tests. Study variables are interval (continuous) and nominal.

*H*<sub>0</sub>1: There is no significant difference in motivational factors influencing male and female pre-service teachers when choosing teaching as a career.

To test Hypothesis 1, a T-test was conducted. A T-test tells if there is a significant difference in the group means of two groups. In this case it would be males against females.

*H*<sub>0</sub>2: There is no significant difference in motivational factors influencing minority and non-minority pre-service teachers when choosing teaching as a career.

To test Hypothesis 2, analysis of variance (ANOVA) was used. An ANOVA tells if there is a significant difference in group means of two or more groups. In this case it would be white, black, Hispanic, Asian Native Hawaiian or other pacific islander, American Indian/Alaskan Native and two or more ethnicities.

*H*<sub>0</sub>3: There is no significant difference in motivational factors influencing pre-service teachers enrolled in traditional route and alternative route certification programs when choosing teaching as a career.

To test Hypothesis 3, T-test was conducted. A T-test tells if there is a significant difference in the group means of two groups. In this case, it would be the traditional route program against the alternative route program.

*H*<sub>0</sub>4: There is no significant difference in motivational factors influencing pre-service teachers enrolled in elementary and special education, elementary education, middle grades education, secondary education, and P-12 education certification programs when choosing teaching as a career.

To test Hypothesis 4, analysis of variance (ANOVA) was used. An ANOVA tells if there is a significant difference in group means of two or more groups. In this case it

would be elementary special education sample, against elementary education sample, against, middle school education, and against secondary education.

### **Limitations of the Study**

Studies always encompass a number of limitations. These limitations individually or combined could prevent the findings of this study to be applied or transferred to another research setting. The first limitation of the study was that it focused only on the career choice of pre-service teachers, leaving teachers with few years of experience in the field outside the scope of the study. Research studies indicate that one third of new teachers leave the field within the first three years (Drury & Baer, 2011). Knowing the motivational factors of those teachers would provide insightful information that might be related to the issue of attrition.

A second limitation was that the FIT-Choice scale (Watt & Richardson, 2007) has been used in longitudinal studies in Australia and other countries around the world. For this exploratory study, the researcher did not conduct a longitudinal study. Consequently, the opportunity to track the progression of motivational factors of pre-service teachers since the moment they enter their teacher preparation program until the moment they graduate from the program is beyond the scope of this study and findings from the present study should be generalized with caution.

Third, the use of a convenience sample comprised of 447 pre-service teachers (undergraduate and graduate students) enrolled in teaching certification programs during the 2013 spring semester at the college of Education and Human Development (CEHD) in a mid-sized, state funded, public research university in the Midwestern region of the United States. In many educational studies, convenience sampling is used (McMillan &



Schumacher, 1989), although caution is again suggested when generalizing the results beyond the present study.

Fourth, low response rate is an impediment to the generalizability of the results to other sample populations. Internet-based self-report surveys offer time efficiency and cost savings (Dillman, 2000). Self-report is the most direct type of attitude assessment because participants whose attitudes are being assessed have the self-awareness to recognize their own beliefs and feelings; consequently, they can articulate them better (Henerson, Morris, & Fitz-Gibbon 1987, p. 20). One of the main problems of Internet-based-self-report surveys is the low response rate (Couper, Blair, & Triplett, 1999; and Schaefer & Dillman, 1998). Low response rates may result in a biased estimate of the characteristics of the population because answers from survey respondents may differ considerably from those non-respondents (Bean & Roszkowski, 1995). The increase in surveying in the United States may be another part of the explanation of lower response rates (Sheehan, 2001). Length of the survey is another factor that can affect response rate.

Lastly, the lack of diversity within the present study's sample posed a limitation in the richness of the responses. Nonetheless, the sample's diversity reflects national trends with overwhelming number of Caucasian teacher candidates over other ethnicities. AACTE (2012) reported that in 2009-2010 the percentage of bachelor's degrees in education were awarded to candidates by ethnicity as follows: 82% Caucasian, 6% African American, 4% Hispanic, 4% more than two ethnicities, 2% Asian, and 1% American Indian.

## Summary

Chapter 3 describes the research design, instrumentation, procedures, data analysis, and limitations of the study. The primary data collected were pre-service teacher participants' motivational factors and beliefs, which influenced their decision as a career choice to become teachers. These data were gleaned using the Factors Influencing Teaching Choice (FIT-Choice) scale developed by Watt and Richardson (2007). Pre-service teachers' data were analyzed based on demographic factors such as gender (male and female), ethnicity, alternative route versus traditional route certification programs, and level of certification pursued (elementary and special education, elementary education, middle grades education, secondary education, and P-12 education). Measures of central tendency and variation were used to describe participants' motivational factors influencing them to choose teaching as a career. A T-test was conducted to analyze dichotomous variables (gender and type of program). Analysis of variance was conducted to analyze variables with more than two dimensions (ethnicity and level of teaching certification being pursued).

The following chapter, Chapter 4, presents data analysis and report findings gleaned from the FIT-Choice scale (Watt & Richardson, 2007) in the use and implementation of the present study.

## CHAPTER IV

### RESULTS

The purpose of this exploratory study was to identify motivational factors that influence pre-service teachers to choose teaching as a career using data gleaned from the FIT-Choice scale (Watt & Richardson, 2007). The scale examines individuals' motivations for choosing teaching as a career; perceptions of teaching; and career choice satisfaction. The motivations factors for choosing teaching as a career were studied from four different angles: gender, ethnicity, type of program, and type of certification. The theoretical framework for this study was the FIT-Choice framework (Richardson & Watt, 2006). Supporting theories for the theoretical framework are expectancy value theory (Wigfield & Eccles, 2000) and social cognitive theory (Bandura, 1997) from the fields of psychology and career development, respectively.

This chapter presents results and findings that answer the four study's research questions:

1. Are the motivational factors that influence pre-service teachers to choose teaching as a career different between males and females?
2. Are the motivational factors that influence pre-service teachers to choose teaching as a career different between minority and non-minority?
3. Are the motivational factors that influence pre-service teachers to choose teaching as a career different between traditional route and alternative route certification programs?

4. Are the motivational factors that influence pre-service teachers to choose teaching as a career different among elementary and special education, elementary education, middle grades education, secondary education, and P-12 education certification programs?

This chapter is organized into three main sections (a) background of the sample, (b) examination of the hypotheses, and (c) summary of the chapter. To examine the four hypotheses, one way analysis of variance (ANOVA) were conducted to assess if there were significant differences between the means in motivational factors based on gender (male/female), ethnicity (minority/non-minority), type of program (traditional route/alternative route), and teaching certification level (elementary and special education/elementary education/middle grade education/high school education/P-12 education).

The FIT-Choice scale (Watt & Richardson, 2007) was used to collect perceived motivational factors in the following sections: motivations, beliefs about teaching, and decision to become a teacher. The FIT-Choice scale included fifty seven (57) Likert scale items for which possible responses ranged from 1 (not at all) to 7 (extremely) and one open ended question in which participants could elaborate on their reasons for choosing to become teachers. The Statistical Package for the Social Sciences (SPSS), version 21.0 for Windows, was used to analyze the data. Tables are included in each section to aid in the discussion of the statistical analysis and results. Appendices provide additional reporting information.

## **Background of the Sample**

The study utilized a convenience sample comprised of 447 pre-service teachers (undergraduate and graduate students) enrolled in initial teaching certification programs during the 2013 spring semester at the college of Education and Human Development (CEHD) in a mid-size, state funded, public research university in the Midwestern region of the United States. All 447 students were invited to participate in the study. Overall, 126 students self-selected to participate in the study. Twenty surveys were discarded because incomplete information. One hundred six surveys were analyzed for this study, representing 23.7 % of the total population of potential respondents. In the following sections, participants' background: gender, ethnicity, type of program, and type of certification are examined.

### **Gender**

Approximately 18% ( $n = 19$ ) of the sample was male and 82% ( $n = 87$ ) was female. See Table 1 for complete details.

### **Ethnicity**

A frequency analysis of ethnicity indicated that 90% ( $n = 95$ ) of the sample was non-minority (white/Caucasian) and 10% ( $n = 11$ ) was minority. The minority group was represented by 8% ( $n = 9$ ) African-American, 1% ( $n = 1$ ) Asian or other Pacific Islander, and 1% ( $n = 1$ ) belonged to more than one ethnicity. See Table 1 for complete details.

### **Type of Program**

A frequency analysis of type of program indicated that 89% ( $n = 94$ ) of the sample was enrolled in a traditional route program, and 11% ( $n = 12$ ) was enrolled in an alternative route program. See Table 1 for complete details.

## Type of Certification

A frequency analysis of type of teaching certification indicated that 10% ( $n = 11$ ) of the sample was Elementary and Special Education; 30% ( $n = 32$ ) was Elementary Education; 18% ( $n = 19$ ) was Middle Grade Education; 34% ( $n = 36$ ) was High School Education; and 8% ( $n = 8$ ) was P-12 Education. See Table 4 for complete details.

Table 4

Frequency of Demographic Variables

Category	Variable	<i>f</i>	Percent
Gender	Male	19	18
	Female	87	82
Ethnicity	Non-minority	95	90
	Minority	11	10
Type of Program	Traditional Route	94	89
	Alternative Route	12	11
Type of Certification	Elementary and Special Education	11	10
	Elementary Education	32	30
	Middle Grade Education	19	18
	High School Education	36	34
	P-12 Education	8	8

## Other Demographics

Other demographics were collected to add contextual value to the study. These demographics were not utilized in examining the four research questions for this study but may provide a more complete picture of the makeup of the sample within this study. Demographics are organized as follows: (a) participants' demographic variables, (b) highest level of school completed by participants and their parents, and (c) parents'

demographics including primary career cluster, country of birth and combined income before taxes.

### **Participants' Demographic**

A frequency analysis indicated that 39% ( $n = 41$ ) of the sample was undergraduate; 47% ( $n = 50$ ) was graduate; and 14% ( $n = 15$ ) did not report their status. Frequency analysis also indicated that 66% ( $n = 70$ ) of the sample reported choosing teaching as their first career choice; 20% ( $n = 21$ ) did not; and 14% ( $n = 15$ ) did not respond to the question. Approximately 85% ( $n = 90$ ) the sample used English as their primary language of communication at home, and 15% ( $n = 16$ ) did not respond to the question. The sample age ranged from eighteen to twenty four years 51% ( $n = 54$ ), from twenty five to thirty four 22% ( $n = 23$ ), from thirty five to forty four 8% ( $n = 9$ ), from forty five to fifty four 2% ( $n = 2$ ), and from fifty five to sixty four 2% ( $n = 2$ ). The sample did not include anyone sixty five and older, and 15% ( $n = 16$ ) did not respond to the questions. Frequency analysis also indicated that 64% ( $n = 68$ ) of the sample did not have children; 8% ( $n = 9$ ) had one child; 6% ( $n = 6$ ) had two children; 2% ( $n = 2$ ) had three children; and 5% ( $n = 5$ ) had four children. The sample did not include anyone having more than five children, and 15% ( $n = 16$ ) did not answer the question. A frequency analysis about samples' occupational status indicated that 35% ( $n = 37$ ) of the sample was employed for wages; 2% ( $n = 2$ ) was out of work but looking for work; 1% ( $n = 1$ ) was homemaker; 46% ( $n = 49$ ) was a full time student; and 16% ( $n = 17$ ) did not answer the question. The sample did not include anyone self-employed, in the military, retired, out of work but not looking for work, or unable to work. See Table 5 for complete details.

Table 5

## Participants' Demographic

Category	Variable	<i>f</i>	Percent
Type of Student	Undergraduate	41	39
	Graduate	50	47
	Total	91	86
	Missing	15	14
Teaching was First Career Choice	Yes	70	66
	No	21	20
	Total	91	86
	Missing	15	14
Language spoken at home	English	90	85
	Missing	16	15
Age Range	18 – 24	54	51
	25 – 34	23	22
	35 – 44	9	8
	45 – 54	2	2
	55 – 64	2	2
	Total	90	85
	Missing	16	15
Number of Children	None	68	64
	1	9	8
	2	6	6
	3	2	2
	4	5	5
	Total	90	85
	Missing	16	15
Occupational status	Employed for wages	37	35
	Out of work and looking for work	2	2
	Homemaker	1	1
	Student	49	46
	Total	89	84
	Missing	17	16



### Highest Level of School Completed by Participants and Parents

Frequency analysis about the highest level of school completed by participants and their parents indicated that 4% ( $n = 5$ ) of the father figure had less than high school. Participants with high school diploma or equivalent were 6% ( $n = 7$ ) and their parents, respectively, were 20% ( $n = 21$ ) father and 21% ( $n = 22$ ) mother; participants with some college but not degree were 22% ( $n = 23$ ) and their parents respectively were 11% ( $n = 13$ ) father and 10% ( $n = 11$ ) mother; participants with Associate degrees were 4% ( $n = 4$ ) and their parents respectively were 15% ( $n = 6$ ) father and 14% ( $n = 15$ ) mother; participants with Bachelor degrees were 40% ( $n = 43$ ) and their parents, respectively, were 21% ( $n = 22$ ) father and 20% ( $n = 21$ ) mother; participants with Graduate degrees were 13% ( $n = 13$ ) and their parents, respectively, were 21% ( $n = 21$ ) father and 20% ( $n = 21$ ) mother. See Table 6 for complete details.

Table 6

Highest Level of School Completed by Participants and their Parents

	Participant		Father		Mother	
	<i>f</i>	Percent	<i>f</i>	Percent	<i>f</i>	Percent
Less than high school	0	0	5	4	0	0
High School or Equivalent	7	6	21	20	22	21
Some College but not Degree	23	22	13	11	11	10
Associate Degree	4	4	6	15	15	14
Bachelor Degree	43	40	22	21	21	20
Graduate Degree	13	13	21	21	21	20
Total	90	85	88	83	90	85
Missing	16	15	18	17	16	15

## **Participants Parents' Demographics**

Frequency analysis about participants' father figure primary career cluster, regardless of their current job, indicated that 5% ( $n = 5$ ) main career cluster was Agriculture Food and Natural Resources, 4% ( $n = 4$ ) was Architecture and Construction; 5% ( $n = 5$ ) was Arts, Audio/Video Technology and Communications; 12% ( $n = 13$ ) was Business Management and Administration; 6% ( $n = 6$ ) was Education and Training; 6% ( $n = 7$ ) was Finance; 6% ( $n = 6$ ) was Government and Public Administration; 2% ( $n = 2$ ) was Hospitality and Tourism; 7% ( $n = 8$ ) was Human Services; 3% ( $n = 3$ ) was Law, Public Safety, Corrections and Security; 10% ( $n = 11$ ) was Manufacturing; 7% ( $n = 8$ ) was Science, Technology, Engineering and Mathematics; and 3% ( $n = 3$ ) was Transportation, Distributions and Logistics.

Frequency analysis about participants' mother figure primary career cluster, regardless of their current job, indicated that 1% ( $n = 1$ ) was Agriculture, Food and Natural Resources; there were no reports for Architecture and Construction; 1% ( $n = 1$ ) was Arts, Audio/Video Technology and Communications; 8% ( $n = 9$ ) was Business Management and Administration; 22% ( $n = 24$ ) was Education and Training; 3% ( $n = 3$ ) was Finance; 6 1% ( $n = 1$ ) was Government and Public Administration; 1% ( $n = 1$ ) was Hospitality and Tourism; 33% ( $n = 35$ ) was Human Services; 1% ( $n = 1$ ) was Law, Public Safety, Corrections and Security; 3% ( $n = 3$ ) was Manufacturing; 1% ( $n = 1$ ) mothers' main career cluster was Science, Technology, Engineering and Mathematics; and 2% ( $n = 2$ ) was Transportation, Distributions and Logistics. Data indicated that none of the parents worked in Information Technology. See Table 7 for complete details.

Table 7

Parents' Primary Career Cluster	Father		Mother	
	<i>f</i>	Percent	<i>f</i>	Percent
Agriculture, Food and Natural Resources	5	5	1	1
Architecture and Construction	4	4	0	0
Arts, Audio/Video Technology and Communications	5	5	1	1
Business Management and Administration	13	12	9	8
Education and Training	6	6	24	22
Finance	7	6	3	3
Government and Public Administration	6	6	1	1
Hospitality and Tourism	2	2	1	1
Human Services	8	7	35	33
Information Technology	0	0	0	0
Law, Public Safety, Corrections and Security	3	3	1	1
Manufacturing	11	10	3	3
Science, Technology, Engineering and Mathematics	8	7	1	1
Transportation, Distributions and Logistics	3	3	2	2
Total	81	76	82	77
Missing	25	24	24	23

Frequency analysis about participants' father country of birth indicated 61% ( $n = 65$ ) were from the United States; 1% ( $n = 1$ ) was from Indonesia, 1% ( $n = 1$ ) was from Iran, and 1% ( $n = 1$ ) was from Liberia. Mother's data indicated that 63% ( $n = 67$ ) were from the United States; 1% ( $n = 1$ ) was from Bermuda; 1% ( $n = 1$ ) was from Liberia; and 1% ( $n = 1$ ) was from Philippines.

Frequency analysis about parents' combined income before taxes when participants were in high school indicated that 3% ( $n = 3$ ) earned under \$25,000; 10% ( $n = 11$ ) earned between \$25,000 and \$39,999; 9% ( $n = 9$ ) earned between \$40,000 and \$49,999; 9% ( $n = 10$ ) earned between \$50,000 and \$74,999; 11% ( $n = 12$ ) earned between \$75,000 and \$99,999; 16% ( $n = 17$ ) earned between \$100,000 and \$124,000;

10% ( $n = 11$ ) earned between \$125,000 and \$149,000; and 6% ( $n = 6$ ) earned over \$150,000. See Table 8 for complete details.

Table 8

Frequency Table of Parents' Combined Income before Taxes

	<i>f</i>	Percent
Under \$25,000	3	3
\$25,000-\$39,999	11	10
\$40,000 -\$49,999	9	9
\$50,000-\$74,999	10	9
\$75,000-\$99,999	12	11
\$100,000-\$124,000	17	16
\$125,000-\$149,000	11	10
Over, \$150,000	6	6
Total	79	74
Missing	27	26

### Examination of Hypotheses

As indicated in the four primary research questions, pre-service teachers' motivational factors regarding career choice were analyzed using the FIT-Choice scale (Watt & Richardson, 2007) in association with the following demographic factors: gender (male/female), ethnicity (minority/none minority), type of program (traditional route/alternative route), and teaching certification level (elementary and special education/elementary education/middle grade education/high school education/P-12 education). Inferential statistics analysis of variance was used to provide evidence for answering the four research questions.

A preliminary analysis of the one open ended question was included to explore how common themes might emerge within the data when participants described their reasons to become teachers. The open ended question was as follows: "I chose to become a teacher because..." (Watt & Richardson, 2007). Participants were invited to complete

the sentence using any response they chose. No a priori choices were provided for participants to choose from. Responses were read, categorized, and collapsed according to the twelve motivational constructs included in the FIT-Choice scale (Watt & Richardson, 2007). Results indicated that 26% ( $n = 28$ ) of the sample chose teaching because they want to shape the future of children/adolescents; 21% ( $n = 22$ ) like to work with children/adolescents; 19% ( $n = 20$ ) want to make a social contribution; 10% ( $n = 11$ ) have intrinsic career values; 9% ( $n = 10$ ) had prior teaching and learning experiences; 4% ( $n = 4$ ) want to enhance social equity; 4% ( $n = 4$ ) have the ability to teach; 3% ( $n = 3$ ) is a fallback career; 2% ( $n = 2$ ) had social influences; 1% ( $n = 1$ ) job security; and 1% ( $n = 1$ ) time for family. Participants did not report job transferability as a motivation to get into teaching. See table 9 for complete details.

Findings indicate the top three most predominant reasons to become a teacher were: 1) to shape the future of children and adolescents; 2) to work with children and adolescents; and 3) to make a social contribution. These findings are parallel with findings from Johnston, McKeown, and McEwen (1999) and Richardson and Watt (2006) regarding the reasons pre-service chose to enter the teaching field.

Table 9

Motivations for teaching “I chose to become a teacher because...” (Watt & Richardson 2007)

First-order Factor	<i>f</i>	Percentage	Order of Importance
Ability	4	4	6
Intrinsic career value	11	10	4*
Fallback career	3	3	7
Job security	1	1	9*
Time for family	1	1	9
Job transferability	0	0	10*
Shape future of children/adolescents	28	26	1*
Enhance social equity	4	4	6*
Make social contribution	20	19	3*
Work with children/adolescents	22	21	2
Prior teaching and learning experiences	10	9	5*
Social influences	2	2	8*
Total participants	106	100	

*Note.* Order of importance 1 = least important; 10 = most important. Comparisons between open ended question responses and the motivational construct of the FIT-Choice scale responses are noted with \* when there is equal or one number apart relationship.

### Multicollinearity

When variables are highly correlated, they are believed to convey essentially the same information in measuring a like phenomenon. Such variables are called “collinear”. Multicollinearity is when the correlation among independent variables is strong (Vogt & Johnson, 2011). Multicollinearity increases the standard errors of the coefficients for some independent variables resulting in not finding significant differences. If multicollinearity is present within a sample, it might be difficult to obtain reliable estimates of individual regression coefficients (Cohen & Cohen, 1983, as cited by MacKenzie, 2013).

Without multicollinearity and with lower standard errors of the coefficients, the same independent variables might show significant differences. Variance Inflation

Variance Inflation Factors (VIF) measures how much of variance of estimated coefficients are increased over the case of no correlation among independent variables. If VIF for one of the variables is equal or greater than 5 there is collinearity associated with the variable (Huck, 2004). Variance inflation was checked using the VIF prior to any analysis of data. No predictor variables were found to have a higher VIF than 1.11. Thus, evidence suggested multicollinearity was not a primary concern within the results of this sample.

**Analysis of Variance ANOVA for testing  $H_01$**

$H_01$  stated that there was no significant difference in motivational factors (FIT-Choice scale) influencing male and female pre-service teachers when choosing teaching as a career ( $H_01: \mu_{1 \text{ male}} = \mu_{2 \text{ female}}$ ). A one-way analysis of variance was conducted to evaluate the relationship between gender and motivational factors using the FIT-Choice scale. The independent variable, gender, included two levels: male and female. The dependent variable, motivational factors, was measured by the FIT-Choice scale. The ANOVA was not significant  $F(1, 89) = 0.499, p = 0.482$ . Evidence indicated failure to reject null hypothesis one ( $H_01: \mu_{1 \text{ male}} = \mu_{2 \text{ female}}$ ). See Table 10.

Table 10

Gender and FIT-Choice scale ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	353.340	1	353.340	.499	.482
Within Groups	63049.342	89	708.420		
Total	63402.681	90			

Despite evidence suggesting non significance between gender and motivational factors, to ensure no potential interactions between the variables of interest, repeated ANOVA measures for each of the FIT-Choice scale sections (motivation, perception and

satisfaction) were examined. The ANOVA measures were non-significant: motivation  $F(1, 91) = 0.106, p = 0.746$ ; perception  $F(1, 89) = 1.522, p = 0.221$ ; and satisfaction  $F(1, 89) = 0.244, p = 0.622$ . Again, evidence indicated failure to reject null hypothesis one ( $H_{01}: \mu_{1 \text{ male}} = \mu_{2 \text{ female}}$ ). Overall, findings indicated that there was no significant difference between motivational factors influencing man and women pre-service teachers when choosing teaching as a career. See Table 11.

Table 11

FIT-Choice scale one way ANOVA according to gender

		Sum of Squares	df	Mean Square	F	Sig.
Motivation	Between Groups	46.453	1	46.453	.106	.746
	Within Groups	39991.611	91	439.468		
	Total	40038.065	92			
Perception	Between Groups	133.137	1	133.137	1.522	.221
	Within Groups	7784.995	89	87.472		
	Total	7918.132	90			
Satisfaction	Between Groups	.651	1	.651	.244	.622
	Within Groups	237.349	89	2.667		
	Total	238.000	90			

### Analysis of Variance ANOVA for testing $H_{02}$

$H_{02}$  stated that there was no significant difference in motivational factors (FIT-Choice scale) influencing minority and non-minority pre-service teachers when choosing teaching as a career ( $H_{02}: \mu_{1 \text{ minority}} = \mu_{2 \text{ non-minority}}$ ). A one-way analysis of variance was conducted to evaluate the relationship between ethnicity and motivational factors using the FIT-Choice scale. The independent variable, ethnicity, included two levels: minority and non-minority. The dependent variable, motivational factors, was measured by the FIT-Choice scale. The ANOVA was not significant  $F(3, 87) = 0.494, p = 0.688$ . The strength of relationship between ethnicity and motivational factors was not strong.



Evidence indicated failure to reject null hypothesis two ( $H_02: \mu_1 \text{ minority} = \mu_2 \text{ non-minority}$ ). See

Table 12.

Table 12

Ethnicity and FIT-Choice scale ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1060.956	3	353.652	.494	.688
Within Groups	62341.725	87	716.572		
Total	63402.681	90			

Despite evidence suggesting non significance between ethnicity and motivational factors, to ensure no potential interactions between the variables of interest, repeated ANOVA measures for each of the FIT-Choice scale sections (motivation, perception and satisfaction) were examined. The ANOVA measures were non-significant: motivation  $F(3, 89) = 0.405, p = 0.750$ ; perception  $F(3, 87) = 0.489, p = 0.691$ ; and satisfaction  $F(3, 87) = 0.280, p = 0.840$ . Evidence indicated failure to reject null hypothesis two ( $H_02: \mu_1 \text{ minority} = \mu_2 \text{ non-minority}$ ). Overall findings indicated that there was no significant difference between motivational factors influencing minority and non-minority-pre-service teachers when choosing teaching as a career. See Table 13.

Table 13

## Ethnicity and FIT-Choice scale sections ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Motivation	Between Groups	539.419	3	179.806	.405	.750
	Within Groups	39498.645	89	443.805		
	Total	40038.065	92			
Perception	Between Groups	131.202	3	43.734	.489	.691
	Within Groups	7786.930	87	89.505		
	Total	7918.132	90			
Satisfaction	Between Groups	2.275	3	.758	.280	.840
	Within Groups	235.725	87	2.709		
	Total	238.000	90			

Findings indicate that there is no significant difference in motivational factors influencing minority and non-minority pre-service teachers when choosing teaching as a career.

### Analysis of Variance ANOVA for testing $H_{03}$

$H_{03}$  stated that there was no significant difference in motivational factors influencing pre-service teachers enrolled in traditional route and alternative route certification programs when choosing teaching as a career ( $H_{03}$ :  $\mu_{1 \text{ traditional route}} = \mu_{2 \text{ alternative route}}$ ). A one-way analysis of variance was conducted to evaluate the relationship between type of program and motivational factors using the FIT-Choice scale. The independent variable, type of program, included two levels: traditional route and alternative route. The dependent variable, motivational factors, was measured by the FIT-Choice scale. The ANOVA was not significant  $F(1, 89) = 1.464, p = 0.229$ . Evidence indicated failure to reject null hypothesis three ( $H_{03}$ :  $\mu_{1 \text{ traditional route}} = \mu_{2 \text{ alternative route}}$ ). See Table 14.

Table 14

Type of program and FIT-Choice scale ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1026.390	1	1026.390	1.464	.229
Within Groups	62376.291	89	700.857		
Total	63402.681	90			

Despite evidence suggesting non significance between type of program and motivational factors, to ensure no potential interactions between the variables of interest, repeated ANOVA measures for each of the FIT-Choice scale sections (motivation, perception and satisfaction) were examined. The ANOVA measures were non-significant: motivation  $F(1, 91) = 0.363, p = 0.549$ ; perception  $F(1, 89) = 2.985, p = 0.88$ ; and satisfaction  $F(1, 89) = 0.42, p = 0.838$ . Again evidence indicated failure to reject null hypothesis three ( $H_{03}: \mu_{1 \text{ traditional route}} = \mu_{2 \text{ alternative route}}$ ). Overall findings indicated that there was no significant difference between motivational factors influencing traditional route and alternative route program pre-service teachers when choosing teaching as a career. See Table 15.

Table 15

Type of Program and FIT-Choice scale ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Motivation	Between Groups	158.904	1	158.904	.363	.549
	Within Groups	39879.161	91	438.233		
	Total	40038.065	92			
Perception	Between Groups	256.952	1	256.952	2.985	.088
	Within Groups	7661.180	89	86.081		
	Total	7918.132	90			
Satisfaction	Between Groups	.112	1	.112	.042	.838
	Within Groups	237.888	89	2.673		
	Total	238.000	90			

Findings indicate that there is no significant difference in motivational factors influencing pre-service teachers enrolled in traditional route and alternative route certification programs when choosing teaching as a career.

**Analysis of Variance ANOVA for testing  $H_04$**

$H_04$  stated that there was no significant difference in motivational factors influencing elementary and special education, elementary education, middle grades education, secondary education, and P-12 education certification programs pre-service teachers when choosing teaching as a career ( $H_04: \mu_1$  elementary and special education =  $\mu_2$  elementary education =  $\mu_3$  middle grades education =  $\mu_4$  secondary education =  $\mu_5$  P-12 education). A one-way analysis of variance was conducted to evaluate the relationship between type of certification and motivational factors using the FIT-Choice scale. The independent variable, type of certification, included five levels: elementary and special education, elementary education, middle grades education, secondary education, and P-12 education. The dependent variable, motivational factors, was measured by the FIT-Choice scale. The ANOVA was not significant  $F(4, 86) = 0.550, p = 0.700$ . Evidence indicated failure to reject null hypothesis four ( $H_04: \mu_1$  elementary and special education =  $\mu_2$  elementary education =  $\mu_3$  middle grades education =  $\mu_4$  secondary education =  $\mu_5$  P-12 education). See Table 16.

Table 16

Type of Certification and FIT-Choice scale ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1580.279	4	395.070	.550	.700
Within Groups	61822.402	86	718.865		
Total	63402.681	90			

Despite evidence suggesting non significance between type of certification and motivational factors, to ensure no potential interactions between the variables of interest, repeated ANOVA measures for each of the FIT-Choice scale sections (motivation, perception and satisfaction) were examined. The ANOVA measures were non-significant: motivation  $F(4, 88) = 1.209, p = 0.313$ ; perception  $F(4, 86) = 0.556, p = 0.695$ ; and satisfaction  $F(4, 86) = 0.788, p = 0.536$ . Again evidence indicated failure to reject null hypothesis four ( $H_04: \mu_1$  elementary and special education =  $\mu_2$  elementary education =  $\mu_3$  middle grades education =  $\mu_4$  secondary education =  $\mu_5$  P-12 education). Overall findings indicated that there is no significant difference between motivational factors influencing elementary and special education, elementary education, middle grades education, secondary education, and P-12 education pre-service teachers when choosing teaching as a career. See Table 17.

Table 17

Type of Certification and FIT-Choice scale ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Motivation	Between Groups	2086.376	4	521.594	1.209	.313
	Within Groups	37951.689	88	431.269		
	Total	40038.065	92			
Perception	Between Groups	199.672	4	49.918	.556	.695
	Within Groups	7718.460	86	89.750		
	Total	7918.132	90			
Satisfaction	Between Groups	8.410	4	2.102	.788	.536
	Within Groups	229.590	86	2.670		
	Total	238.000	90			

Findings indicate that there is no significant difference in motivational factors influencing pre-service teachers enrolled in elementary and special education, elementary education, middle grades education, secondary education, and P-12 education certification programs when choosing teaching as a career.

## Summary

Results of this study supported the four hypotheses proposed in this study. The variables included in  $H_01$  through  $H_04$ , gender, ethnicity, type of program and type of certification were not significantly associated with motivational factors that influence pre-service teachers to choose teaching as a career. Therefore, hypotheses  $H_01$  through  $H_04$  were supported by the findings of this study. Chapter 5 discusses the results and implications of these findings for research, theory, and practice.

## CHAPTER V

### IMPLICATIONS AND RECOMMENDATIONS

The purpose of this study was to analyze motivational and demographic factors that influence pre-service teachers' decision to become teachers. The theoretical framework used in this study is the Factors Influencing Teaching Choice (Richardson & Watt, 2006), which is rooted in Expectancy Choice (Wigfield & Eccles, 2000) and Social Cognitive theories (Bandura, 1997).

This exploratory research study identified motivational factors as reported by survey respondents that influenced pre-service teachers to choose teaching as their career, using data gleaned from the Factors Influencing Teaching Choice (FIT-Choice) scale (Watt & Richardson, 2007). The study examined 106 individuals' reported demographics, motivational factors, perceptions about teaching, and satisfaction with career choice as part of the FIT-Choice scale (Watt & Richardson, 2007). Respondents were pre-service teacher candidates in coursework, field work and clinical experiences in a mid-size, state funded public research university in the Midwestern region of the United States and its initial teacher certification programs in early childhood education; elementary education with dual certification in special education, dual certification; elementary education; middle grades education; secondary education; and grades P-12 certification in Art, World Language, Music and Physical Education. Further the programs reflected B.S., M.A.T. traditional route certification, and M.A.T. alternative route certification pathways. The independent variables selected for this study were

gender, ethnicity, type of program, and type of certification. This chapter provides a brief summary of the study, a discussion of the results, and a brief narrative of the implications for policy, research, and practice. Following this section are topics to consider for future research in regard to the study's topic.

### **Summary of Findings in the Study**

The purpose of this study was to explore which differences in motivational factors regarding career choice exist, based on pre-service teachers' demographics using data gleaned from the FIT-Choice scale (Watt & Richardson, 2007). Demographic factors included gender (male/female), ethnicity (minority/non-minority), type of teaching certification program (traditional route/alternative route), and desired level of teaching certification (elementary and special education; elementary education; middle grades education; secondary education; and P-12 education). This study was guided by four research questions:

1. Are the motivational factors that influence pre-service teachers to choose teaching as a career different between males and females?
2. Are the motivational factors that influence pre-service teachers to choose teaching as a career different between minority and non-minority?
3. Are the motivational factors that influence pre-service teachers to choose teaching as a career different between traditional route and alternative route certification programs?
4. Are the motivational factors that influence pre-service teachers to choose teaching as a career different among elementary and special education, elementary



education, middle grades education, secondary education, and P-12 education certification programs?

To explore these research questions, four hypotheses were proposed for examination:

*H*<sub>0</sub>1: There is no significant difference in motivational factors influencing male and female pre-service teachers when choosing teaching as a career.

*H*<sub>0</sub>2: There is no significant difference in motivational factors influencing minority and non-minority pre-service teachers when choosing teaching as a career.

*H*<sub>0</sub>3: There is no significant difference in motivational factors influencing pre-service teachers enrolled in traditional route and alternative route certification programs when choosing teaching as a career.

*H*<sub>0</sub>4: There is no significant difference in motivational factors influencing pre-service teachers enrolled in elementary and special education, middle grades education, secondary education, and P-12 education certification programs when choosing teaching as a career.

The identified population as respondents for this study consisted of 447 undergraduate and graduate P-12 pre-service teachers pursuing initial teaching certifications in a College of Education and Human Development (CEHD) in a mid-size, state funded public research university in the Midwestern region of the United States. All 447 pre-service teachers were invited to participate in the study by completing the Internet-based self-report survey FIT-Choice scale (Watt & Richardson, 2007). One hundred and twenty six students elected to participate in the study. Twenty surveys were discarded because of incomplete information. One hundred and six surveys were

analyzed for this study, for a 23.7 % response rate. Caution is suggested when generalizing the results beyond the current study.

ANOVA analyses indicated there is no significant difference between selected demographics (gender/ethnicity/type of program/type of certification) in reported motivational factors influencing pre-service teachers when choosing teaching as a career. Results of this study suggested there are no statistically significant relations in this sample population among the variables of interest as reported by teacher candidates in selecting teaching as a career pathway. None of the four null hypotheses were rejected. Although this study did not result statistical significance, further research is suggested, including larger sampling size and follow-up, qualitative interviews – either face to face or in focus groups. More discrimination among these variables, may, in fact, be teased out.

### **Discussion of Motivations for Choosing Teaching as a Career and Teacher Education**

The FIT-Choice framework (Richardson & Watt, 2006) provides a comprehensive and coherent model to guide systematic investigation to identify individuals' reported motivations for choosing teaching as a career (Richardson & Watt, 2006, p. 31). The FIT-Choice scale was developed by Watt and Richardson (2007), and it is rooted mainly in expectancy value theory (Richardson & Watt, 2006). The FIT-Choice scale is divided into three sections (motivations -12 constructs; perceptions -5 constructs; and satisfaction - 1 construct). See appendix A for a visual of the constructs.

There were no differences among demographics and motivational factors influencing pre-service teachers when choosing teaching as a career as was found for this

study (e.g, gender, ethnicity, type of program and type of teaching certification). However, study findings provide valuable information that validate and bring into some question the literature review as well as emphasize the need to expand this line of research. For example, based on the FIT-Choice framework (Richardson & Watt, 2006), social cognitive theory (Bandura, 1997) and/or expectancy value theories (Wigfield & Eccles, 2000) more research could further determine the motivation factors for individuals selecting teaching as a career and what must follow this identification.

Additional research about motivational factors in individuals' choices to pursue teaching as a career, including mixed methods studies at universities and programmatic revisions to address motivational factors explicitly in coursework and field and clinical experiences are needed.

In the next paragraphs, Bandura's (1997) social cognitive theory, expectancy value theory (Wigfield & Eccles, 2000), and Factors influencing Teaching Choice framework will be discussed as they relate to teacher preparation and professional development for pre-service teachers or teachers who have been in the profession from one to five years.

### **Social Cognitive Theory and Teacher**

Self-efficacy and outcome expectancies are two core constructs from Bandura's (1997) social cognitive theory which appear to be pivotal to the teaching profession as a review of selected literature in Chapter 2 reflects. These constructs are difficult to set apart because they are often intertwined. For example, if teachers have the outcome expectancy that all their students will read at grade level by the end of the school year, and they have high self-efficacy, this combination will lead them into achieving their

expected goal. By the same token, if pre-service teachers have the outcome expectancy that they will be prepared to enhance social equity in any educational environment upon completion of their teacher preparation program, and they have high self-efficacy, this combination will lead them into achieving their expected goal. Future research related to self-efficacy and outcome expectancies as they influence motivational factors for pre-service teachers to choose teaching as a career may uncover valuable information for colleges and universities that they can then tailor around their programs.

Self-efficacy is described as the resilient process of self-regulated change to achieve personal efficacy (Bandura, 1997). People with high self-efficacy tend to be more persistent and put more effort in the achievement of their goals (Bandura, 1997).

Teachers with high self-efficacy will be more resilient when facing difficulties and setbacks. These teachers will succeed in the achievement of their goals regardless of the level of difficulty. Challenges and difficulties will make them stronger. On the contrary, teachers with low self-efficacy and who have been exposed to minimal difficulties and setbacks might be easily discouraged by failure after a few attempts. Future research comparing pre-service teachers' self-efficacy and motivational factors influencing their decision to choose teaching as their career using the FIT- Choice scale (Watt & Richardson, 2007) might uncover meaningful correlations or lack of correlations between self-efficacy and constructs outlined in the instrument.

Statistics show the staggering numbers of teachers leaving the profession during their first few years on the job. Aud et al. (2011) reported that about 8% teachers left the profession in 2009. Some accounts and labor statistics conclude that the profession is losing approximately 60%-75% of new teachers within the first five to seven years of

teaching (Carrol & Foster, 2010). One wonders how high the self-efficacy of these teachers leaving the profession was. By the same token, one wonders, was teaching their true calling in life, as a passion they pursued, or did these individuals drift into teaching by convenience or happenstance? If significant individuals are entering the teaching profession through the latter modes, there may be cause for concern and a need for additional research in this area, as the complexities and demands of teaching, in addition to what may be a number of individuals casually entering the profession, do not support Bandura's (1997) self-efficacy theory about competent and successful individuals in a given profession. Results from the present study indicate that, "shaping the future of children/adolescents" and "making social contributions" were the most important factors for choosing teaching as a career. Further research would be valuable to measure pre-service teachers' self-efficacy to predict their teaching success.

Self-efficacy also has a social component embedded. If people see others like them succeed, they are more likely to believe that they have the capacity to succeed and will succeed (Bandura, 1997). This is worrisome for the teaching profession because colleges and universities do not have an equitable representation of African American, Hispanic, Asian, or American Indian faculty; consequently, this makes it difficult to recruit and retain pre-service teachers representing different ethnic groups (Flores & Claeys, 2011).

Historically, the teaching profession has been feminized. Percentages of female teachers have been on the rise. There were 73% female teachers in 1955 and 76% in 2007 (Drury & Bear, 2011, p. 28). Men and people from diverse backgrounds historically have had little presence in the teaching workforce (Aguerreberre, 2011). At one period in

American education, there were more teachers of color – primarily African American, than there are now (Boser, 2011). In 2007, Caucasian teachers accounted for over 80% of the teaching work force (Drury & Bear, 2011, p. 29). The small representation of minorities in the teaching workforce does not provide enough minorities to be role models in the classroom. For instance, the American Association of Colleges of Teacher Education (2013) reported that in 2009-2010, the percentage of bachelor's degrees in teaching awarded to minorities was very low (6% African American, 4% Hispanics, 2% Asian, 1% American Indian) in comparison to the percentage awarded to non-minority (82% Caucasians). This means that there will be a small percentage of minority teachers in the classroom.

Although the present study did not find demographic or motivational factors for choosing teaching as a career to be significant as reported by teacher candidate respondents, the research literature on self-efficacy makes demographic and self-efficacy choices as clear indicators of an individual's projected success in a given profession. Data gleaned from the present study are congruent with national reports related to low representation of minority teachers in the classroom. About 90% of pre-service teachers participating in this study were Caucasian, and only 10% were minorities. Further research to develop effective recruiting strategies for minority pre-service teachers is needed. As well, the inclusion of minority positive social persuaders in colleges and schools of education to serve as role models for self-efficacy are needed.

Another social component of self-efficacy is the social persuasion received from others. Social persuaders play an important role in the development of self-efficacy. Effective social persuaders are entrusted to cultivate people's beliefs in their capabilities

while insuring the envisioned outcome is successfully attained (Pajares, 2002). The education system needs more effective social persuaders in teacher preparation institutions and school districts who will strengthen self-efficacy in new teachers. These social persuaders need to be cognizant of the complexities of the teaching profession. They should be vigilant that pre-service teachers or new teachers have the appropriate skills and knowledge to successfully navigate through the 21<sup>st</sup> century challenges. They should avoid prematurely placing pre-service teachers or new teachers in situations in which they are likely to fail.

The Kentucky Teacher Internship Program (KTIP) (EPSB, 2013) provides new teachers with the opportunity to work closely with a resource teacher, their principal, a teacher educator from a college or university, and the school district's coordinator during their first year of teaching. New teachers' self-efficacy will be strengthened if all KTIP mentors are effective social persuaders (D. Kyle, August 5, 2013). In addition, it is recommended that there be a closer collaboration and alignment between teaching and learning programs and P-12 administration programs. This collaboration will allow P-12 administrators to learn and develop strategies and positive support systems to help new teachers have a successful and long lasting teaching career.

Based on this study's findings, it might appear that social persuaders, including casual and formal mentors and supporters, are more than ever important to teacher candidates and to new teachers as they begin and step into their careers in effective ways.

## **Expectancy Theory and Teacher Preparation**

A second conceptual framework the researcher identified in chapter two for the present FIT-Choice scale (Watt & Richardson, 2007) study is expectancy value theory (Richardson & Watt, 2006). Outcome expectancies are the expectations that after a given behavior, an outcome will follow (e.g., to achieve a goal). The outcome would be beneficial for an individual. However, one would need to ponder if the benefits of the outcome exceed the cost before the behavior is performed (Bandura, 1997). Expectancy value theory postulates that people will perform according to the value they attach to the achievement of a goal (i.e., outcome). Motivational factors play a substantial role in shaping people's behavior and how would they position themselves in the world (Fishbein, 1970).

Again, expectancy value theory (Richardson & Watt, 2006) is pivotal in the teaching profession because new teachers weigh the subjective value of the burdens of their first years of teaching more heavily than the academic gains of their students (Grissmer & Kirby, 1987). The likelihood of pre-service teachers remaining in a teaching preparation program and/or new teachers staying in the profession are highly influenced by the value they attach to their professional experiences and the achievement of their goals.

The expectancy of achieving a goal (outcome) is also closely related to socialization (Eccles, 1984). For instance, previously mentioned is that the teaching profession has been feminized over time (Drury & Baer, 2011). The message society has given to young people is that professions are perceived as female-oriented and male-oriented occupations (Croxtton et al., 1989). For example, teaching is identified as a



female-oriented occupation, and it is often not presented as a viable option for males. Consequently, male role models are vanishing from the classroom. The American Association of Colleges of Teacher Education (2013) reported recently that less than 25% of teacher candidates were male. If policies and procedures are not in place to recruit male candidates for the teaching profession, males may likely be soon extinct from the classroom. Not having male teachers in the classroom puts our society in a tremendous disadvantage because students will not have male role models, in addition to female role models, in the classroom. Although gender and ethnicity did not prove to be significant demographic variables in this study, teacher preparation programs must be intentional to recruit and support diverse groups of teacher candidates, including teachers of color and males (the latter, e.g., in early childhood and elementary education classrooms) who represent the demographics of the workforce and P-12 students in the nation's classrooms.

### **FIT-Choice Constructs and Pre-Service Teachers Motivations to Choose Teaching as a Career**

The next section discusses responses to the motivational constructs and their relation to the body of knowledge in the field of teacher education.

#### **Motivations**

Respondents of this study identified: shape the future of children/adolescents, make social contributions, perceived ability to teach, and work with children/adolescents as the most important motivational factors when choosing teaching as a career. "Shape the future of children/adolescents" was the most important factor in both survey and open response answers. Richardson et al. (2007) identified motivational factors of people in

business related careers who transition into teaching using the FIT-Choice scale (Watt & Richardson, 2007). Their study results are closely related to results of the present study. For example, Richardson et al. (2007) reported participants' perceived teaching ability as the most important motivational factor, followed by the intrinsic value of teaching, the desire to make social contributions, shape the future of children and work with children.

Looking at the demographic characteristics of the present study's participants, 60% reported being between 18 and 24 years of age which places these individuals in the Millennium generation born between 1981-2000. People of this generation are optimistic, nurtured, focused, want fast and immediate processing; they have been told they are special, and thus, they expect the world to treat them that way. They do not live to work, but rather, they prefer a relaxed work environment with a lot of support and accolades, and they do not typically view a vocation or career choice, unlike the teachers who taught them in P-12 classrooms, as a lifelong career commitment (Novak, 2013). These generation's characteristics should be treated with caution since they do not depict a generalizable representation for everyone born between 1981 and 2000.

The current study's teacher candidate respondents are likely to be employed within the city's public school district. To contextualize the challenge these teacher candidates will be encountering, a brief profile of the district is presented. [Anonymous] is the 28<sup>th</sup> largest school district in the United States with more than 100,000 students; more than 63% of the student body receives free or reduced-price lunch; and 50% are minority students who represent, as a group, more than 100 different languages (Anonymous, 2011).

A comparison of the teacher candidate's profile for this study and the public school district's profile show a strong disconnect between them. These issues raise a major red flag when comparing the characteristics of this generation and the demands of the teaching profession. For instance, teachers are expected to understand and educate diverse populations, to serve others continuously on an hourly and daily basis, and to work long and intense hours to meet current accountability, curriculum, and assessment demands (Drury & Bear, 2011). Teachers experience tremendous work and accountability pressures, heavy workload, low engagement with other adult peers, and, often, lack of positive leadership and support (American Psychological Association, 2013). The present study reflects that there may well be a lack of congruency between the realities of the teaching profession and career and life expectations of this new generation of teachers.

Teacher preparation programs are challenged to close this gap. To provide teacher candidates with the appropriate knowledge, skills and dispositions to meet the challenges of a global community, it is recommended that teacher preparation programs embed across the curriculum specific learning strategies and differentiated instruction, especially for English learners and students with special learning needs.

Students enrolled in P-12 administration programs in CEHD are trained in the effective use of Professional Learning Communities (PLC) to increase student achievement (P. Connelly, August 5, 2013). The Professional Learning Community model premises that formal education has to ensure that students' learning is taking place every day, all the time (DuFour, 2004). To have effective PLCs, it is important to include special education teachers and English as second language teachers along with regular

classroom teachers to discuss and implement learning targets and interventions for struggling students.

It is recommended to align teacher preparation program curricula to teacher candidates' motivational factors to provide them with the appropriate support system and skills to successfully navigate through the aforementioned 21<sup>st</sup> century challenges.

In data from the present study, it is encouraging that pre-service teachers reported perceptions that they elected teaching as profession to shape the future of young people. However, there are several essential questions to be answered: are these pre-service teachers cognitively, emotionally, and physically ready to embrace the challenges of the teaching profession? Or, are they, based on this idealism, going to become statistics of teacher attrition as the research literature illuminates? If the latter, this phenomenon presents a tremendous challenge to colleges and universities based teacher preparation programs regarding closing the gap between motivations for choosing teaching as a career and the realities and demands of the teaching profession, which do not often involve supportive induction programs, mentoring, and peer-based teaming and problem solving as are found in other "21<sup>st</sup> century" professions.

The Council of Chief State School Officers (2012) recommends that teacher preparation institutions should implement early immersion and ongoing field and clinical experiences that will require that candidates engage, learn about, and successfully face the realities that they will encounter in their teaching positions, most often in high need schools in urban and rural environments with diverse groups of P-12 students. Faculty members, university supervisors, and cooperating or mentor teachers in P-12 classrooms in teacher preparation programs should explicitly serve as positive social persuaders for

teacher candidates and new teachers. These individuals are needed to ensure that teacher candidates acquire the knowledge, skills and dispositions to successfully navigate and cope with the 21<sup>st</sup> century challenges of being a classroom teacher in the U.S. The present study reveals that while many teacher candidates report noble intentions and motivations for entering teaching as a profession, acknowledgment and articulation of motivations, intents, and demographic factors that influence teaching as a career choice (or a lack, thereof) are, in both cases, cause for concern. Teacher candidates may not be self-aware of their motivations for choosing teaching as a career, or they may be aware. In either case, much more intentionality and strategic support structures, in college and university based teacher preparation programs and in the early years of teaching, are needed.

Respondents identified: intrinsic career value, prior teaching and learning experiences, enhance social equity, and job security as less important motivational factors when choosing teaching as a career. Richardson et al.'s (2007) study also found that enhanced social equity, prior teaching and learning experiences, and job security were less important motivational factors when choosing teaching as a career. Thus, the present study and the Richardson study found similarities in this line of research.

Respondents identified: social influences, job transferability, time for family, and fallback career as their least important motivational factors when choosing teaching as a career. Richardson et al. (2007) also reported fallback career and social influences as the least important motivational factors. Richardson et al. (2007) reported that, in this group of factors, job transferability and time for family were less important but were not the least important. It might be inferred that because that study was about individuals in business related fields transitioning into the teaching profession, participants of the study

were probably in their 30s and had a family. On the contrary, participants of the present study are generally in their early 20s, and more than 60% reported not having any children (see appendix B). It is reasonable to infer that there is some type of relationship between demographics and motivational factors when choosing teaching as a career.

Figure 2 below illustrates the order of importance of motivational factors for participants in this study, and if the level of importance is compared with demographic information presented in appendix B, it becomes apparent that there is a relationship between some demographics and the level of importance of some motivational factors. See appendix B and figure 2 below.

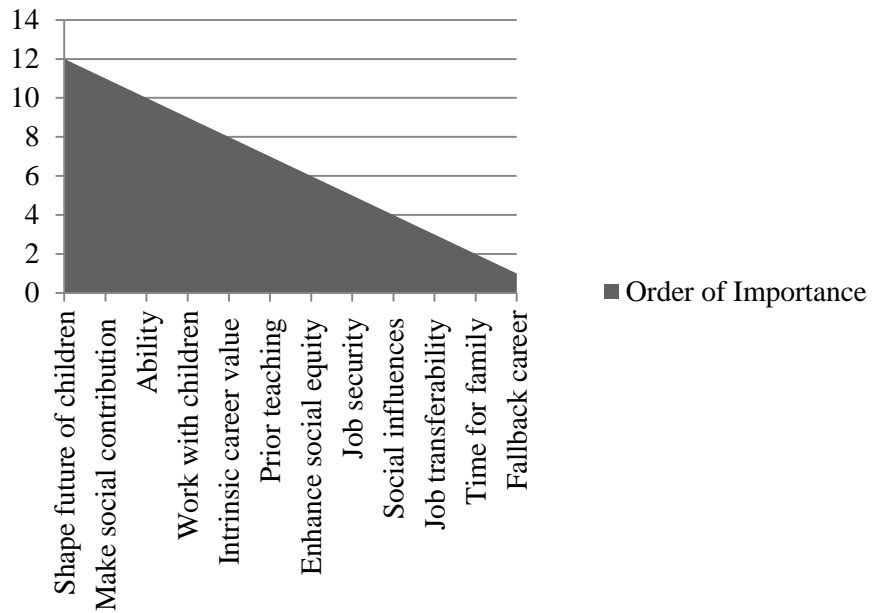


Figure 2. Motivations for Teaching

### Perceptions

Respondents of this study identified: difficulty and expertise as their most important perceptions or factors about teaching when choosing teaching as a career. As well, Watt, Richardson, and Pietsch (2009) conducted a study using the FIT-Choice scale

(Watt & Richardson, 2007) to examine Science, Technology and Mathematics teachers' motivational factors when choosing teaching as a career. Results were congruent with the results of the present study. Watt et al. (2009) reported that there was a significant difference between gender and perceptions of the difficulty of the teaching career.

Respondents of this study identified: social status, social dissuasion, and salary as less important perceptions about teaching when choosing teaching as a career. Watt et al.'s (2009) results were congruent with the results of the present study. Watt et al.'s (2009) findings also indicate that there was a significant difference between gender and perceptions of the difficulty of the teaching career. See appendix B and figure 3 below.

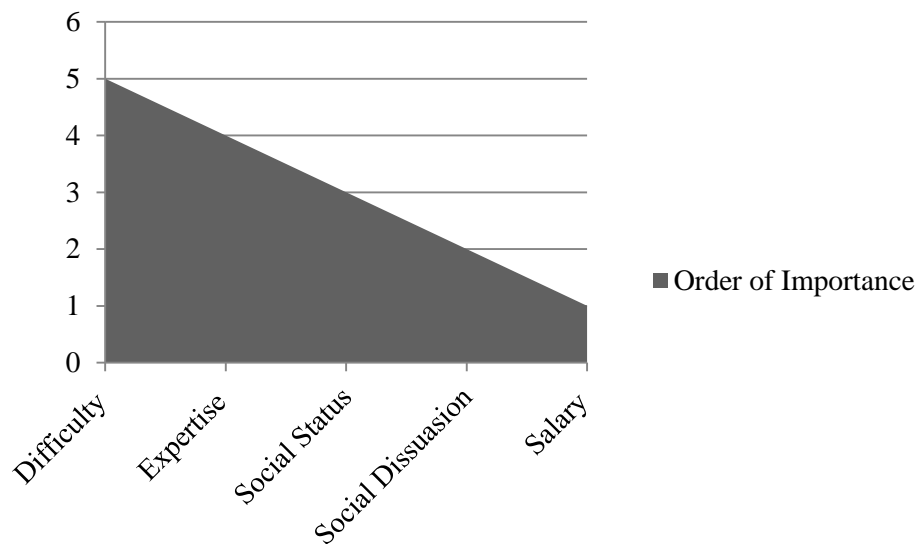


Figure 3. Perceptions about Teaching

### **Satisfaction**

This section consists of respondents' reported perceptions regarding their satisfaction with choosing teaching as their career choice. Respondents overall considered satisfaction with choice as a very important factor when choosing teaching as a career. Findings from the present study are consistent with research. In their study, Watt

et al. (2009) reported that despite participants' perception of the teaching profession to be high demand and low salary profession, they were very satisfied with their career choice.

See appendix A.

### **Implications for Policy, Research and Practice**

This study found no evidence that gender, ethnicity, type of program, and level of teaching certification has a significant effect on pre-service teachers' motivations to choose teaching as a career. The present study's findings, and literature identified and reviewed for this study, suggest that scholars, researchers, and practitioners must continue to take a closer look at and deconstruct, affirm, and support defining the motivational factors that influence pre-service teachers to choose teaching as a career in a 21<sup>st</sup> century world. Those who work in teacher preparation programs – faculty, graduate teaching assistants, cooperating and mentor teachers, and university field and clinical supervisors must work together, with field and clinical experiences coordinators and human resources personnel in school districts, to be more intentional and strategic to develop models that will do what is necessary in this dispositional domain to support and retain new teachers at a time where the nation is losing far from the profession of teaching.

### **Implications for Policy**

To accompany a series of current spotlights and national and state policy and accreditation recommendations and changes in teacher preparation, there is an imminent need for future research and responses to that research that provide insights and strategies regarding teacher candidates' motivational factors for choosing teaching as a career. Such an articulated response through policy to practice is timely for higher education



institutions that are increasingly regulated by the state (Middleton, 2000, as cited by MacKenzie, 2009). Teacher preparation programs have to abide by new sets of standards, policies and accreditation standards when admitting, preparing and graduating teacher candidates. As assessments of dispositions is one of these critical accountability areas, more attention is needed toward pre-service and new teachers' motivational factors -and how these are affirmed or distorted- in teaching and learning contexts during those impressionable and early years of teaching.

The Interstate Teacher Assessment and Support Consortium (InTASC) released the new Model Core Teaching Standards in April 2013 (CCSSO, 2013). These revised teacher standards outline what teachers should know and be able to do to ensure all P-12 students reach the goal of being college and career ready to succeed in the 21<sup>st</sup> century. For example, these new standards for teachers require that they develop strong cultural competency skills and be prepared to teach literacy across the curriculum to high standards, regardless of students' learning abilities, socio-economic status or native language (CCSSO, 2012). How do pre-service teachers' reported motivational factors for selecting teaching as a career for choice align with the demands and expectations of standards such as InTASC or program or state standards?

To further make this point, the state department of education for the present study has adopted a new teacher assessment called the Professional Growth and Effectiveness System (PGES), formed by the Measures of Effective Teaching (MET) project (Anonymous, 2013; MET 2013). This new assessment platform includes observation, peer observation, reflection, professional growth, student growth, and student voice. Districts and schools are expected to be vigilant that diversity is present all throughout

PGES. For example, one of the critical factors of this initiative is to effectively train a diverse pool of teachers, principals, and administrators so that they can become positive role models and effective social persuaders for new and practicing teachers. How do pre-service teachers' reported motivational factors for selecting teaching as a career of choice align with the demands and expectations of new evaluation and professional growth systems, including models such as the PGES and professional learning or professional development models, which states are instituting at rapid speed?

In the present study, pre-service teachers' expected program and certification proficiencies, skills and competencies are aligned with institutional, state, and national standards and policies. Following these policy recommendations and existing and forthcoming accountability measures which occur during their pre-service programs and teaching careers, teacher candidates' motivational factors for choosing teaching as a career must be articulated, challenged, reinforced and further refined to help them be stronger, more resilient and effective and long-serving practitioners, who, in turn, will become social persuaders and mentors for prospective candidates entering the profession.

Teachers with strong self-efficacy and clear expectancy values about their profession have found that joining a professional learning community in their school or through organized membership in the National Education Association (NEA), National School Boards Association (NSBA), or the American Federation of Teachers (AFT) may enable them to help shape school policies, not just respond to them (APA, 2013).

Likewise, practicing teachers can serve as cooperating or mentor teachers for teacher candidates and work with higher education as teacher educators to help shape and support new teachers. In some schools, there are opportunities for teachers to participate in school

based management teams or councils and/or to serve on policy making committees (APA, 2013). These types of opportunities for teachers would benefit efforts to inform and implement national and state policies related to initial and advanced teacher education, following a career ladder model. Again, there is an imminent need to develop, implement and enact national and state policies with teachers in mind. Teachers need to be “at the table and not on the menu” in this era of high stakes accountability, which often overrides new teachers’ motivational factors for selecting teaching as a profession.

### **Implications for Research**

There is a clear need for researchers to further explore motivational factors that influence pre-service teachers to choose teaching as a career. As well, further research should be conducted validating item syntax of the FIT-Choice scale (Watt & Richardson, 2007). The instrument was developed in English for Australian pre-service teachers; however, there are nuances in the wording that reduce comprehensibility for some U.S. participants, including English learners.

It would also be advisable to conduct a study in a university with similar characteristics to the one which served as the research site for the present study and to use only the motivation section of the FIT-Choice scale (Watt & Richardson, 2007). These two suggestions to conduct a further study in a university with similar characteristics would assist researchers to compare results and investigate if a short survey might reduce response time and, potentially, improve the response rate.

Future research using the FIT-Choice scale (Watt & Richardson, 2007) could plan for dissemination in larger, urban metropolitan higher education settings to offset respondent homogeneity, which was the case in the sample population for the present

study. Future research is recommended using the FIT-Choice scale (Watt & Richardson, 2007) to compare motivational factors for choosing teaching as a career between undergraduate elementary traditional route and graduate elementary alternative route teacher candidates (D. Kyle, August 5, 2013). Research for future exploration or study on this topic should also plan for minority-specific colleges to gather information from minorities where they are not considered as such. The researcher recommends as well that future studies should use the FIT-Choice scale (Watt & Richardson, 2007) to uncover factors influencing new teachers' motivations to be teachers, throughout the first 5 years of their entering the teaching workforce. A mixed-methods approach for such a study, using quantitative and qualitative research, will be important.

Future longitudinal research using the FIT-Choice scale (Watt & Richardson, 2007) as a component of a teacher preparation program would allow teacher preparation faculty and university supervisors to craft their instruction, evaluation, and deliverables around pre-service teachers' motivations to ensure that these teacher candidates have the required knowledge, skills, and dispositions to be successful in the teaching profession Longitudinal (M. B. Shuck, August 5, 2013). Including the FIT- Choice scale (Watt & Richardson, 2007) as a course component at pre- and post- assessment milestone in the teaching preparation program could potentially have a positive effect to increase a survey response rate for data analysis and program implementation.

Engaged employees come to work every day feeling a connection to their organization and have a high level of enthusiasm for their work (Buckingham & Coffman, 1999). As previously mentioned, teachers instead of being engaged often deal with chronic stressors such as work overload, work pressures, student behaviors and

discipline. Shuck's (2010) study findings indicated that affective commitment and employee engagement predict lower levels of employees' intention to leave. Future research on teacher engagement may help uncover valuable information that will assist school districts and school administrators to learn about teachers' intention to leave the profession. Research findings may assist school districts and school administrators to develop strategies and positive support systems to ameliorate the alarming exodus of teachers from the profession.

The present study's findings in the open response question revealed that a richer and more complex qualitative method would provide additional information as to which motivational factors influence and why they inform pre-service teachers to choose teaching as a career. There is an extensive body of literature in teacher education on teacher biography and teacher narrative using qualitative interviews (Clandinin & Connelly, 2000) which may unveil other trends and phenomena regarding motivational factors for individuals which influence teaching as a career (A. E. Larson, July 10, 2013).

Lastly, valuable contribution to the body of knowledge for the present study's focus, would include researchers' conducting interviews with teachers who have taught for some period of time who express that they are overwhelmed, burned-out, or stressed. This research may provide valuable information concerning teacher preparation and individuals' expressed needs, including career support in the form of renewal and professional development opportunities for teachers who have been employed in the profession for some time but who are disillusioned and may be "stuck" in their work (Rosenholtz, 1989).

## **Implications for Practice**

As a research site for the present study, the College of Education and Human Development's conceptual framework focuses on teacher candidates' demonstrated performance in three areas: inquiry, action, and advocacy. The framework is aligned with the university's mission and Quality Enhancement Plan developed for the Southern Association of Colleges and Schools (SACS, 2013). The university's mission is to be a metropolitan research university advancing the intellectual, cultural, and economic development of their diverse communities and citizens. The college's mission is to "advance knowledge and understanding across disciplines and constituencies, to develop educational leaders who will inform policy, improve practice, strengthen communities and address pressing social concerns." The college's vision is also to be considered a top-tier national Metropolitan College in teaching, scholarship, and stewardship.

The college has five key principles which are (a) social and human equity; (b) high-quality instruction and professional services; (c) life-long learning; (d) research based practice; and (e) leadership and collaboration. The present study unveiled some incongruence between the college's key principle of social and human equity and pre-service teachers' reported, low degree of regard for this construct, which is integral in state, national and accreditation, accountability and policy standards. The construct, enhance social equity or "advocacy" in the college's conceptual framework, was measured, in part, in the FIT-Choice scale (Watt & Richardson, 2007) in the following items that were prefaced with the statement "I chose to become a teacher because..." (a) teaching will allow me to work against social disadvantage, (b) teaching will allow me to

benefit the socially disadvantaged, and (c) teaching will allow me to raise the ambitions of under-privileged youth.

To contextualize this incongruence, pre-service teachers' data for this study indicated that more than 45% are full time students, more than 60% do not have children, more than 50% are between 18 and 24 years of age, more than 80% speak English as a primary language, more than 65% chose teaching as their first career choice, most of their parents have post-secondary degrees, diversity in terms of ethnicity was almost nonexistent, and about three fourths of the sample population reported that they came from a middle to upper socioeconomic background. National demographic data depicts pre-service teachers as white, female, and middle class with lack of cross cultural awareness. Attention to this finding is a recommendation by the researcher of the present study for faculty who are teacher educators in the study setting's higher education programs.

The college's goal is that teacher candidates "evolve and act as Critical Thinkers, Problem Solvers, and Professional Leaders who affirm principles of social justice and equity and who commit themselves to making a positive difference in their communities and schools" (Anonymous, 2013). As the college's and programs' constructs (inquiry, action, and advocacy) are learned in the classroom, applied through practice, and internalized as means of solving problems to improve the lives of individual members of communities and communities at large (Anonymous, 2013), teacher candidates would benefit further learning about social equity in a more structured, hands-on and guided approach through a clinical model of teacher preparation (National Council for the Accreditation of Teacher Education [NCATE], 2012; CCSSO, 2013). It is challenging to

demystify and enhance social equity and advocacy when it may present itself to teacher candidates as a theoretical or abstract concept, which has no personal, experiential or biographical meaning to the majority of pre-service teachers based on their demographic and motivational profiles. Deprived societies and those seeking social justice postures and tangible outcomes to improve the lives and learning of citizens take pride in making school accessible to everyone (Herdoiza-Estevez, 2002). Teachers are the catalyst to make this happen.

**Conclusion: 21<sup>st</sup> Century Skills and Motivations to Choose Teaching as a Career**

Strong motivational factors for learning to teach and choosing teaching as a career can get overridden, as well, by the 21st century environment within which all of the complexities, accountability, standards, assessments, reform initiatives, working effectively with diverse group of students, families, peers, frustrations, and challenges in teaching present themselves to new teachers. It is essential to provide teachers with a positive support system that will foster their motivations but also provide them with the tools to face many of these relatively new changes and to develop systems and strategies that will further develop teachers' motivations and dispositions so that they are able to exemplify excellence in the classroom and will choose to remain in the teaching profession.

The Partnership for 21<sup>st</sup> Century Skills (P21) has developed a framework for 21<sup>st</sup> Century Student Outcomes and Support Systems (Greenhill, 2010; & Framework for 21st century skills, 2011).

(see figure 4). This framework is interesting in light of the findings for the present study and may provide some concrete domains in which to apply some of the recommendations



presented in this chapter. The framework describes: knowledge (academic content mastery), skills (critical thinking, communication, and technology literacy), and expertise (global awareness, entrepreneurial, civic, health and environmental literacy) required to be successful in college, career and life in this competitive global community (Greenhill, 2010). The framework has implications for teacher education programs and for teachers’ practice as lived in their classrooms. The framework is presented in graphic form below (Framework for 21st century skills, 2011).

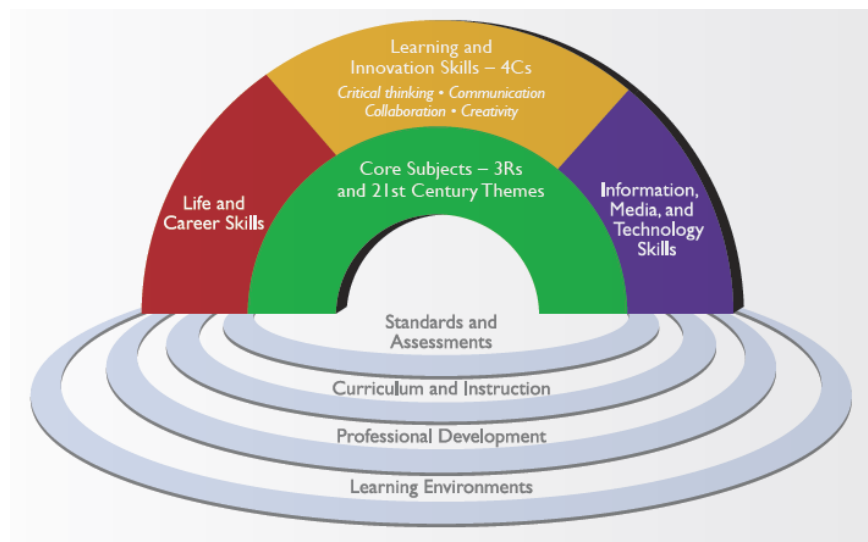


Figure 4. 21<sup>st</sup> Century Student Outcomes and Support Systems (P12, 2010).

Twenty first century skills and motivational factors are clear catalysts for teachers and their challenge to educate P-12 students to succeed in a competitive environment. Secretary Arne Duncan noted: “To keep America competitive, and to make the American dream of equal educational opportunity a reality, we need to recruit, reward, train, learn from, and honor a new generation of talented teachers... (Greenhill, 2010).” Secretary Duncan’s comment supports analysis, implications, and recommendations for the present study and illuminates the importance of preparing new P-12 teachers who will be able to effectively educate and prepare children and adolescents for the 21<sup>st</sup> century work.

## Summary

The present study and its findings, implications and recommendations have policy, research, and practice implications. The study aimed to: explore which differences in motivational factors regarding career choice exist, based on pre-service teachers' demographics, using data gleaned from the FIT-Choice scale (Watt & Richardson, 2007). Demographic factors include gender (male/female), ethnicity (minority/non-minority) type of teaching certification program (traditional route/alternative route) and desired level of teaching certification (elementary and special education; elementary education; middle grades education; secondary education; and P-12 education).

In terms of policy, changes to teacher preparation and assessment should be leveraged to prepare a diverse pool of social persuaders who will shape the future of the teaching profession. In terms of research, future studies which employ mixed methods – quantitative and rich qualitative methodologies – are needed in order to explore further the motivational factors and the ongoing nature of these in pre-service teacher preparation and induction to the profession. Qualitative studies are needed to gather and hear teacher candidates' voices (M. Herdoiza-Estévez, August 5, 2013). These voices will provide a more vivid and enriching biographical context in regard to pre-service teachers' motivational factors for choosing teaching as a career. In terms of practice, the teaching profession needs practitioners and teacher preparation programs to address and further develop increased social equity awareness among pre-service and new teachers. Teacher preparation programs and school districts need to design, provide, and upkeep appropriate support systems to help pre-service teachers and teachers new to the

profession to successfully navigate and cope with the challenges of the 21<sup>st</sup> century, in their classrooms and for their P-12 students as world citizens.

Clearly, the time has come to shift paradigms and make some drastic changes for much-needed reforms in teacher education by providing and inculcating teacher candidates with the knowledge, skills, dispositions and field-based experiences, which build on their initial motivations to become teachers. If this were to occur systematically in the profession of teaching, few teachers would likely join the alarming and nation-wide mass exodus from teaching that continues to plague the nation.

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## APPENDIX A: FIT-Choice Constructs

### Motivations for Teaching “I chose to become a teacher because...”

Constructs	Order of Importance	Mean	Items
Shape future of children/adolescents	1	6.34	Teaching will allow me to shape child and a dolescent values. Teaching will allow me to influence the next generation. Teaching will allow me to have an impact on children/adolescents.
Make social contribution	2	6.31	Teachers make a worthwhile social contribution. Teaching enables me to give back to society. Teaching will allow me to provide a service to society.
Ability	3	6.19	I have good teaching skills. Teaching is a career suited to my abilities. I have the qualities of a good teacher.
Work with children/adolescents	4	6.16	I want to work in a child and a dolescent-centered environment. I want a job that involves working with children and a dolescents. I like working with children and a dolescents.
Intrinsic career value	5	6.01	I have always wanted to be a teacher. I like teaching. I am interested in teaching.
Prior teaching and learning experiences	6	5.96	I have had good teachers as role models. I have had inspirational teachers. I have had positive learning experiences.
Enhance social equity	7	5.92	Teaching will allow me to work against social disadvantage. Teaching will allow me to benefit the socially disadvantaged. Teaching will allow me to rise the ambitions of under-privileged youth.
Job security	8	5.22	Teaching will provide a reliable income. Teaching will be a secure job. Teaching will offer a steady career path.
Social influences	9	3.60	My friends think I should become a teacher. My family thinks I should become a teacher. People I have worked with think I should become a teacher.
Job transferability	10	3.51	Teaching will be a useful job for me to have when traveling. A teaching job will allow me to choose where I wish to live. A teaching qualification is recognized everywhere.
Time for family	11	3.44	As a teacher I will have short work days. As a teacher I will have lengthy holidays. Part-time teaching could allow more family time. School holidays will fit in with family commitments. Teaching hours will fit with the responsibilities of having a family.
Fallback career	12	1.68	I chose teaching as a last-resort career. I was not accepted into my first-choice career.



## Perceptions about Teaching

Constructs	Order of Importance	Mean	Items
Difficulty	1	6.57	Do you think teachers have a heavy workload? Do you think teaching is emotionally demanding? Do you think teaching is hard work?
Expertise	2	6.04	Do you think teaching requires high levels of expert knowledge? Do you think teachers need highly specialized knowledge? Do you think teachers need high levels of technical knowledge?
Social status	3	4.48	Do you believe teachers are perceived as professionals? Do you think teachers have high morale? Do you believe teaching is perceived as a high-status occupation? Do you think teachers feel valued by society? Do you believe teaching is a well-respected career? Do you think teachers feel their occupation has high social status?
Social Dissuasion	4	4.34	Were you encouraged to pursue careers other than teaching? Did others tell you teaching was not a good career choice? Did others influence you to consider careers other than teaching?
Salary	5	3.57	Do you think teaching is well paid? Do you think teachers earn a good salary?

## Satisfaction with Choice

Construct	Order of Importance	Mean	Items
Satisfaction with choice	1	6.50	How satisfied are you with your choice of becoming a teacher? How happy are you with your decision to become a teacher?

APPENDIX B: Demographic Figures

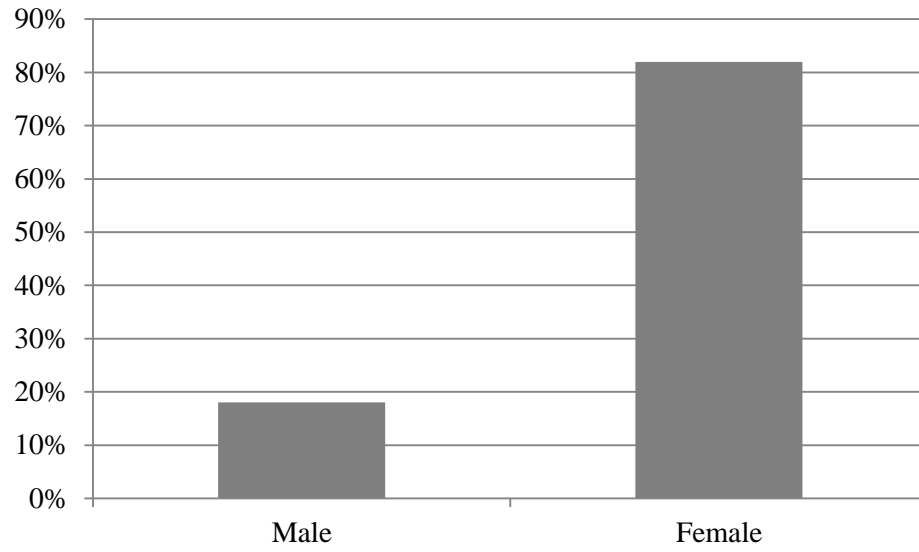


Figure B1. Pre-service Teachers by Gender

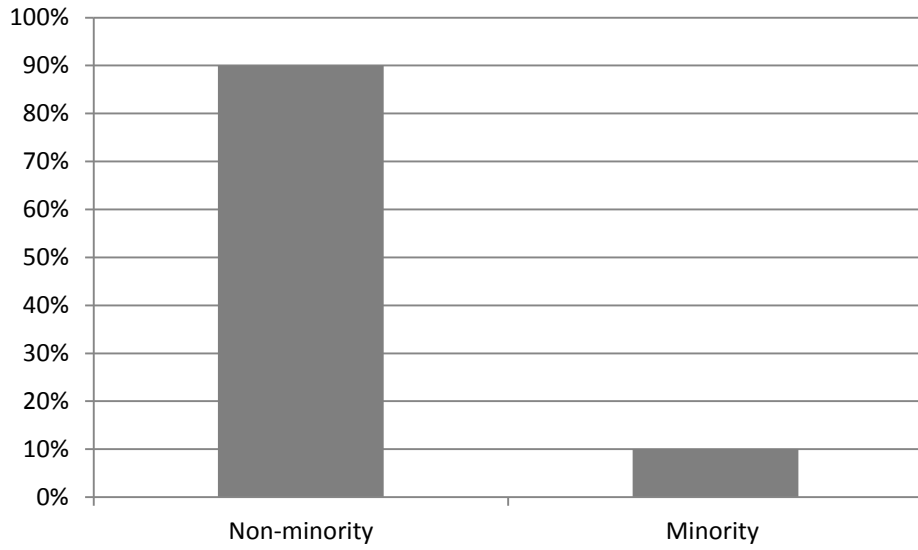


Figure B2. Pre-service Teachers by Ethnicity

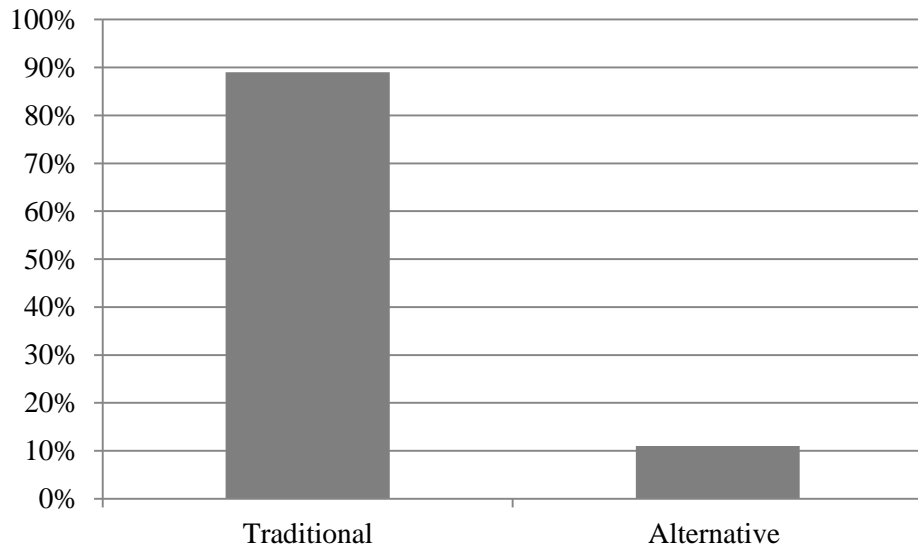


Figure B3. Pre-service Teachers by Type of Program

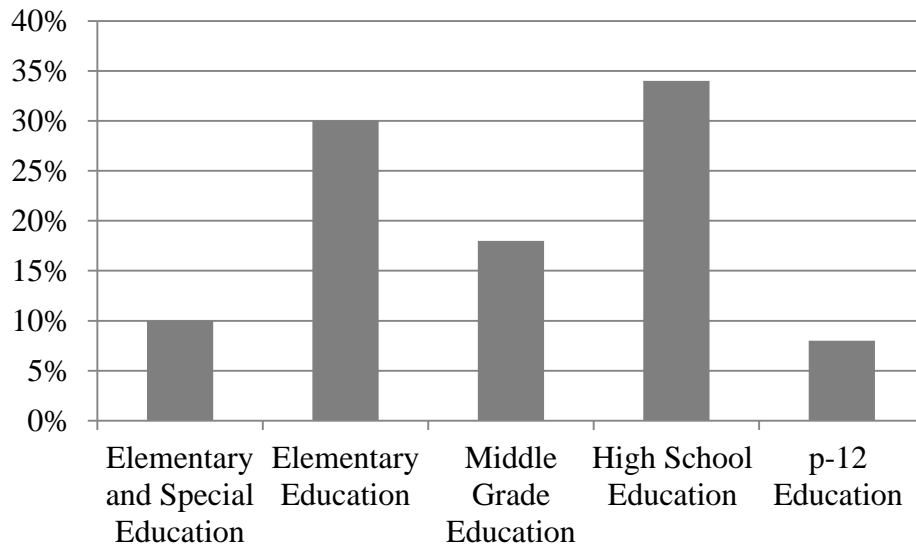


Figure B4. Pre-service Teachers by Type of Certification

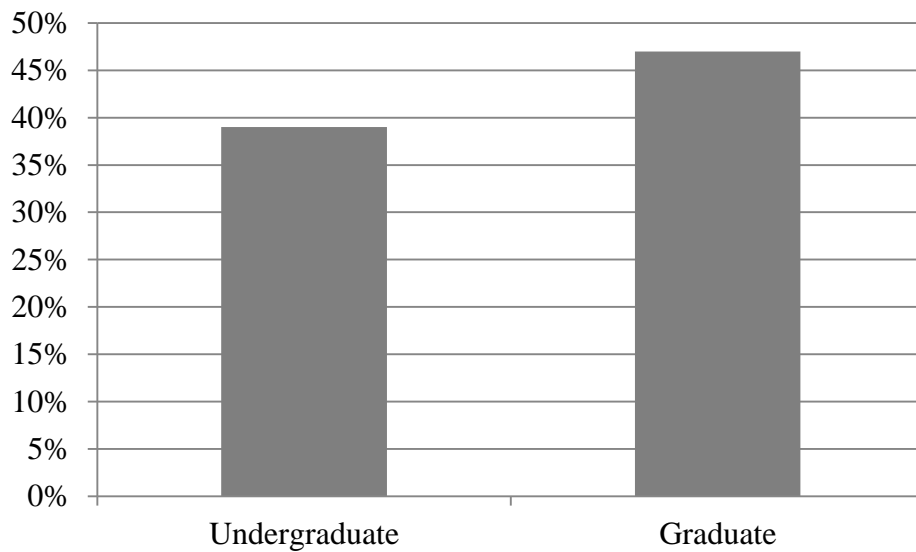


Figure B5. Undergraduate and Graduate Pre-service Teachers

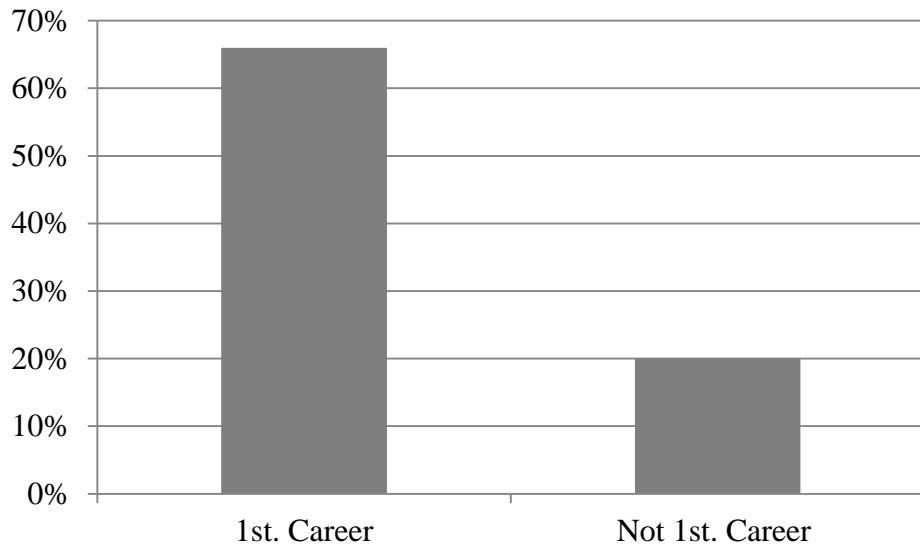


Figure B6. Teaching as a First Career Choice

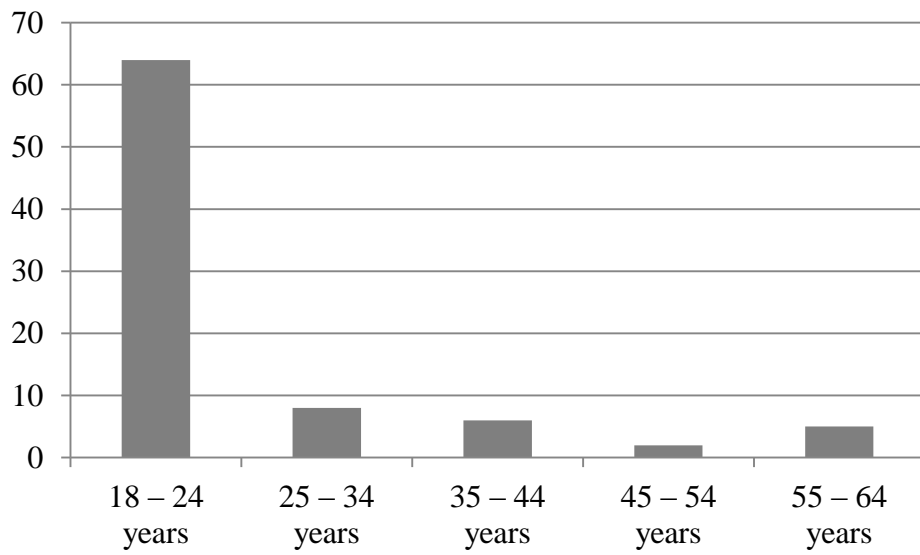


Figure B7. Pre-service Teachers' Age Range

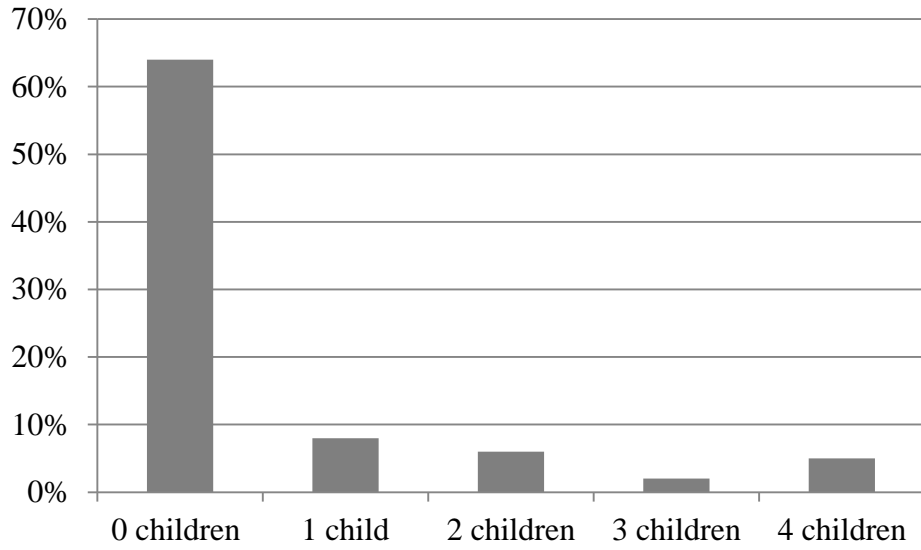


Figure B8. Pre-service Teachers' Number of Children

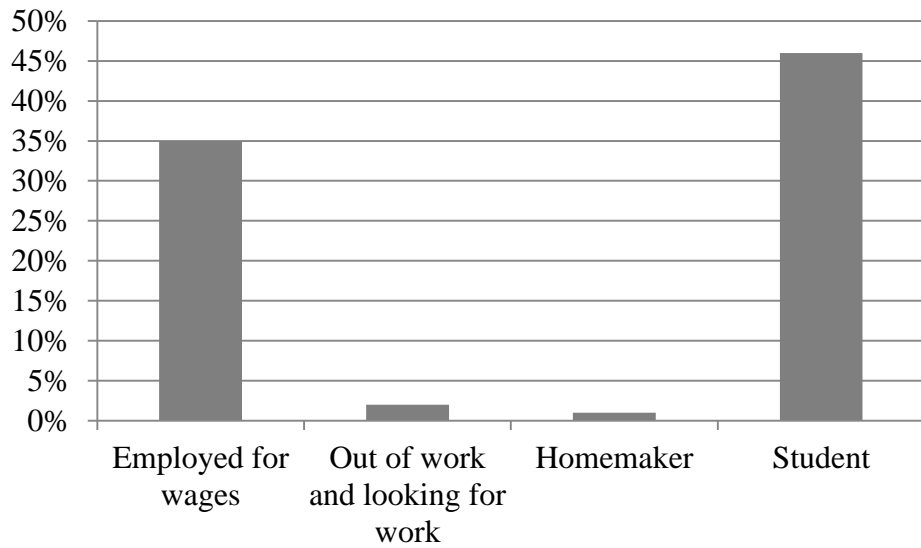


Figure B9. Pre-service Teachers' Employment Status

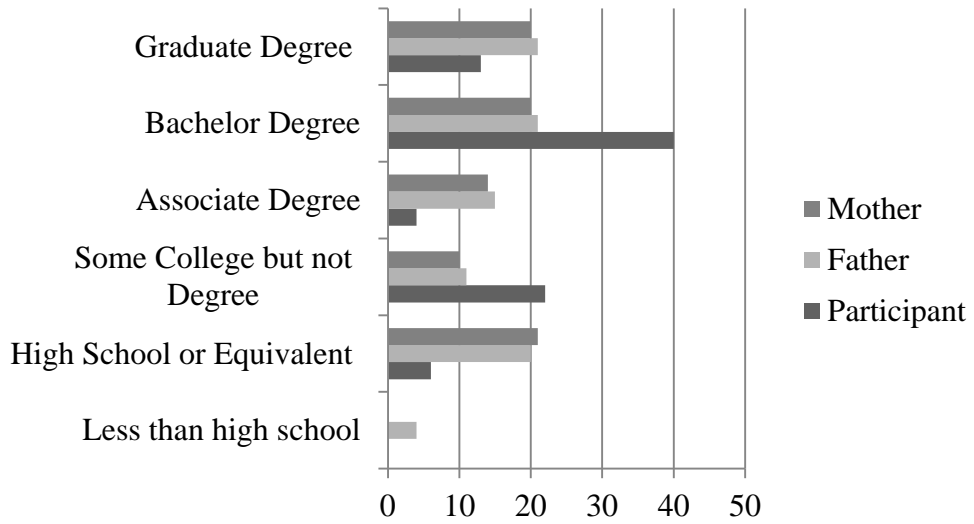


Figure B10. Pre-service Teachers and Parents Highest Level of School Completed

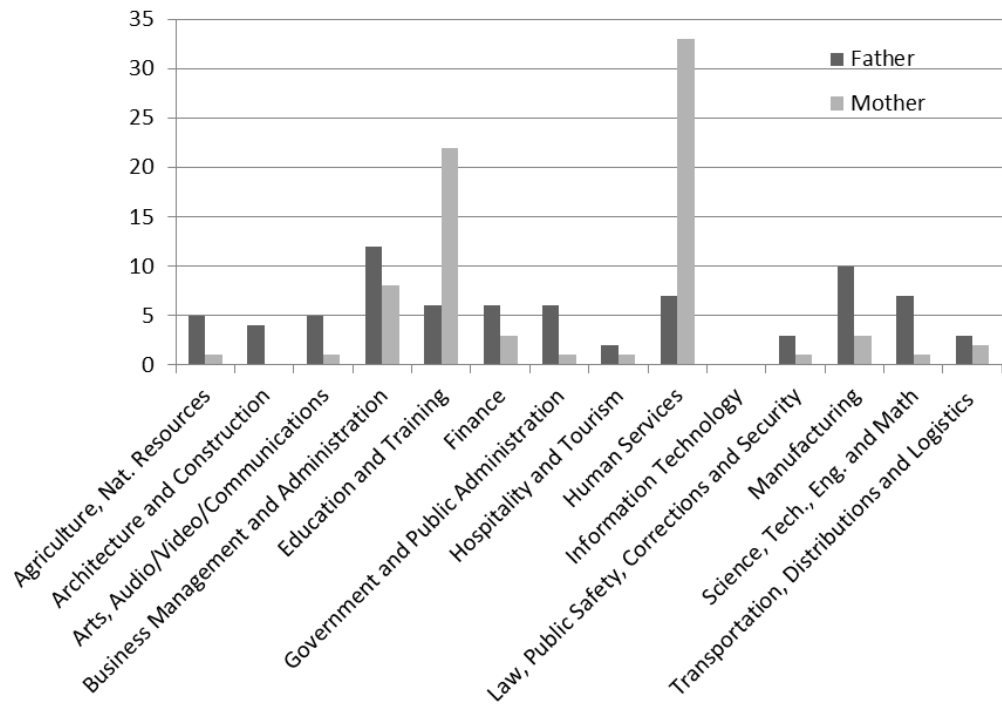


Figure 11. Parents' primary Career Cluster

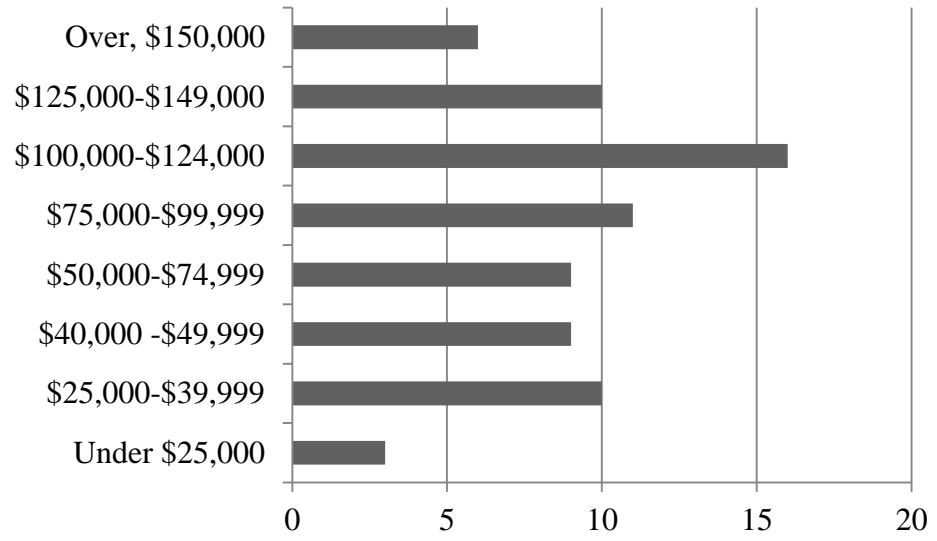


Figure B12. Parents' Combined Income before Taxes



## CURRICULUM VITAE

NAME: Diane MacKenzie

ADDRESS: 10600 Findon Ct. Louisville, KY 40243

DOB: Guatemala, Guatemala – September 19, 1964

EDUCATION  
& TRAINING: Ph.D., Human Resources and Organization Development  
University of Louisville  
Dissertation: Choosing a Career: A study of Motivational  
Factors and Demographics that Influence P-12 Pre-service  
Teachers.  
2013

Dissertation Committee: Ann Larson, chair, CEHD,  
University of Louisville; Phyllis Connelly, CEHD,  
University of Louisville; Magdalena Herdoiza-Estévez,  
Indiana University Southeast; Diane Kyle, CEHD,  
University of Louisville; Michael Bradley Shuck, CEHD,  
University of Louisville.

Professional Certification for Instructional Leadership  
School Principal University of Louisville  
2005

Professional Certification for Instructional Leadership  
Supervisor of Instruction University of Louisville  
2005

Master of Arts in Teaching  
Secondary Education – Spanish  
University of Louisville  
1994

Bachelor of Arts  
Psychology  
University of Louisville  
Secondary Education Teaching Certification  
Pedagogy & Psychology  
Universidad Rafael Landivar, Guatemala  
1990

Elementary Education Teaching Certification  
Pedagogy  
Colegio Santa Teresita, Guatemala  
1992

EXPERIENCE:

Career Pathways Specialist  
Human Services, Education, and International Studies  
Jefferson County Public Schools  
2009 – Present

High School Teacher  
Atherton High School  
Jefferson County Public Schools  
2002 – 2009

Post-Secondary Instructor  
Especial Methods of Teaching Foreign Language –EDTP  
609/629  
University of Louisville  
2005 – 2011

Post-Secondary Spanish Instructor  
Kentucky Institute for International Studies – Louisville  
Metro Police Department  
Murray State University  
2005

Middle School Teacher  
Myers Middle School  
Jefferson County Public Schools  
2000 - 2002

High School Teacher  
Assumption High School  
Archdiocese of Louisville  
1997 – 2000

Post-Secondary Instructor  
Spanish101  
Indiana University Southeast  
1998

Program Coordinator  
Central American Program of Undergraduate Scholarships  
CAMPUS IX  
Center for Latin American Education, School of Education  
University of Louisville  
Sponsored by United States Information Agency  
1996 – 1997

Program Coordinator  
Training for School Supervisors - Honduras  
Center for Latin American Education  
School of Education, University of Louisville  
Sponsored by U.S. Agency for International Development  
1996

Teacher Educator  
Kentucky Teacher Internship Program (KTIP)  
University of Louisville  
1996

Graduate Assistant  
Center for Latin American Education  
College of Education and Human Development  
University of Louisville  
1994 – 1995

Student Assistant  
Ekstrom Library  
University of Louisville  
1994

Teacher of English as a Second Language  
English Grade Teacher -fourth grade.  
Colegio Interamericano, Guatemala  
Accredited by the Southern Association of Colleges and  
Schools  
1992 – 1993

Training and Development Director  
Asociación de Amigos del País, Guatemala  
1990 – 1991

Foreign Language Teacher  
W. Young Elementary School  
Jefferson County Public Schools  
1989 – 1990

Post-Secondary Instructor  
Universidad Francisco Marroquin  
Guatemala  
1987

Elementary School Teacher  
Colegio San José de los Infantes  
Guatemala  
1987

High School Teacher  
Language Arts and Typing  
Academia Comercial Santa Catalina  
Guatemala  
1983 – 1987

#### HONORS

Milken National Kentucky Educator Award  
Milken Family Foundation  
Washington, DC  
2005

ExCEL Award  
Excellence in Classroom Educational Leadership  
LG&E Foundation and WHAS 11  
Louisville, KY  
2005

Brotherhood/Sisterhood Award  
Jefferson County Public Schools  
Louisville, KY  
2005

Teacher Summer Academy Scholarship  
Three Periods, Three Places, Three Peoples, One Mexico  
Sponsored by Jefferson County Public Schools  
Kentucky Institute for Interantional Studies  
2004

Teacher Summer Scholarship  
World Language Teaching Methodologies  
Cadiz, Spain  
2003

Fulbright Scholar  
Central American Program of Undergraduate Scholarships  
United States Information Agency. Bureau of Education  
and Cultural Affairs  
Louisville, KY  
1988 – 1990

#### APPOINTMENTS

SBDM Council Member  
Atherton High School  
Jefferson County Public Schools  
2004 – 2009

World Language Department Chair  
Atherton High School  
Jefferson County Public Schools  
2004 – 2009

Teachers' Advisory Council (TAC)  
Division of Next-Generation Professionals  
Kentucky Department of Education  
2006 – 2009

Task Force Committee Member  
College of Education and Human Development  
University of Louisville  
1996 – 1997

Urban Studies Committee Student Representative  
College of Education and Human Development  
University of Louisville  
1995 – 1996

Faculty Search Committee Student Representative  
College of Education and Human Development  
University of Louisville  
1995 – 1997

Curriculum Committee Student Representative  
College of Education and Human Development  
University of Louisville  
1995 – 1997

Council of Leaders – Member  
Office of Vice President of Student Affairs  
University of Louisville  
1995 – 1996

President of the Sigma Delta Phi Honor Society  
Spanish Honor Society  
University of Louisville  
1994 – 1995

## FUNDING

Assistant in Grant Writing  
United States Agency for International  
Development/Honduras  
United States Department of State  
\$83,909 – funded  
1996

Assistant in Grant Writing  
United States Information Agency  
Central American Program of Undergraduate Scholarships  
CAMPUS IX  
\$806,527 – funded

## CONFERENCE PRESENTATIONS

It Takes Team Work to Redesign CTE  
High Schools That Work Summer Conference  
Charlotte, NC (with Sharon Stone).  
2013

Choosing a Career: A Study of Motivational Factors and  
Demographics that Influence P-12 Pre-service Teachers  
Spring Research Conference  
Sponsored by the University of Cincinnati and the  
University of Kentucky  
Lexington, KY  
2013

Young Men of Color Professional Panel Discussion  
MTRP Symposium and Professional Development Day  
University of Louisville  
Louisville, KY (with Bernard Minnis, Darrell Aniton,  
James Sweatt, Shawn Gardner, Joseph Goodman, Michael  
Cuyjet, Aukram Burton).  
2012

Community Engagement in the Classroom  
Innovation and Partner Engagement Conference  
Kentucky Department of Education  
Louisville, KY (with Durell Hamm, Elizabeth A. Fuller,  
and Billie Travis).  
2012

Redesigning High Schools Around Career Themes  
Postsecondary Career and Life Preparation  
Association for Career and technical Education, Region II  
Leadership Conference  
Louisville, KY (with Ken Talley).  
2010

Instruction Diversity and Non-Traditional Students  
Celebration of Teaching and Diversity Conference  
University of Louisville  
Louisville, KY  
1996

Using Foreign Visitors as Resources in Cross-cultural  
Learning  
Second Annual Conference on Children in a Multicultural  
World  
Indianapolis, IN (with Maria Palmer, Lilian Valle, and  
Nury Nuila).  
1989

## TRAINING

Career Pathways Leadership Certification  
National Career Pathways Network  
Dallas, TX  
2010

International Baccalaureate  
Qualified Teacher  
Center for the Advancement and Study of International  
Education  
Atlanta, GA  
2003

Advance Preparatory Training  
Qualified Teacher  
College Board Louisville, KY and Fortlauderdale, FL  
1997 – 2007

Myers-Briggs Type Indicator  
Qualified Administrator  
University of Louisville  
1996

Professional  
Memberships and  
Affiliations

American Educational Research Association  
Asian Institute, Crane House  
Association for Career and Technical Education  
Association for Supervision and Curriculum Development  
International Society for Technology in Education  
Kentucky Association for career and Technical Education  
Kentucky Educator Quality and Diversity  
Milken Family Foundation